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COMPARATIVE STUDY OF THE ART OF CALLIGRAPHY OF THE NASTALIQ FONT AND ARCHITECTURE

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Abstract. What we are facing in this article was the study of calligraphy art, especially the Nestaliq font, in terms of its aesthetics and its alignment with the art of architecture. Since calligraphy is a full-fledged art, it is important to understand the status of calligraphy art among other arts. The research methodology of this paper was descriptive and analytical, and data were gathered in a library and documentary manner. This paper responded to the question of what features the Nastaliq font has among the arts, especially the Islamic countries, that is considered the finest arts and, in addition, what are the common features between the art of calligraphy and the art of architecture. For this purpose, firstly, the definition of calligraphy and principles of the Nastaliq font have been discussed, and then the common aspects of the Nastaliq font and architecture have been investigated.

Key words: art, calligraphy, Nastaliq line, architecture, aesthetics

as Roman inscriptions or some of the manuscripts of the Gospel), calligraphy in Europe was a subculture of libraries and academic circles. Chinese calligraphy has a certain abstract and visual quality that allows expression of thought and feel and is therefore related to painting (Figure 1). In countries such as Japan and Korea, this was partly the same. Generally, in the Far East, calligraphy art was most prevalent among priests and religious authorities, but grew dramatically alongside the painting.

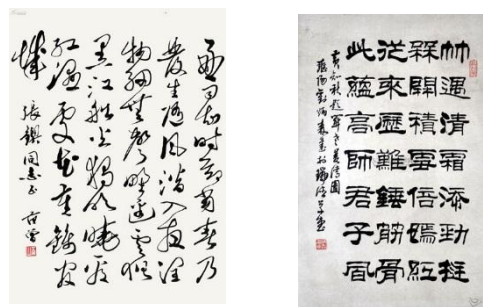


Figure 1. Chinese Calligraphy

2.2. The Emergence Of The Persian Font

Before Islam, various fonts, including the Nail font, Pahlavi, and Avestan have been spread in Iran, but with the advent of Islam, our ancestors embraced the alphabet and Islamic fonts. The history of the formation of the Arabic script and its way of writing did not go far before Islam, and it was formed almost simultaneously with the spread of Islam and in the early years of Islamic conquests. Although Iranians have borrowed their current font from the Arabs, they have played a major role in evolving this font and turning it into a calligraphic art. The creation of dot and accent in Arabic font is attributed to a person called Abu Sa'd 'De'li al-Fars Yu in the first century AD, which was further carried out by non-Arabians, including Iranians, to prevent the mistakes of reading the Qur'an. If we keep in mind that Islamic and Iranian calligraphy is based on very specific rules and systems, each of which has different font types, from a certain system of form, and are to a great extent indistinguishable. Then we find that the creation of new fonts or personalized calligraphic techniques

1. INTRODUCTION

Religion, science, philosophy, art, etc. all seek to discover the truth. Each of them uses their own way. It seems that the purpose of all of them is same, but the ways and means to achieve that goal are different. Religion rely on faith, science on experience, philosophy on reason and art on feeling. Although in appearance, the boundary separates them from each other into an independent domain, but there is no font and boundary behind it. Art is also a combination of beauty, science, religion, and philosophy in the depth of their existence. Calligraphy means making a beautiful or beautiful piece of art. Calligraphy is sometimes difficult to understand as an art. It seems that in order to understand and enjoy the visual experience of calligraphy, calligraphers, in addition to writing a text, have tried to create artistic work with aesthetic values. Thus, calligraphy varies with the simple writing of the contents and even the design of the letters and the layout. Calligraphy can be found in almost all cultures, but is located at the summit of the visual arts on the east, especially in Islamic lands and Iran. Islamic calligraphy and more than that Iranian calligraphy is a striking balance between all its components and its constituent elements. The balance between useful and usable on one hand and its dynamism and its transformation on the other; the balance between the form and content, which, with a neat and neat, can provide a suitable form for different meanings.

2. CALLIGRAPHY BACKGROUND

2.1. Traditional Chinese Calligraphy

Although calligraphy in the Orient has found its importance and development, it can be found in all cultures. The calligraphy from the fifteenth century AD entered the Latin vocabulary circle and was only introduced as a well-known term after the nineteenth century, but from late, especially in the Far East and Islamic countries including Iran, calligraphy has been as an artistic indicator. In Europe, although the state and the church were long-awaited to calligraphy (such

3.1 Good formation

In order to obtain the good form of writing in calligraphy, the following points are required:

A-Tuffieh: Observe the arc, the level and the round of the letter in proportion to the width of the same font.

B- Finishing: Observe the length, width and height of the letters and their proportion.

C- Smuggling: Observe the concentration and dilution of the letters in writing.

D-Exmal: Observe the general principles of each letter in writing.

E-complement: Leaving hands at the end of letters such as (d, v, r (in Persian)).

And this statement is used in the elements of the rules of principles and ratio.

