

Baroque in Advanced Nastaliq

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Abstract: The choice of five dang points in Nastaliq and the fractal of Nastaliq calligraphy, which is caused by the choice of a golden oval, has made Nastaliq calligraphy an undisputed and unrivaled art in the world of calligraphy.

The golden oval is a turning point in the evolution of Nastaliq calligraphy and it realizes all the components of this calligraphy from letter to sentence and from line to literacy and gives logical and scientific answers to all students' questions.

Everyone has said what I say
Everyone has gone to the garden of knowledge
I can only build a foundation
On the horn of that shade caster cedar
(Ferdowsi)

Imam Sadiq (PBUH) says:

All the virtues are gathered in three qualities: "look", "silence" and "speech". "Look" is the beginning of human understanding of the world, thus greatness should be in our looks and not in what we look at.

If you were Majnoon
You won't see anything but Leili's goodness
(Vahshi e Bafghi)

Art:

Moving from amorphousness and disorganization to limitation, order and harmony.

Artist:

A magnifying lens that brings an object so close and tangible that its small, large and obscure parts are disclosed and defined.

Avant-garde art:

Purifying existing facts, extracting unalloyed ones and placing them in the channel of reasonable life in an interesting and receptive form.

Precision

The starting point of art and the transition from ambiguity to discernment.

God, the wise and the creator of the beauties of the universe, gave us the eye to carefully look at the depth of these visual beauties. Due to their extraordinary ability and rapid communication with other parts of the brain, our eyes can recognize distances, balance and even slowness or fastness of movements. They also provide us

with the possibility to live a more pleasant and comfortable life and by understanding beauty and its main elements, we can achieve the necessary progress in any art.

Calligraphy

Calligraphy wants to harmonize the pen and ink with his soul, mind and body and control them so that he can arrange appropriate and similar letters, words and sentences creating what is necessary for a work of art. The calligrapher's job is to manifest the divine art in the piece he writes and thus show a world in one letter or word. Thereby, he should reach this position beforehand with mentality and familiarity with movements and non-stop practice. Evidently, our pioneers and great thinkers in this field, the founders of the beautiful art of calligraphy, knowingly entered this path with their broad vision and worldview and a specific destination and goal, and showed the way of this path to their future successors by pure and detailed treatises. In each of these treatises, they used their utmost efforts to elevate this art. These treatises attempt to pave the way for the students and take a step forward in the evolution of calligraphy, such a way that by a better understanding of the music and playing and the geometry of letters, words and even sentences can explain the beauty and harmony of this beautiful art.

Baroque:

A simple but useful description of the baroque style is that it accumulates the framework of the piece with action and movement and creates spaces for creating thinking with a special feature. This special feature is maintaining balance and creating unity among dense and diverse elements.

Based on baroque's philosophy, that is maintaining balance in proportions and creating unity and integration, and in a way realism and creating a scientific system based on real documents, in the beautiful and attractive art of Nastaliq, you can look for scientific support and create unity.

Baroque in Nastaliq:

The seniors and pioneers of Nastaliq and especially Mir Ali Tabrizi (may God have mercy on him) who is known as the creator of this beautiful art, chose a circulation for this beautiful and eternal art with a wide-eyed look and high visual and geometrical literacy; a circulation which was not seen, or less seen in any other script or they were somewhat close to it, such as the Taliq script, and in some letters and gestures in the Kufi script, this harmony can be seen.

The late Mir Ali Tabrizi, inaugurated the Nastaliq script approximately a century before the development of the baroque style in Europe, with a harmonious and homogeneous structure by maintaining balance and proportions. This beautiful and harmonious structure with a geometric fractal in the Nastaliq script (which makes it beautiful, balanced and proportional) lies in the shape of an ellipse, known as a golden ellipse.

A matter of fact, genuinely the golden ellipse is the pearl of the Nastaliq shell, which has not been discussed so far. To reach a better understanding of this geometric option, we discuss why the geometric shape of the ellipse is beautiful and which ellipse shape is the most beautiful?

