

COSMIC POETRY OF OMAR KHAYYAM AND ITS ARTISTIC EXPOSITION USING BATIK TECHNIQUES

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Abstract

It is a fact that many artists have been mathematicians and many mathematicians have been artists. But while talking about Omar Khayyam who was a great mathematician, astronomer and poet it appears that neither he was an artist nor he ever painted. But a lot of art that can rightly be termed as Khayyamic Art is created on the basis of his poetry. Several popular editions of his poetry are illustrated by great artists who tried to expose the sense of his poetry via their paintings. In most cases the paintings express the point of view the artist has about the poetry of Omar Khayyam. Artists having a Sufi approach painted in Sufi style exhibiting their views regarding eternity and cosmology, the artists having heretic approach produced marvelous romantic paintings and artists having interest in the philosophical themes created paintings exposing the same.

Ahmad Imad-Ad-Din in Astronomical References in the Rabaiya't of Omar Khayyam has studied astronomical poetry of Omar Khayyam. He selected six of Omar Khayyam's quatrains and termed them astronomical on the basis of their theme. He then compared two translations of Omar Khayyam, one by A. Saidi a 20th century Irani-American scholar and the other by the famous 19th century scholar Edward Fitzgerald (the first American

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edition). The translation of Fitzgerald was illustrated by the paintings of 19th century American-Italian artist Elihu Vedder. Ahmad has commented on these paintings too.

This study compares seven translations of Omar Khayyam five in English, one in Urdu and one in Russian. These translations are free translations from Persian. Translators in most cases have translated giving a flavor of their own views about the poetry of Omar Khayyam. So, all the translations appear different while translating the same quatrain. Eight quatrains of Omar Khayyam which this study terms as cosmic are selected and their translations are compared. Finally, eight paintings created by one of the authors Victoria Nikulina are introduced which illustrate the cosmic views of Omar Khayyam. These paintings utilize the mediums of Batik Art. It is expected that this study and the paintings presented will prove pioneering adding something different and new in the treasure of Khayyamic.

Keywords: *Omar Khayyam, Cosmic Poetry, Sufism, Cosmogony, Artistic Exposition*

Introduction

This section is about “mathematics and art” and “mathematics and artists”. Mathematics and art both expose creative ideas provoking aesthetic form and composition enabling intellectual perceptions to relate, collage and communicate. Creative thinking is the thread that relates Mathematics and Arts. Different cultures in different parts of the world have their own ways to combine mathematics and aesthetics to make the visualization of this creative thinking possible. Designs based on geometric shapes and their symmetries, tessellations, sculpture, paintings, batik on fabric, landscapes, architecture, pottery and music are such expositions in enormous forms. It is a vast and interesting topic but due to the scarcity of space the discussion is closed referring (Sajid, 2001, Web site) and (Bjerregaard, 1915, 9) for details.

For a classical example of the relation of mathematics and arts it is to mention the golden ratio (golden section) or the divine proportion. This ratio has been in use in paintings, designs, sculpture and architecture since antiquity and being carried

over to the recent past it is still in use for the satisfaction of aesthetic feelings and emotions. In addition to Leonardo Da Vinci's illustrative work in (Pacioli, 1509) and his famous paintings some other famous works to refer are by Piet Mondrian, Michelangelo, Raphael, Rembrandt, Salvador Dali, and Seurat. In nature also the examples are abundant as beautiful geometric patterns can be observed in honeycombs, galaxies, snowflakes, curvature of flowers and distribution of branches of cactuses.

In the modern day aesthetic approaches using mathematics and geometry, the geometry of nature or fractal geometry is of paramount importance. Without going into mathematical details it can be said that fractal is the space filling property of a curve. Based on self-similarity, natural or artificial patterns that repeat at various scales can be classified as fractal. Fractals are characterized by the simplicity of the initial pattern leading towards very complex structures by replicating itself at various scales (Mandelbrot, 1982). Fractal geometry in its nature is different from the usual Euclidean geometry as it involves dimensions that are non-integers and are termed as fractal dimensions. For a detailed study of fractals (Mandelbrot, 1982) and (Hastings and Sugihara, 1993) can be referred. Fractals are useful in the study of natural patterns and phenomena. Artificial landscapes and patterns can also be created forming a separate class of art that can be termed as fractal art. For the connections of mathematics and arts Schattschneider (Schattschneider, 2003) is referred where it is explained that how mathematics produces art.