2-beauty of status:

Adjustment and alignment of rows, observance of intervals, good proximity and moderation of words, ranking and extension.

To be aware of the good situation, you should be aware of the following points:

A- Freshen: Observe the place of each letter or letter with other letters.

B-Level: Observe the location of all letters and words to align one row.

c- Writing: Observing the goodness of the connection of the letters in the formation of the word.

D-supremacy: Aestheticism in writing letters and words.

And from these, two other rules of the font, the combination and the seat, are obtained.

3. PRINCIPLES OF CALLIGRAPHY

Baba Shah Isfahani (deceased in 996 AH), in the Tradition of Al-Mukṣas Nastaliq, listed the twelve fonts of the calligraphy as follows: composition, seat, proportion, weakness, strength, level, distance, ascension, descent, principles, Safa and dignity, as well as four principles: Literacy, whiteness, real ascension and real sedimentation as components of the rules of the font (Mahmoudi, 2006). The authors of the letter of the scholars of Nasserī attributed the status of the twelve fonts of the font to Ibn Muqall and then referred to Mir Ali Tabrizi (the Nastaliq line), and maybe Mir Ali Tabrizi, from the views of Ibn Muqallāh and the rules of the Twelve Ganja inspired and expanded (Mahmoudi, 2006).

emerge from the basis of what aroused and astonishing observation. In calligraphy, the size of each letter and its relation to other letters is determined with great precision, and each letter is defined as a "modulus", the violation of which constitutes a neglect of a multi-hundred-year agreement that always exists between the reader and the audience and with the consent of the parties. Even the arrangement of the form of words is determined on the basis of certain principles, which are set up by the great professors in the "scriptures" and "adjectives". The placement of words-that is, "seats" -that each row, though not entirely anticipated and mandated, -which was impossible - but in its "ideal taste" had its own aesthetic proposition. Calligraphy training is being taught today in Iran by many professors and centers.

2.3 Principles of calligraphy

Principles of calligraphy are the principles that have been around for 1000 years. The general rules of the Islamic fonts, especially the six fonts and the Nastaliq font, have been formed. It is based on the correction and categorization of the errors that prevail among the calligraphers of that time, and the writing of rules and their rule. These principles have been created (Falsafi, 2007). Calligraphers paid attention to the rules laid down by Ibn Muqallāh. These rules were favorable ground for the professors on the basis of which they were able to reach the final level of calligraphy principles and rules. Ibn Muqall Shirazi expresses the rules of calligraphy in the thesis. He divided the rules of the font into two parts:

1. The goodness of forming the observance of the principles and pillars of writing the letters and their connections in words is good, including: ratio, level, distance, weakness, virtual ascent, virtual descent, true ascension, true descent, sending, literacy and aptitude.
2. Good status (how to link the letters of connectivity and the combination of the letters separated and the proximity of the words and the system of rows and the proportion of motions (stretches) that use the rules of "composition" and "seat" of them. After Ibn Muqall, another calligraphers gradually expanded these principles and set them in eight or twelve bases and more. Because understanding the issues of font and calligraphy requires recognition, it is briefly stated (Falsafi, 2007)

And the third seat (green line): The words are staggered at the end of the virtual rising line at the end of the row.



Figure 2. Arranging of seats

3.3. Ratio: (Alignment) is the size of the letters. It means that each letter should be written relative to the font, not the smaller one.

3.4. Weakness: It's respecting of thin note in the letters, and its ultimate at the end is diurnal.

3.5. Strength: Observing the thickness in letters, and its fullness is seen at the end of the strokes.

3.6. Surface: The state of the land that you watch is only in the early stages of the drawn.

3.7. Away: The softness of the letters and the cursor of the letters, which ultimately have been pulled, and the distance between the level and the end should be found in the masters' line (Figure 3).

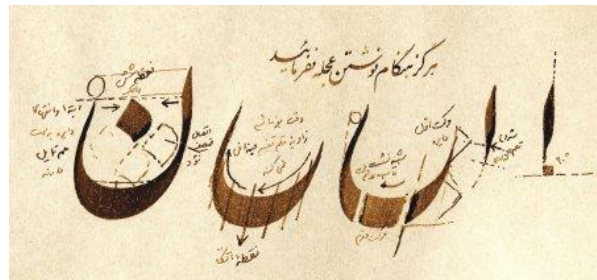


Figure 3. Round and ascending in Calligraphy

1. Combination

2. Seats

3. Ratio

4. Weakness

5. Strength

6. Level

7. Round

8. Virtual Climb

9. Virtual Descent

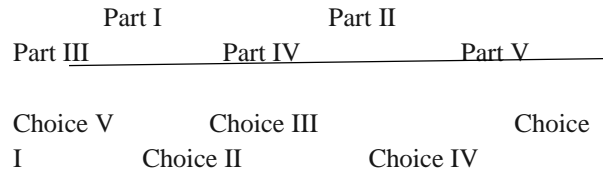
10. Principles

11. Safa

12. Dignity

3.1. Combination. (Coordination): The combination is twofolded: partial and general.

It also includes the correct writing of my word strings, including the correct writing of the word. Also, the shape of the words in the sentence is included in the sentence. For example, if a row is in size of hemistich, then a word can be drawn in a word or the two words are drawn in semi taut, the word can be lowered or pulled, and the last one is not inserted. It's better to be upright.