As you are aware, geometric shapes such as square, rectangle, triangle, circle, and other geometric shapes each have their own epistemology based on scientific and psychological findings, and brings to mind a separate character and meaning.

As an instance, square and rectangle promote a feeling of security and trust, and are mostly used for designing company logos. The triangle promotes a conflicting personality, especially if the top of the triangle is down, it induces a sense of lack of balance. The circle also has the character of love, friendship, stability and universality.

But how is the character of the ellipse like, the shape that we are considering?

An ellipse, like a circle, has no beginning and end, and it prompts the whole universe and the movement of the skies and the earth. Also, it has a magical and enigmatic feeling.

Like a circle, an ellipse does not have an edge or apex, and thus, it creates more softness and can show eternity. The ellipse shape and its equivalent abound in nature, for example in the overall view of people's faces, which is one of the most beautiful face shapes, and the shape of flowers and the overall view of trees and birds' wings, and in the smaller parts of the universe. Hence, the choice of the ellipse as the base in this script has been very smart and accompanied by obsession and taste. Thus it is necessary for students to have a better and more understanding of this form and to learn some concepts of this beautiful form.

What is a fractal?

It is a repeatable geometric structure of a certain shape by repeating which we get the same original shape with different sizes; bigger or smaller, like pieces of brick by placing a few of which we get a brick with the same shape but a bigger size.

Ellipse and its definition:

An ellipse is a geometric location; of a point on the surface where the "sum" of its distances from two fixed points F and F' located on the same surface is a "constant" value.

Generally, F and F' are called "ellipse foci" and the distance between these two points is called ellipse "focal distance" and is shown with 2C (two centers).

An ellipse is a closed curve and each that divides the plane into three separate parts, which are: inside the ellipse, on the ellipse and outside the ellipse.

Any point like M that is on the curved line of the ellipse, the sum of its distances from the two foci of the ellipse is a constant numerical value, and conversely, any point whose sum of distances from the two foci is a constant value is located on the ellipse.

The smaller the distance between the foci of the ellipse F and F', the shape of the ellipse curve becomes close to a circle.

If F and F' coincide, the resulting shape will be a circle, and the more the two focal lengths are separated, the longer and flatter the ellipse becomes.

Ellipse diameters

dissimilar to a circle, an ellipse has two small and large diameters because of its special shape (a circle is a type of ellipse whose two foci coincide).

A line that passes through the two foci of the ellipse and extends to reach the two sides of the ellipse is the major diameter of the ellipse (AA') and the line that is perpendicular to this major diameter to reach the other two sides of the ellipse is the minor diameter of the ellipse or non-focal diameter of the ellipse (BB').

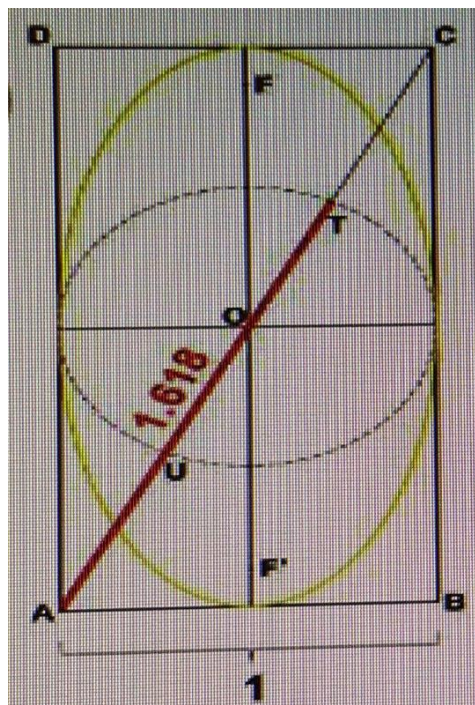
As we said earlier, because of having two foci an ellipse can be elongated and become narrow or wide and similar to a circle.

But there is a shape of the ellipse which is the most beautiful in our views and the pioneers of this art got to it with their visual miracle, which we call the golden ellipse. What is its shape and how is it drawn?