Omar Khayyam himself was not an artist like Leonardo Da Vinci. He never created paintings. But he is prominent in the sense that a lot of art is created because of his poetry which can be truly termed as Khayyamic art. A large number of paintings based on his poetry in various mediums and styles are created so far and still in continuation. It is unfortunate that most of the artists preferred to paint considering the romantic meanings of his poetry. But the sense of his poetry is not only the romantic one. The poetry has deep philosophical sense elaborating many discrepancies originated in cosmology and cosmogony. In addition, Omar Khayyam was a scientist, astronomer, philosopher and mathematician. This aspect of his poetry should not be overlooked in the paintings created on the basis of his poetry.

Ahmad (Ahmed, 2001, pp.8) in his study has selected six astronomical quatrains of Omar Khayyam. In view of two translations of Omar Khayyam by Saidi (Saidi, 1991) and Fitzgerald (Fitzgerald, 1884) respectively he has commented on the paintings of Elihu Vedder included in the first American edition of Fitzgerald (Fitzgerald, 1884). This study extends the study of Ahmad (Ahmed, 2001, pp.8) in two ways. First, it has selected eight quatrains of Omar Khayyam termed as cosmic. By cosmic it is meant that together with astronomy they add symbolism, spirituality, eternity and divinity to the physical mortal existence. Secondly, it has studied and compared seven translations of Omar Khayyam including the two considered in Ahmad (Ahmed, 2001, pp.8), one Urdu translation by Saba (Saba, 1985) and one Russian translation by Osip Rumer (Rumer, 1936, pp.113). In addition it introduces eight paintings created by one of the authors (Victoria Nikulina) to illustrate the cosmic views of Omar Khayyam. These paintings utilize the mediums of Batik Art, creating Khayyamic Art in Batik. It is expected that this study and the paintings presented will prove pioneering by adding something different and new in the treasure of Khayyamic Art.

To keep the cosmic aspect of the poetry of Omar Khayyam clear, in section 2 a discussion on cosmology and cosmogony is included whereas, section 3 studies Sufism and Omar Khayyam in a Sufi perspective. Section 4 presents a review of cosmic art. Since the paintings introduced here use the medium of Batik, an introduction to Batik art is also included in the same section. Section 5 includes a commentary and explanation of eight cosmic and philosophical quatrains of Omar Khayyam. Section 6 includes eight cosmic paintings by Victoria Nikulina in Batik. These paintings specially expose the cosmic aspect of the poetry of Omar Khayyam preserving the scientific mode of it. Being scientific these paintings do not contradict the romantic, spiritual, heretic and religious perspectives of the poetry of Omar Khayyam.

Cosmology, Cosmogony and Cosmic Philosophies

From antiquity to the modern times humans have been circling round two “hows” and two “whens.” The first, how and when the world came into being and the second, that how and when it will end. Myths, philosophies, theories and theologies all keep on attempting to answer these “hows and whens”. The answers provided are not simple. Rather, they are in the form of large and complex models

composed of various explanations about the universe, life and human destiny and fate. Modern cosmological theories and models explain the origin, present structure, evolution, and the future of the universe. One of the characteristics of modern cosmological models is their consideration of the universe and the cosmos as physical phenomena. These models differ from the philosophical and religious models in the sense that they skip supernatural explanations for the physical phenomena.

So, there are two prominent aspects of cosmology, the physical cosmology and the religious and mythological cosmology. Physical cosmology is the scientific study of the origin, evolution, large scale structures, dynamics, and ultimate fate of the universe. This includes the study of scientific laws governing the respective phenomena. Religious and mythological cosmology or more generally the metaphysical cosmology can be considered as complexes of creeds, and beliefs based on religious, mythological and esoteric teachings, literature and traditions of creation and ending. Religious and metaphysical cosmologies coexist with the physical cosmology and all these deal with the structure and order of the universe and the place of humans in the universe. As an example of theological cosmological description Genesis 1 (Genesis, 1) can be referred. Cosmological concepts prevailing Islamic societies based upon the teachings of Qura'an, Hadith, Sunnah and other authentic Islamic references, frame the Islamic cosmology. For the cosmological concepts from the Islamic point of view regarding the creation and annihilation of the universe, celestial objects, of heavens and the sustainment of the control by Allah of the vast universe, (Yusuf, 1988), (Nasr, 1993), and (Nasr, 1968) can be referred.