In fact, if we divide the sentence into five parts, the best choice is to drag the middle section and then to the left and then to the right. The last letter of the sentence should not be lower than the upper limit of the eye movement at the bottom of the row, and the closure should be closed. In fact, the sentence is seen as "B" in Nastaliq.

3.2. Seat: (Ductility): The line of the seat or the line of the carrier or the line is a linear field that replaces the letters and the words of each row in terms of it (Figure 2)

The first line of the red line (first seat): which is the same as the main one in a row (Nastaliq) and the words are placed on the line of the seat.

But the blue line (the second seat): letters or words relative to the original size of a little bit smaller than words placed before the end of the row

سطر اول خط آبی (کرسی دوم) اول
و کرسی سوم (خط سبز)
اما خط آبی (کرسی دوم)
سطر اول خط قرمز (کرسی اول)

No phenomenon in the world is accidental. The causality always provokes a new and fresh phenomenon. A law that man cannot fully discover and its beauty is the same. The triumph of these laws brings magnificence, glory, beauty and continuity of the world as well as the emergence of religion and faith. Art is also a combination of beauty, science, religion, and philosophy in the depth of their existence. Perhaps one of the most beautiful natural effects is the license. The flying butterfly is full of imagination and aspects of the faith, while at the same time fulfill all the laws of the flight. Its shape and form are full of mathematics and symmetry. Its colors are full of grace and beauty, and the type of birth and transformation and its life is a divine miracle. Combining and mixing all of these components together brings out the unique butterflies. It seems that each of the other phenomena of existence also has such conditions. Therefore, the beauty of the butterfly is not inherent in its own right; it is derived from the use of the form, color, and achievements that all come from religion, art, science and philosophy (Figure 5). In other words, if any other thing exists, it will be like a beautiful butterfly (Taherian).

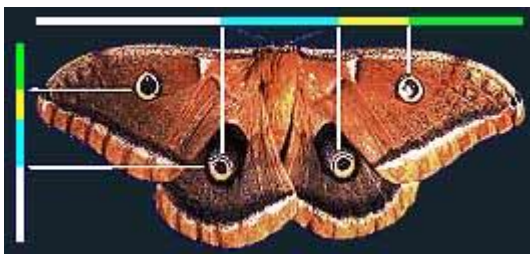


Figure 5. The butterfly's aesthetics

Although art is basically closer to the discovery of intuition and spiritual and spiritual experience, it is never needed without science and mathematical rules. On the other hand, beauty and aesthetics in art have been criticized and studied for centuries in the field of philosophy. Behind the scenes artwork and artistic subjects are full of rules and laws of science and math. Especially the calligraphy is full of mathematics and clerical geometry. Balance, symmetry, balance, parallelism, parallelism, rhythm, song, texture, point, surface, etc., and other elements used in art, all before the entrance to the arena, belong to the field of science and mathematics. The category of art that belongs to the universe also has its own geometry and mathematics. As Einstein discovers and expresses the

3.8. Virtual ascent: Moving the pen from below to up, in a condition that it is not straight. Like the vogue (drowned).

3.9. Virtual descent: Moving the pen from the bottom is not straightforward, as it is originally drawn.

3.10. Principles: the quality is obtained from the combination of the nine parts mentioned above, and in the line that this trait is a little visible, that line is an elephant, and it is desirable that the character is bestowed upon it, as it is in the form of a manifestation. The ninth parts are in front of it as its body, and it is the spirit of the line. "You do not know the taste of this wind until you do not taste it to God" (Figure 4).

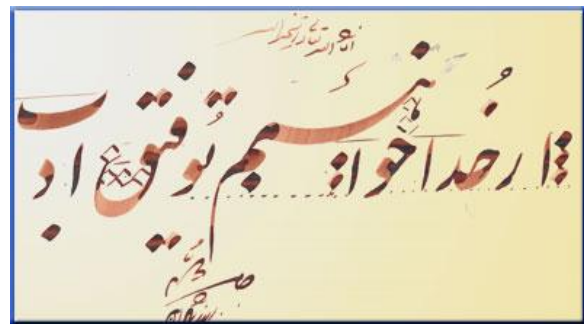


Figure 4. Calligraphy Principles

The two terms of "Safa" and "Dignity" are font's traits that have reached the stage of perfection, and after years of practice and experimentation in calligraphy, they are described in the description of the two:

3.11. Safa (happiness): It is a state that makes the mood happy and brightens the eyes (Falsafi, 2007). It is a state that enhances nature and makes the eyes lightening and cannot be achieved without the purification of the heart. As Rumi has said: "That the purity of line is of purity of heart".