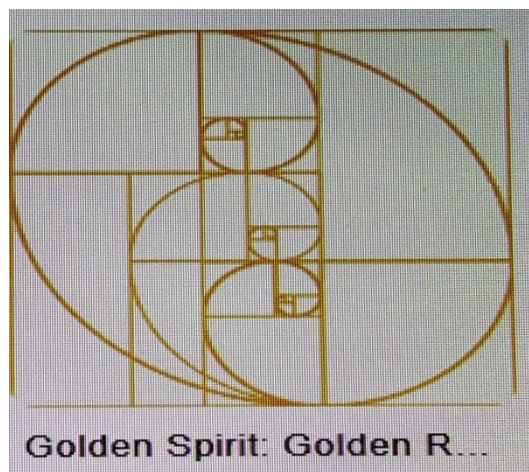
To answer this significant question, we should know the golden ratio, the way it was obtained, its history and the reason of its importance.

Golden Ratio:

To indicate this ratio more comfortably from a visual point of view which is closer to our job and expresses the idea of the formation of this ratio, we show it on a line segment:



We draw the following line in such a way that when we divide it into two parts, the following relationship exists between them:



This symbol is called the number "Phi" and its number is called the golden number, and the shapes that reach a beautiful proportion with this number are called golden shapes.

Like golden rectangle and golden ellipse. For more details you can refer to reference books.

Therefore, it is natural to ask whether an ellipse can be drawn with the golden ratio and reach the golden ellipse. The answer is yes.

Golden ellipse drawing:

An ellipse has two diameters, a large one and small one. Therefore, whenever we can draw an ellipse whose ratio of the large diameter to the small diameter is close to the golden number 1.618, that ellipse is more beautiful, more balanced, and the most appropriate shape of the ellipse that we have in mind.

God, the wise and the creator of the beauty of the universe, has used the proportions of the golden ellipse in creating the small and big parts of the world, including the DNA of man, his face, the ant's head and the shape of the galaxies of the world.

And since these ellipse proportions are used in the small and large parts of movements and the shape of Nastaliq parts, in all parts of this script similarity to the natural forms exist.

This ellipse organ in Nastaliq makes the arrangement of letters, words and sentences to be interconnected and interwoven and chain-like, and it becomes a shape like the waves resulting from throwing a stone in water with a single center.

Professor Gholamreza Taherian says:

All Nastaliq is nothing but a movement, and a calligrapher who can discover and understand this movement has reached the destination, and the continuation of this movement will eventually lead to the rhythm and proportions from which the glory and beauty of Nastaliq arise.

I also believe that there are always suitable and interesting solutions and answers to good, correct and accurate questions.

Now that we know what the golden ellipse is and why it is important, I would like to mention an interesting point:

If you hold a pencil or a pen in your hand and place your hand on the page, move your pencil or pen from your wrist on the page of paper, the path that is drawn coincides with the axis of the golden ellipse.

The extension of the small diameter of this golden ellipse on the F line creates two angles of twenty-six degrees and sixty-three and a half degrees, which is another important reason for the importance of this geometric shape and its beauty, and the importance of these two angles that approaches our mind, heart and hand. Another point is the angle of about sixty degrees, which is also one of the electrical and important axes of the heart, and maybe this is the reason why you like this angle.

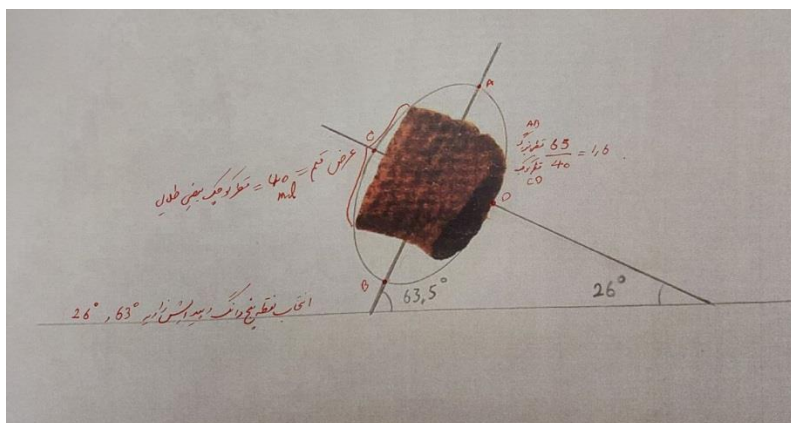
Why panj dang dot?