There are other doctrines and philosophical systems too that deal with a restricted area of cosmology called cosmogony which can be considered as an explanation that how the universe or any of its components came into being. In science it is a branch of astrophysics. Since, cosmogony is concerned only with the origins of the universe it can be viewed as a subset of cosmology. Cosmogony is more metaphysical and philosophical than cosmology. The two are clearly distinguishable. Cosmology studies the universe at large and throughout its existence without enquiring directly into the technicalities of source of its origins and cosmogony is the philosophical and theological epistemology dealing with the origins of the physical existence of humans based on religious beliefs. This

also includes the quest about an outside creator source. However, both religious and para-religious approaches deal with some cosmology also. So instead of cosmogony this study has adopted the general terminology of cosmology with a classification of Physical cosmology and Metaphysical cosmology. Metaphysical cosmology includes Religious Cosmology and Esoteric Cosmology.

As mentioned above Sufism has its base in religion. Particularly, Muslim Sufism revolves round **one**, Allah (God) or the creator who is the cause of everything. Sufi is a seeker of that **one**. But in contrast to exoteric beliefs and practices of the religions they believe in their esoteric explanations. They believe most religious definitions and practices as metaphoric and have their own meanings and explanations.

Such cosmologies cover many of the same concerns also addressed by religious cosmology and philosophical cosmology, such as, the origin, purpose, and destiny of the universe and of consciousness and the nature of existence. For this reason it is sometimes difficult to distinguish where religion or philosophy end and esotericism or occultism begins. However, esoteric cosmology is distinguished from religion in its more sophisticated construction and reliance on intellectual understanding rather than faith, and from philosophy in its emphasis on techniques of psycho-spiritual transformation. For a detailed discussion on cosmology and cosmogony from a religious point of view (Nasr, 1993), (Nasr, 1993) and (Longhurst, 2013, pp.116-125) can be referred.

Omar Khayyam and Sufism

Sufism is an important but controversial part of the poetry and philosophy of Omar Khayyam. Authors like Dashti (Dashti, 1967) and Fitzgerald (Fitzgerald, 1859), (Fitzgerald Edward, 1879), (Fitzgerald, 1884) consider him as heretic and atheist and a critic of religion but the others such as Govinda (Govinda, 1941), Yogananda (Yogananda, 1995), and Nadavi (Nadavi S. S. 1933) consider him a Sufi, seeker of God and pious.

The objective here is not to study mysticism or Sufism but for the sake of completion and to understand the true sense of the quatrains of Omar Khayyam it is to mention that Sufism nowadays is considered a Para-religion or Creed based on Love. It is a complex composed of different beliefs, practices and expositions that simultaneously claim to be the part or arising from one or many or all

religions. Initially it was considered to be the part of Esoteric Islamic beliefs. Being strict in its routines the softer expositions of Sufism are fervor and passionate devotion. Mysticism is a more generalized and ancient terminology engulfing Sufism in it. Mystic doctrines are more general and cover not only the philosophies and doctrines of Sufism but also of the other esoteric structures. Mysticism believes in the rising of an individual soul to awareness identifying the individual with the Universal Whole. It is considered to have a reawakening in the Islamic orders by Ibn El-Arabi, El-Ghazali, Omar Khayyam, Jalaluddin Rumi, Fariduddin Attar. Hindu, Jewish and Christian mysticism also exist such as Yoga and Kaballah. So, mysticism can be considered more universal than an individual mysticism associated to a particular religion.

In view of his quatrains Omar Khayyam can be studied in two ways. Firstly, by considering him as an icon of Islamic mysticism and Sufism symbolizing mystical wine, the divine beloved (i.e. God), the mystic (Sufi) and divine love by wine, saki, and Lover. Secondly, by considering him in contrast, as a blithe mortal using the words wine and lover in their most literal and material meanings. However, both the approaches conclude, him being an optimist not a pessimist. He was very practical though difficult to understand. He had a clear understanding of the absurdity behind the shortcomings of assuming humans as pure mortal. And similarly, he was well aware of the mythical illusionary of the mystic paradoxical vision. He considered mystical obsession and excessive sensual pleasures both unable to achieve eternal joy. The riddles of mortality, temporality of existence, struggles in life and unavoidable death appeared to him irresolvable despite all his wisdom and intellect.

In the perspective of Omar Khayyam's quatrains his mysticism and philosophy can be summed up as follows.