3.12. Dignity (melodious): It is a quality of the line that, as it arises, the calligrapher is fascinated by looking at the line and does not feel tired. This is a scenario where, as seen in a line, the writer is fascinated by watching it and be free from it (ibid).

خلق را مونس وانیس شوی	ایکه خواهی که خوشنویس شوی
عالمی پر ز نام خود سازی	خطه خط مقام خود سازی ست
وین به عهد شباب باید کرد	ترک آرام و خواب بای کرد
روز و شب لحظه ای نیاسودن	سربه کاغذ چو خامه بر سودن
هرزه گشتن نه کار پاکان	خط نوشتن شعار پاکان است

است

4. CALLIGRAPHY AMONG ARTS

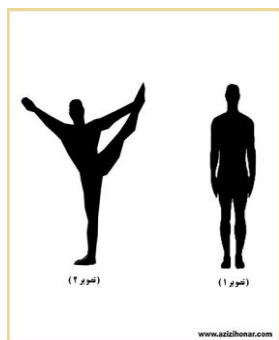


Figure 6. Symmetry and balance

Nastaliq is full of balance. Balance in letter, word, row, chilipa, black braid and etc. And Nastaliq equals this equilibrium in the first place. Symmetries and pseudo-symmetries in the "good form" and "good status" and, ultimately, the balance and beauty of Nastaliq have played a central role. The reversals are the most objective and most prominent types of symmetry (Falsafi, 1386) (Figure 7).



Figure 7. Calligraphy Aesthetics

Balance and symmetry in architecture: Concepts of equilibrium and symmetry have been used since the beginning of architecture. As a major compilation topic, equilibrium in architecture is created by the use of spatial and spatial components. Equilibrium is an objective or subjective state of equilibrium, and symmetry is a special state of equilibrium. Naturally, human beings, while observing things, compare them with horizontal and vertical axes in their minds, and they detect existence or imbalance in them. The artistic effect without balance and harmony between its compositions will be incomplete. It would not be desirable to provide the desired message to the artist (Figure 8).

theory of relativity, Mir Emad uses his golden ratios - which is a mathematical topic - without knowing and recognizing himself. The only difference is that in science there is a kind of self-awareness and in the art of sub consciousness. Science is on the way and art through the heart. In the meantime, the work of researchers and investigators is to understand and explain the rules and laws that lie in art. It is not forgotten that the entry of each of the components into the work of art is unconscious and, ultimately, it must pass through the path of heart and soul, and only in these circumstances, the created works, artistic dignity, and otherwise in terms of technique and Science and skills remain. Experts, researchers and art critics always have the opportunity to analyze and analyze the works of art, and eventually reveal and express the elements and elements of the work.

5. COMMON CHARACTERISTICS OF ARTS

5.1. Balance and symmetry

Each form is symmetric, balanced, but not every symmetrical form is necessarily symmetric. One of the criteria for aesthetics in visual arts is the balance of art. The reason for this is the sentiment of human being who needs to balance and balance the world from inside and outside. One of the easiest ways to achieve balance is by using simple and mathematical imaging. Every person standing in position (Figure 1) is symmetrical and not necessarily balanced. But this person can stand up to be balanced, but not symmetrical (Fig 2). The balance of Fig 2 is slightly more complicated and more artistic than the balance of Fig 1. Now imagine the individual balance on the circus rope a few meters above the ground, without safety features and only on one leg (www.parsacad.com). It seems that there is a certain degree of equilibrium for making art more complex and artistic. In ancient arts, every civilization has typically been used with simple equations and symmetries. But gradually this simple equilibrium is replaced by complex and advanced equilibrium, and in the meanwhile instead of symmetries of symmetric or asymmetric symmetries (Figure 6). In this situation, it will be difficult to balance, but the result will be very varied and beautiful, and this has happened in modern arts.

if we add one unit, we will square it. Its geometric definition is: the rectangular length to the unit area whose width is one unit less than its length. (Wikidia). The forms defined by the golden ratio are aesthetically pleasing in Western cultures, because the reflector is a property of symmetry and asymmetry. Among the numbers of some of them are of great importance, one of the numbers that the history of dating to humanity comes to thousands of years BC is a number called Golden Ratio. This ratio is still widely used in art and design. The golden ratio, the golden cut, the golden number, is also known as the divine ratio, and is usually indicated by the Greek letter (Figure 9). Golden number applications in ancient human artifacts