The mainspring of the advanced and developed Nastaliq script is the panj dang dot and the golden ellipse that circles it.

The late professor Kalhor and Emad al Kitab (may God have mercy on them) have made the point of panj dang the basis of their script with a careful and sensitive look, which is necessary for progress in this art, and perhaps they did not miss the opportunity to explain the reason in a scientific way. We will also explain this issue here:

It was observed that the extension of the natural path of movement of the hand will also become a golden ellipse. For each hand, based on the small or large size of the hand and wrist, this axis and the drawn ellipse will be bigger.

But the ellipse obtained from the continuation of the movement regardless of the size of the hand will still be a golden ellipse. To better understand and be blessed with the article, I requested the path of the hand of my dear professor "Nima Elikaei" to do this experiment and include the movement of his hand as a basis in the article and the result is the shape you see.



As you can see, from the extension of his hand, an ellipse has been obtained, its largest diameter is 8 and its smallest diameter is 4.8 centimeters, with the ratio of the golden number 1.6.

If the blade of the pen or the width of the sharpened and ready pen is 1 centimeter, then draw a golden ellipse whose small diameter is 1 centimeter and its largest diameter is 1.6 or close to it according to the previous explanation, we can only draw a panj dang dot with this 1 cm pen inside this golden ellipse. This dot rests inside this golden ellipse and becomes tangent to its surface, and the shesh dang dot (which is 1 centimeter on each side and is a complete square with sides of 1 centimeter) does not fit inside the golden ellipse and is bigger than it, and a part of that shesh dang dot gets out of golden ellipse.

After drawing the golden ellipse enclosing the panj dang dots, if we extend the diameters of this golden ellipse so that it intersects with the horizon line, the resulting angles are sixty-63.25 and 26. These angles, in addition to the slope of the large diameter of the golden ellipse, form the beginning of beauty and harmony, and the fractal core of the Nastaliq script.

The author has examined the pages of many manuscripts of Taliq and Nastaliq and found signs of a tendency towards the golden ratio and the golden ellipse.

Based on this, with the permission of the great teacher and the living heritage and pride of Iran, professor Amirkhani, I based the article on his handwriting.

And surprisingly, in this script, from the dot to the cruciform, the dimensions are consistent with the geometric standard of the golden ellipse.

Based on this study, many questions and ambiguities in the shape and size of the angle of movements, even the distance between the dots in words and letters, the distance between the words and letters, and how to write them correctly, even the choice of the cruciform angle, are explained.

Our intention is not to enclose the beautiful and charming script of Nastaliq in the framework of ruler and geometry, but to analyze its beauty and claim that this lasting art is beautiful and tender like a flower, and this analysis is necessary for an artist who wishes to focus, practice and follow this art. The beauty and pleasant smell of this noble art can be understood by every viewer and there is no need to analyze it geometrically. It is enough to enjoy it by looking at it.

But it is the task of a professional artist to write it as beautifully and systematically as possible and be more careful and elegant in his choice, and to seek to know and understand the secret of this beauty.

Nastaliq script has the characteristics of Naskh and Taliq, and as these two scripts have progressed throughout their history, so does Nastaliq.

However, this feature of baroque in Nastaliq could remove Naskh and Taliq and make itself an indisputable substitute for them.

In examining the beautiful works of the late professor Mir Emad al Hasani, one can see that he follows the golden ellipse in both letters and words, both connected and separated.

In the scripts and markings of Gholamreza Esfahani, Mir Hossein Turk and Mirza Kazem Tehrani, following the golden ellipse has led to the creation of beautiful letters and words in the scripts of these professors.

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