1. The human fate and destiny is extra-humanly controlled
2. The physical existence and extinction of humans is in some way linked with dust
3. The most precious moment is the present that is in hand with the options **employ** or **destroy**.
4. Love is an essential ingredient of every beating heart which links mortality with divinity and capable to impart true joy.

Bjerregaard (Bjerregaard, 1915) considers Omar a Sufi mystic of the order of Jellalladdin Rumi, Fariduddin Attar and Saadi. Whereas, Boyle in (Boyle 1959, pp.30-45) with reference to Fariduddin Attar (1142-1220) the celebrated Sufi poet and thinker has mentioned that Omar was the astronomer poet not a fellow mystic, a free thinking scientist, who all his life exalted reason over revelation and who now, in his tomb, awaited with fear and trepidation the final reckoning on the Judgment Day. Zare-Behtash (Zare-Behtash, 1994) is a good source about the philosophy of Omar Khayyam with an approach different from Fitzgerald (Fitzgerald, 1859). It should be kept in mind that Sufism has been very controversial among religious circles. A criticism on Sufism can be found in (Sajid, 2001).

However, it is not confirmed that whether Khayyam practiced Sufism in his actual life or not. He lived an active life. He developed institutions, established observatories, wrote marvelous treatises on mathematics and astronomy and most remarkably, developed calendars and almanacs. Keeping eye on time is the most practical aspect of this humanly and mortal world. This is the most contradictory to the reflections of his quatrains. As a mathematician he provided solutions of algebraic equations with the help of geometrical constructions and vice versa and can be considered as the initiator of the unification of algebra and geometry. He was the most original, and the greatest mathematician of his time with a vision for the shape of future mathematics and science, Mardia (Mardia, 2000). It is important that this work was done far before the analytical geometry by Descartes.

Sufism, from its commencement claims oneness out of dualities. Science, in view of the confirmation of unified theory at the end of 20th century admitted oneness out of dualities. Science is now the art of searching for unity within the diversity. All science is the search for unity in hidden likeness and apparent distinction. One objective of science is thus to unravel this unity. Avoiding the details of the characteristics of Muslim science and its differences with other sciences for which reference can be made to (Anwar Web Side), it is to mention that Muslim science was idealized by cosmic unity rooted in a divine unity. But in practice it was not at all in contrast to the principle of creative secularism of the modern science. The two great mathematicians Muhammad ibn Musa al-Khwarizmi and Omar Khayyam in the 9th and the 11th century respectively were of the same opinion.

Most of the modern scientists also have their own theological creeds and practices irrespective to the principle of creative secularism of the modern science.

Cosmic Art and the Batik Art

In the following it is discussed that what is meant by cosmic art and since some paintings related to the cosmic poetry of Omar Khayyam are presented here using Batik as a medium a brief discussion on Batik is also provided.

The Greek word kosmos is the origin of the word cosmos meaning order or harmony which is in meaning opposite to the word chaos meaning unordered or irregular. Now it is used as a synonym of the word Universe. Cosmic art is not a well-defined terminology. Though, it is fairly understandable in the physical sense. It includes a factor of fantasy, intuition and visualization. It cannot be put in the class of science fiction as seen in the perspective of War of the Worlds and Time Machine by H. G. Wells that is associated with scientific characters like Martians, robots, space craft, space travels and space machines. Cosmos having footings in the physical universe has something additional enabling at least to have a feel of amazing realms. It exposes the unification of intuitional bravery, mental adventure, fantasy of thought, alertness of perception, freshness of spirit and glory of heart and soul. So on one hand cosmic art includes images of heavenly objects like suns, moons, planets, galaxies, nebulae and skies and on the other hand it lodges simple or exaggerated imagery of thought, imagination, dreams, illusions, delusions and philosophical elucidation. No doubt, it adds symbolism, spirituality, eternity and divinity to the physical mortal existence.

Batik is an Indonesian word meaning a drop of wax. Membatik means paint and to cover drops to hatch. Batik technique is based on the fact that paraffin, rubber cement, as well as some other resins and varnishes, as marked on the fabric, do not pass through the paint itself and keeps some parts of the fabric unpainted or in the jargon of the artists "reserved". Batik can be performed by hand painting on fabric using reserving compositions. It may be done on the silk, cotton, wool and synthetic materials by applying appropriate fabric paint to obtain clear boundaries at the junction of colors and a special fixer called reserve (reserving part). These may involve paraffin, petroleum and water-based material. The choice depends on the adopted technology, fabrics and paints. There are several types of batik such as hot batik, cold batik, nodular batik and free painting. They are differentiated by

the way the fabric is reserved. Batik painting has long been known in Indonesia, India, China and Japan. All these countries had their own method of dyeing cloth. In the early twentieth century batik became fashionable in Europe, England and America. In Russia, batik became known in the second half of the twentieth century.