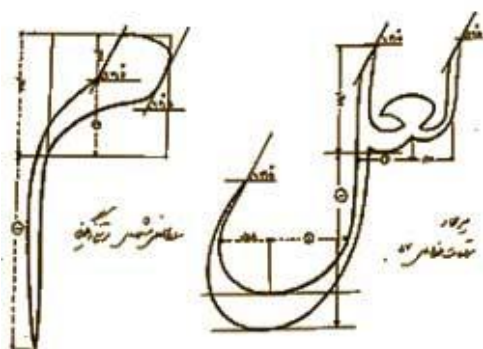


Figure 9. The Miremade font

5.3 Golden proportions on the nastaliq font

It seems that calligraphers, especially the Nastaliq font, with the scientific knowledge and data of the low-costless of the golden ratio, did not make it the basis of their work, but the habit of seeing this fit in the elements and phenomena of the beauty of nature, the instinctive rule in choosing these proportions In the structure of their artwork they have been. We know that the size of the organs of the human body is golden relative to each other, and we consider each organ that has these proportions to be proportional and harmonious. Accordingly, in every natural phenomenon and with an artistic work whose structure has a golden ratio, the minds of the public will be able to recognize its imperfections (Bakhtiari, 2008). In order to find the golden ratio on the Nastaliq font, we did a test. In this way, the two sample fonts, the first sample of which are proportional and beautiful, and the second, are slightly unsuitable, were showed people who were not familiar with the rules of the

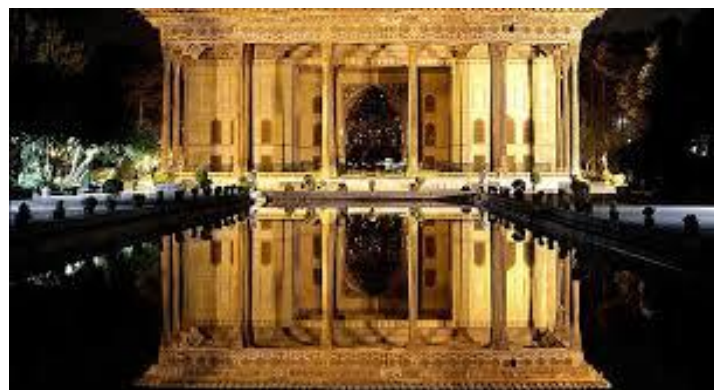


Figure 8. Symmetry in architecture

5.1.1. The aesthetics of balance and symmetry

Most living things are symmetrical. From insects to birds, reptiles and mammals including humans. Truly, what is the secret of beauty and the presence of a great symmetry in the universe? Every balance and symmetry in nature is inviting to unity and integrity, and every unity is always beautiful. Unity and integrity are the realm of love, and everyone who goes away from this area feels a sense of nostalgia and abandonment. Maybe the human being is the only creature that is out of this unity and integrity of the world and in the words of Rumi, they are away from globe canebrake and is always connected, and this is his unyielding and restlessness. Nastaliq is plural in the same unity and at the same time unity at the same plurality. The whole point is a move. Calligraphy that can detect and perceive this move has come to the intended destination. The continuation of this movement ultimately leads to a song and proportions that magnifies the glory and beauty of Nastaliq. The understanding and perception of this movement and the achievement of Nastaliq's song begins from within and is an esoteric and, at the same time, relative. Calligraphers who have not reached a balance and unity from within, can easily reach out to a beautiful and balanced line. The reasons for high study of symmetry, balance and unity and aesthetics in the later sections of the text will be clear.

5.2. Golden ratio of "golden proportions"

The golden ratio in mathematics and art is when the ratio of the smaller part to the larger part is equal to the ratio of the larger part to the whole. Another definition of the golden ratio is that "the positive number is that

referred to this ratio. The Egyptian people, from the years BC, have been aware of this proportion and have respected it in the construction of the Egyptian pyramids. Many of the natural patterns in the human body have this ratio. The ratio of the length of the five right side to the length of the regular pentagon is equal to the same number. Psychologists also believe that the most beautiful rectangle in human's eyes is a rectangle whose length to width is equal to the golden number.

5.3.1 Golden ratio in iranian architecture

Freedom Tower and Square: The length of the building is 63 and the width 42 that $42:63 = 1:1.5$ is close to the golden number. Its architectural was a large concourse that was a combination of the Achaemenid, Sassanid, and Islamic styles, whose curve inspired by the arch of the architectural deficit Ancient Iran. **Ibn Sina Mausoleum:** The tomb is surrounded by a circular staircase (spiral Fibonacci) and twelve towers. The courtyard is connected to the porch with a wide staircase. A door with a doorway with a height of 3.2 m and a width of 9 / 1 meter is attached to the tomb's grave ($6/1 = 9/1: 2/3$). There are two halls on either side of the courtyard, one on the south, where the hall of lectures and gatherings. And one in the north is the tomb library. The library's hall 45.9 m and its exposure is 5.75 m ($6/1 = 75/5: 45/9$). **Square of the Universe and the Lotfollah Mosque:** In recent books, author Jason Eliot believes that the golden ratio has been used by the designers of the Square of the Universe and in the vicinity of the Lotfollah Mosque (Figures 11,12).

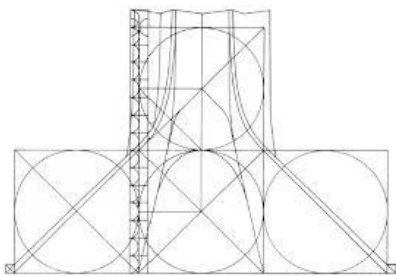


Figure 11. Golden proportions in the boo-Sinai tomb

Nastaliq font, and, all of them, mentioning the imperfections and incompatibilities in the samples of the Dumef, can be the first example. Like This test, while emphasizing the golden proportions of the Nastaliq line that are known, eyes and minds were looking for a better fit, selecting the golden items (Figure 10).

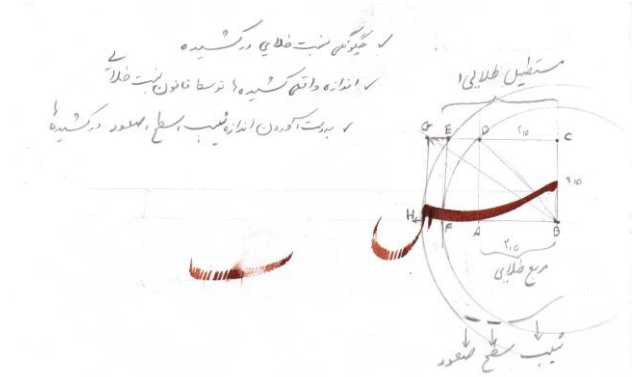


Figure 10. Golden proportions in calligraphy

However, the Nastaliq line was invented and culminated (the Timurid and Safavid periods), that artists in various arenas of art were at the peak of the flourishing and the creation of new works of architecture, miniatures and geometric designs, and their interplay in The formation of the Nastaliq line and its elevation cannot be ignored. The Nastaliq line in the form of letters and words and the choice of the box, the parts, the chippa, the book and the distance between the two rows and its other combinations, in most cases close and sometimes miraculously, have been consistent with the golden proportion. Here is an overview of this. Harp and words are related in two directions:

- A: Weakness and strength ratio (thickness of components)
- B: The ratio of the components of the components to the total and the components together

5.3.2 Golden proportions in architecture

The background of paying attention to the golden number is not much of Fibonacci time, but far more distant. Euclid, in the sixth volume of his thirteen volume books, in which he constructed Euclidean geometry, introduced this ratio. In 1509 Luca Pacheuli wrote a book titled "The Divine Proportion". He portrayed the paintings of Leonardo da Vinci, which featured five Platonic objects, in which they also

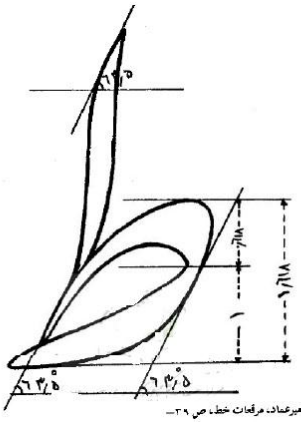
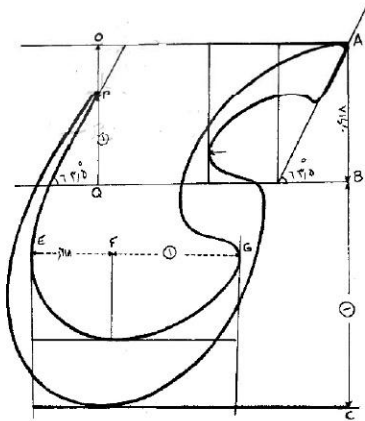


Figure 14. The Miremad font

5.4. Golden angles in nastaliq

The golden angle in Euclidean geometry is 63.5 degrees. In Nastaliq there are two main and golden angles:

- 1 - The pencil angle on the paper, which is 60 degrees to the horizontal line.
- 2 - The thrust angle is 30 degrees and it is made in two forms:

- A. From right to left: Most of the movements in the Nastaliq are from right to left, so with a little ignorance one can ignore the rogue as the average and the right thrust angle from right to left. This angle is 30 degrees.
- B - From left to right: this thrust is the reciprocal of dots and reversals, and this paper considers the points as representing the thrust from left to right, whose angles are 30 degrees.

Perhaps one of the reasons why Nastaliq is known as the bride of lines is in the presence and implementation of the above angles. For scientific proof and

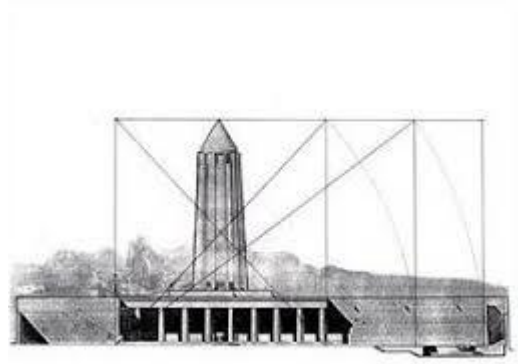


Figure 12. Golden proportions in the Freedom Tower

A) The ratio of weakness and strength

With care in a large number of works by outstanding readers and geometric parsing of the letters, it is found that the letters at the beginning of the angle were 63.5 degrees higher than the horizon line. This means that the reader chose to cut the font at the beginning of the writing with a 63.5 degree angle on the paper (ibid).