Free painting technique is a widely spread technique using which artists can reveal their originality, expose their hand work and demonstrate their inherent manual and intellectual qualities with uniqueness. Free paintings are usually made on fabrics made of natural silk though synthetic fibers are also in use. Nowadays, batik is a leading art among the other branches of decorative arts. This technique unifies the features of traditional artistic techniques such as watercolor, drawing, stained glass and mosaic. Batik allows the artists to express their individuality in a variety of ways, techniques and colors. This makes batik prominent in contemporary art, as evidenced by the increasing number of professional artists and lovers of this art in the modern world. It is to remark here that the Russian batik is characterized by exposing philosophical themes. A good reference about Russian batik is [Germanovich(2010)]. Paintings of Victoria Nikulina included in the next section use the Batik medium and technique as described in this section.

Cosmic Quatrains of Omar Khayyam

This section includes a commentary and explanation of some of the cosmic and philosophical quatrains of Omar Khayyam. By cosmic quatrains it is meant those quatrains that refer to universe, galaxies, stars, planets, moon and earth with some reference to their existence, origin and fate together with the origin and end of the physical existence of human beings. This also includes the quest about an outside creator source.

The quatrains of Omar Khayyam in contrast to their romantic considerations are philosophical and highlight basic questions of life and death, of identity and being, and of origin and destiny of humans. Fitzgerald [(Fitzgerald (1859), Fitzgerald (1879), and Fitzgerald (1884)] only exposed the superficial view of Omar Khayyam's poetry. His quatrains have great insight to enlighten the intellect, shower guidelines to unknot the societal complications and give insight to all the cultural sections of the humanity. Ahmad in (Ahmed, 2001, pp.8)], has focused on the astronomical quatrains of Omar Khayyam from two sources

Fitzgerald (Fitzgerald, 1884) and Saidi (Saidi, 1991) and explained the veiled philosophy and meanings in the poetry with a commentary on the artistic interpretations by Elihu Vedder. In his explanation of the poetry he has consulted Graves (Graves and Ali-Shah, 1967) and Arberry (Arberry, 1952). These artistic illustrations are the part of (Fitzgerald, 1884). He admires the artistic abilities of Vedder who truly figured out all possibilities in the quatrains of Omar Khayyam keeping intact all its broadness. He has selected six quatrains translated by Fitzgerald (Fitzgerald, 1884) and (Saidi, 1991). These quatrains are marked as AF and AS respectively.

In this study the perspective is a little bit extended and a selection of eight quatrains of Omar Khayyam is made from Fitzgerald (Fitzgerald, 1859), (Fitzgerald, 1879), Govinda (Govinda, 1941), Saba (Saba, 1985) and Rumer (Rumer, 1936) which are astronomical as well as philosophical and are termed as cosmic. These quatrains are termed cosmic in the sense of quatrain 1 which is in accordance to what this study means by cosmic. In this quatrain Omar Khayyam invites attention towards the creation of man from soil. He mentions that by constant effort and using the wisdom inherited in mankind one can resolve many problems of the cosmos. But the problems of life and death and human fate he considers irresolvable. He claimed in this quatrain to rise from the Earth's center to the throne of Saturn through the seventh gate. Seven here indicates the stage wise ascend. In view of this quatrain both terrestrial and celestial objects are part of his cosmos. Terrestrial objects he has symbolized with clay and pottery made of it and celestial objects with different planets, moon, sun, stars and constellations. Thus some quatrains related to pottery are also included in the selection. Such quatrains are deep in meanings and sense. In the following, quatrains from seven sources are compared. They are referred according to the following legend.

LEGEND

AF	Ahmad [Ahmed (2001)]— Fitzgerald [Fitzgerald (1884)]
AS	Ahmad [Ahmed (2001)]—Saidi [Saidi (1991)]
NAF [I]	Nikulina& Ansari (this study) — Fitzgerald [Fitzgerald (1859)]
NAF [IV]	Nikulina& Ansari (this study) — Fitzgerald [Fitzgerald (1879)]

NASG	Nikulina& Ansari (this study) —Govinda [Govinda (1941)]
NASA	Nikulina& Ansari (this study) — Saba [Saba (1985)](Urdu)
NAR	Nikulina& Ansari (this study) —Rumer [Rumer (1936)](Russian)
v	verse

To compare the sources it is to mention that Fitzgerald is well known for his English translations of Omar Khayyam at the end of 19th century. Saidi was an Iranian-American scholar whose translation appeared in 1991. Swami Govinda Tirtha was an Indian writer and his book Nectar of Grace first published in 1941 is a treatise on Omar Khayyam.

Out of five English translations of Omar Khayyam considered here, three translations are by Fitz Gerald, the first American Edition (Fitzgerald, 1884) mentioned in Ahmad (Ahmed, 2001, pp.8) and the first and fourth editions (Fitzgerald, 1879) and (Fitzgerald, 1884) selected for this study, a translation by Saidi (Saidi, 1991) included in Ahmad (Ahmed, 2001, pp.8) and Govinda (Govinda, 1941). Among the the two remaining translation are the Urdu translation by Saba (Saba, 1985) comparatively a recent translation and an Old Russian translation dating 1936 by Rumer [Rumer (1936)]. There are three more sources worth mention. These are Nadvi (Nadavi, 1933), Razvi (Razvi, 2001) and Yogananda (Yogananda, 1995). Nadvi (Nadavi, 1933) is a very authentic source of information about the poetry, works and personal information about Omar Khayyam in Urdu; Yogananda (Yogananda, 1995) is a spiritual interpretation of Omar Khayyam in English. Razvi (Razvi, 2001) is also an authentic resource book in Urdu about the poetry and scientific works of Omar Khayyam. All the above mentioned sources are the translations of Omar Khayyam from Persian. It should be noted that each source has translated the quatrains from its own point of view and so they differ much from each other in many cases. Even the three translations by Fitz Gerald do not agree at some places. The seven translations of each Persian quatrain are collected at one place then a commentary is added. However, for the sake of similarity quatrains in Russian are separately given in appendix 1 and Quatrains in Persian and Urdu in appendix 2. The following are the selected quatrains.

Quatrain 1

From core of Earth to Saturn's apogee,
I loosed the knots of heaven's mystery;
The barriers of fake and fraud I crossed,
Yea, all the bars save that of Destiny. **AS (v. 53)**

Up from Earth's Centre through the Seventh Gate
I rose, and on the Throne of Saturn sate,
And many a Knot unravel'd by the Road;
But not the Master-knot of Human Fate **AF (v. 31)**

Up from Earth's Centre through the Seventh Gate
I rose, and on the Throne of Saturn sate,
And many Knots unravel'd by the Road;
But not the Knot of Human Death and Fate **NAF [I] (v. 31)**

Up from Earth's Centre through the Seventh Gate
I rose, and on the Throne of Saturn sate,
And many a Knot unravel'd by the Road;
But not the Knot of Human Death and Fate **NAF [IV] (v. 31)**

From puny mite to Saturn's farthest height
All problems I have solved, and think them light;
I freed myself from all entanglements,
All chins are snapped, but not of death, 'tis tight **NAG (IV. 41 p.62)**

From the specks of Earth to the ascend of Saturn
Every problem of the world I resolved
And every Knot I unraveled
Every bond broken but not the bond of Death **NAS (p. 120)**

Up to Saturn sprayed I, God's light
In every puzzle managed to get insight

And to overcome all obstacles, and the bonds so,

Except the riddle of, death, I could not unravel, no **NAR (v. 183)**

NAF [I] (v. 31) appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 1.

The quatrain is the most pronounced declaration of the views of Omar Khayyam about cosmos. He means that as explorer of the mysteries around them humans by searching and establishing the laws of nature can resolve the problems arising in life. Even they can reach far points of space. But the problem of their own destiny and death are irresolvable for them. The quatrain is not limited to astronomy only. It is rather indicative of the problems of cosmology and cosmogony.

Comparing the English translations by Fitz Gerald **AF**, **NAF [I]** and **NAF [IV]** it is observed that in all these three editions the quatrain is placed at number 31, in **AF** in line 4 it is written “But not the Master-knot of Human Fate” whereas, in **NAF [I]** and **NAF [IV]** in line 4 it is written “But not the Knot of Human Death and Fate”. In the original Persian Quatrain there is no reference of human fate. In the English translation **AS** it is placed at number 53 and the unresolved problem is referred as destiny. In the English translation **NAG** the unresolved problem is the death. In the Urdu translation **NAS** the unresolved problem is referred as death. In the Russian translation **NAR** it is verse number 183 and the unresolved problem is referred as death.