B) The ratio of the sizes of the components to the total and the components together (Figure 13)

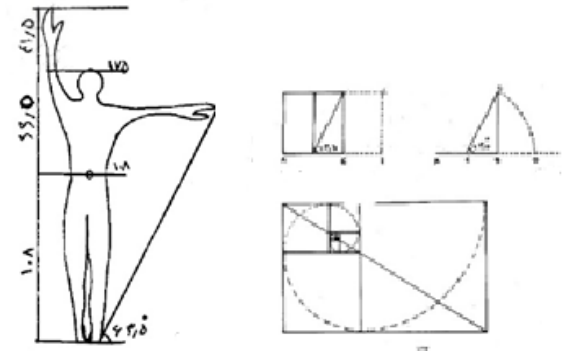


Figure 13. Golden proportions

In the sample below, the selected letters and words of the most eloquent readers of Iranian history have been analyzed based on the golden ratio (Figure 14).

The angle of these two points relative to the horizon is half the angle of 30 degrees, and is equal to 15 degrees (Figure 18). If our marking on paper is normal and at a 60-degree angle, with the pen drive, there are three horizontal, perimeter, and perpendicular movements, as shown in Figure 16. In this image, the thickness of the slider movement is exactly equal to the perpendicular thickness. In the right triangle ABC, angle A, 30 degrees and angle C, is 60 degrees. Therefore, in this triangle, the side to the 30 ° A, BC, which is the same as the oblique motion, is half the chord. On the other hand, since the chord of this triangle is the same as the square of the point, it can be concluded that the rough thickness in this case is exactly half the point (Figure 16).

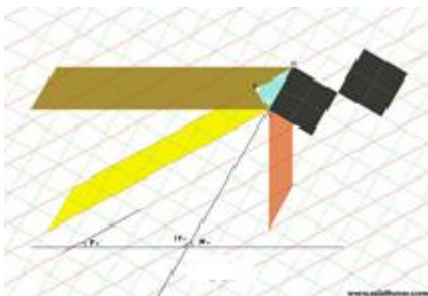


Figure 16. Angles and skew movements in Nastaliq

In Figure 16, the movement of the oblique is precisely "rogue movement," and the horizon moves out the motion of "B" and the vertical movement is associated with the letter "A". Although the "alphabets" in the Nastaliq range from the top down to the perpendicular line (Fig. 17). So it will be reduced its thickness to the vertical line. As a result, the thickness of the "A" is slightly less than the vertical movement, as well as the shear movement (rogue). The word is that in Nastaliq, "alphabets" are slower than rogue and the rough thickness is half the point. Do not forget that the size of each side of the dot is as wide as the font.

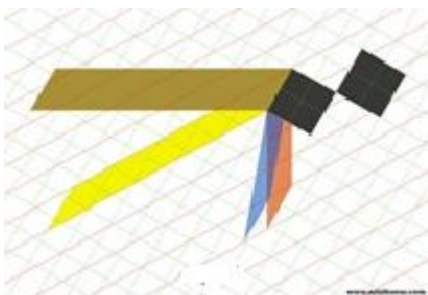


Figure 17. Movement of "A" in Nastaliq

understanding, as well as the importance of these two angles and their relationship with each other, we analyzed and figured out how to consider the image of No. 15. As shown in Fig. 15, a network with the above angles is formed. It should be noted that this network with features that can only be formed at a 60 and 30 degree angle, is the point of turning this paper and research into consideration. The angle of 60 degrees doubles the angle of 30 degrees. The sum of the two angles 60 and 30 makes the angle of the right. These two complementary angles are complement of each other. The right angle in geometry and trigonometry has a special position. The importance of this angle in the universe is that the angle of gravity from the center of the earth is 90 degrees relative to its crust. On the other hand, this network only has the ability to show symmetry at two angles of 60 and 30. Symmetry is the factor and the result of beauty. The thrust from left to right, which appears in this paper at the dots, is 30 degrees, and exactly the thumbnail from right to left, which is seen in rogue. In other words, the drift in Nastaliq is always around the 30 degree axis and the pen continuously seeks to create a variety of symmetries. Repetitive movements and rhythms from right to left are balanced in Nastaliq with symmetrical movements from left to right. This is where the importance of dots and reverse runs becomes apparent (Figure 15).

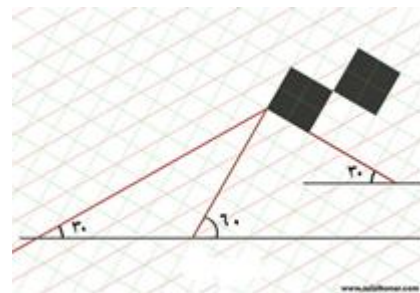


Figure 15. Angles in Nastaliq

Without a dots and reverse circle, it will certainly not be perfect. They are a heavy burden of symmetry and ultimately a balance. The puzzle of the Nastaliq bride, whose peak is manifested in the great Miremad line, is only possible with the presence of dots and reversals in the above network at 60 and 30 degrees. In this network, the true location of two points along each other is clearly revealed. As shown in the figure, the rightmost point is slightly higher than the left point.

movements of the pen and with the black that are formed, but also the rhythm, tracks and hypothetical circuits can be embedded in white. Even in the black and white parts. The position of the points in each work is defined and determined according to the circuits in the multiplication of that effect. As a result, Mirdamad has not relentlessly relied on Rafi Nastaliq Peak. The font of Mirdamad is full of principles and rules; it is rational and wise rather than artistic. He is a philosopher and wise Nastaliq, writing from the beginning to the end in a style. All his movements can be defined and edited. Line Miremad is pure classical. That's why you can use it all the time. This line can be updated and used in new technologies, including computers, more than any other line (Sector).

6. CONCLUSION

Every work of art is a combination of beauty, science, philosophy and aspects of faith, including discovery and intuition. Although the amount and proportion of the earnings in an artwork can vary, however, it is always possible to derive scientific, philosophical, and religious laws from every work of art.

Do not forget that the entry of each component in the work of art is unconscious and should ultimately pass through the passage of heart and soul, and only in these conditions, the created works, artistic dignity, and otherwise in terms of technique and Science and skills remain. According to the aforementioned, the arts have a common aesthetics that is presented in various arts in various ways (Taherian). Characteristics such as rhythm, repetition, balance and symmetry, fitness, scale, and so on are among the vivid ones, both in calligraphy art and in the art of architecture. In the table below, some of these features are compared in architecture art and calligraphy art (Table 1).

Fig. 18 is same as the 16th and 17th figs. In this figure, the axis of vertical symmetry, the axis of horizon symmetry, the main slope of the rogue and the inclined gradient are observed. Point drift is precisely the roughness of the drift in the vertical axis of symmetry. The rebellion is reflected at a 30 degree angle to the mirror of symmetry perpendicular to the same angle. Moving or throwing dots along this reflection and from left to right. Of course, twice as rude in thickness (Figure 18).

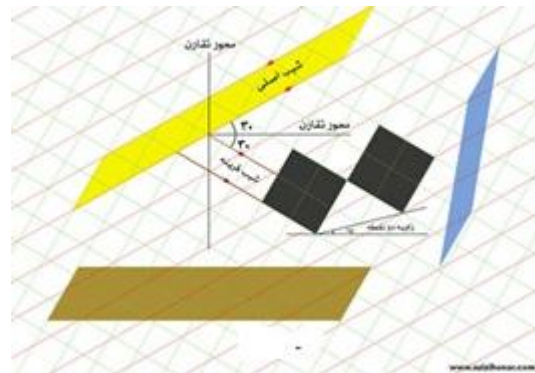


Figure 18. Axis of symmetry in Nastaliq

The angle of this reflection, which is a rough angle, is extremely important. This symmetry goes beyond normal symmetry and is somehow a call to balance and rhythm and a natural song. This symmetry is the result of normal and natural penetration and drift. From this perspective, early calligraphers can be said to be easier than contemporary writers. Because the pen and throwing of their pens in Nastaliq were completely normal and natural and the pen was not distorted, confused and misleading in its thrill. The antecedent line is linear and flowing from the inside, clean and coordinated with the outside. Line is normal, simple and uncomplicated. It should be kept in mind that Nastaliq has a total repetition of movements and beats that ultimately bring harmony and make the visual effects of this line more beautiful. But repetitious and excessive rhythm and beat, causing the boredom and soul of the calligrapher, as well as the audience, should lead to movements of the rhythm and the song, in order to bring the soft and smooth beat to diversity and balance. Proximity movements, which are the same dots and reversals, in practice, burden this heavy duty. It is worth noting that the rhythm and tracks, seats and hypothetical circuits in Nastaliq are not only in the

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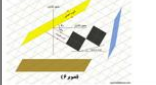
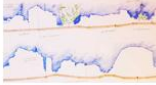
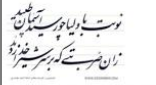
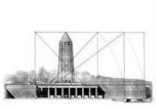

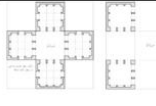



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Table 1: Features in architecture and calligraphy arts

Architecture	calligraphy	features
		Equilibrium, symmetry
		Line of base- Sky line, line of land
		Golden proportions
		Feynson-modulus
		Repeat