Quatrain 2

It is not included in **AF**, **AS** and **NAF [I]**

Shapes of all Sorts and Sizes, great and small,

That stood along the floor and by the wall;

And some loquacious Vessels were; and some

Listen'd perhaps, but never talke'd at all **NAF [IV] (v. 83)**

I looked at night in Potter's shop, me thought

That pots conferred and some solution sought;

And each enquired of me: Tell who on earth

Is pot, or potter, who that sold, or bought” **NAG (V. 33, p.78)**

The earthen lot tomorrow clinked in the market

And suddenly spoke one bowl

Except the one who made me and sold

Is there any other buyer of me? **NAS (p. 125)**

Yesterday I went to pottery at an hour late,

And to me, the pots state

And a question one of them asked: Who potters

Among us? Who buyers, Who seller **NAR (v. 145)**

For painting 2 the translation from **NAF [IV] (v. 83)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 2.

This quatrain uses clay pots as a metaphor for human beings who are considered to be made of dust and bound in the mould of their destiny. They are considered totally helpless against their fate. Mostly they remain silent but if someone tries to be vocal even then it makes no change and it happens according to the fate.

This quatrain is not included in **AS**, **AF** and **NAF [I]**. The English translation **NAF [IV]** is lacking the actual sense of the Persian verse where one of the vessels enquires about the potter, the buyer and the seller. **NAF [IV]** mentions no question from the vessels. The English translation **NAG** makes clear mention of the question. But makes mention of the pots too in the question. In the Urdu translation **NAS** also poses the question but it considers the potter and the buyer and the seller as the same. The Russian translation **NAR** also poses the question including the vessels too.

Quatrain 3

This Wheel, amazed at which we gaze below,

Is like a magic lamp in shadow-show;

The Sun the candle is, the world the shade,

Whereon we, phantom figures, come and go **AS (v. 63)**

We are no other than a moving row
 Of Magic Shadow-shapes that come and go
 Round with the Sun-illumin'd Lantern held

In Midnight by the Master of the Show **AF (v. 68)**

For in and out, above, about, below,

'Tis nothing but a magic Shadow-show,

Played in a Box whose Candle is the Sun,

Round which we Phantom Figures come and go **NAF (I) (v. 46)**

We are no other than a moving row

Of Magic Shadow-shapes that come and go

Round with the Sun-illumin'd Lantern held

In Midnight by the Master of the Show **NAF (IV) (v. 68)**

Methinks this Wheel at which we gape and stare,

Is Chinese lantern—like we buy at fair;

The lamp is Sun, and paper-shade the world,

And we the pictures whirling unaware **NAG (II, 5, p.17)**

Orbiting of sky that astonishes

Dazzling like the chandelier of thought

Sun is the candle and the world chandelier

We are the images? Is the worry **NAS (p. 60)**

Where did we come from? To administer our way

What our lives mean? A problem, solution far away

Like many pure souls under the blue wheel

Burned to ashes, but where, the smoke reel? **NAR (v. 002)**

The translation from **AS (v. 63)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 3.

In a magic shadow show images are produced with a source of light (in the past a candle or lantern and afterwards electric lamp) with some objects in front of the source. Shadows produced, generate ghostly figures for a fun show. Omar Khayyam considers the cosmos as a magic box with the sun as its lantern. The human beings are the ghostly images. They come, showing their event and then leave for the other one to come for the show.

Comparing the English translations **AF**, **NAF (I)** and **NAF (IV)** it is found that in **AF** and **NAF (IV)** it is verse number 68 which are the same and in **NAF (I)** it is verse number 46 which is quite different in wordings from the earlier two but the sense is the same. In the English translation **AS** the wordings are different but the sense is the same. The English translation **NAG** retains the sense but has different wordings.

The Urdu translation **NAS** also retains the theme and closest in the sense to the original Persian verse expressing the worry about the situation. The wordings are however different. The Russian translation **NAS** is different in wordings and meanings and is a free translation enhancing the Sufi theme putting the question that “Burned to ashes, dust, but where, the smoke reel?”

Quatrain 4

The good and evil in the mold of Man
The joy and grief in Fate and Fortune’s plan,
To Wheel impute not, for in fact the Wheel

A thousand times is more helpless than Man **AS (v. 71)**

And that inverted Bowl they call the Sky,
Where under crawling coop'd we live and die,
Lift not your hands to It for help — for It

As impotently rolls as you or I **AF (v.72)**

And that inverted Bowl we call the Sky,
Where under crawling coop't we live and die,
Lift not thy hands to It for help — for It

Rolls impotently on as Thou or I **NAF (I) (v.52)**

And that inverted Bowl they call the Sky,

Where under crawling coop'd we live and die,
Lift not your hands to It for help — for It

As impotently rolls as you or I **NAF (IV) (v.72)**

The good or evil human nature moulds,
And bliss or bane which He in power unfolds,
Are not from stars the stars in path of love
Are meeker far than man—who thinks and scolds **NAG (II. 47, p.28)**
Evil and the good both hidden in man
Sorrow and glee fills the times
Skies do not intervene it the wisdom suggests

Constrained are the Skies more than us **NAS (p. 74)**

Heavens, I'm tired of your rotation,
To you without response my moans ascend, no attention
Only the ignorant and ill forgive you – so well know:

I'm not so wise, not enlightened so **NAR (v. 102)**

Here translation from **AS (v. 71)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 4.

The palm is considered to give clue of the human fate. Sky is considered as controller of human fate. The quatrain considers the sky itself as helpless as humans. The painting expresses the sky as an inverted bowl on the palm of a woman so that the sky attains the same status as that of the lines on the palm which are useless to manage the fate of humans. The lined cat represents mysteries and secrets of the human destiny.

The English translations **AF**, **NAF (I)**, and **NAF (IV)** are the same. The English translation **AS** and **NAG** are different in wordings but closest to the theme of the Persian verse.

The Urdu translation **NAS** is also very close to the theme of the Persian verse. But the Russian translation **NAR** is far away from the theme of the Persian verse.

Quatrain 5

This quatrain is not included in **AF** and **AS**

Think, in this battered Caravanserai

Whose doorways are alternate Night and Day.

How Sultan after Sultan with his Pomp

Abode his Hour or two, and went his way

NAF (I) (v.16)

Think, in this batter'd Caravanserai

Whose Portals are alternate Night and Day,

How Sultan after Sultan with his Pomp

Abode his destined Hour, and went his way

NAF (IV) (v.17)

This ruined Inn of yore is world we call,

The mules of day and night lie in this stall;

A hundred Arthurs grace this golden hall,

A thousand Canute's lie in state—for all

NAG (IV. 33, p. 60)

This battered Caravanserai known as world

Where posture morn' and eve'

Been the assembly of hundred Jamshids

Is the palace where lived hundred Bahrams

NAS (p. 63)

Where there was a palace long ago

And spent their days, Sultans in a row,

It's ruins a dove shares there

Crying plaintively: "Where, where, where?"

NAR (v. 041)

Here the translation of **NASG (IV. 33, p. 60)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting5.

The continuous alternation of night and day expresses the continuous passage of time. The continuous replacement of one ruler by the other represents the continuous changes of events with respect to the passage of time. This quatrain thus describes the dynamics of the cosmos. Representing the cosmos with a Caravanserai or inn Omar Khayyam explains that the cosmos is not stationary and every event in the cosmos is temporary and dynamism all over rules.

This quatrain is not included in English translations **AF** and **AS**. In English translation **NAF (I)** it is verse number 16 and in **NAF (IV)** it is verse number 17. However, they are exactly the same. The English translation **NAG** is different in wordings but very close to the Persian verse.

The Urdu translation **NAS** is also very close to the Persian verse. The Russian translation **NAR** however differs slightly in meaning.

Quatrain 6

This quatrain is also not included in **AF** and **AS**

Ah, Moon of my Delight who know'st no wane,

The Moon of Heaven is rising once again:

How aft hereafter rising shall she look

Through this same Garden after me—in vain! **NAF (I) (v. 74)**

Yon rising Moon that looks for us again —

How oft hereafter will she wax and wane;

How oft hereafter rising look for us

Through this same Garden—and for one in vain! **NAF (IV) (v. 100)**

The Lord thy Moon has rent the vests of night,

Rejoice, on better times though won't alight;

Do kiss His feet and see that many moons

Will shine from dust and flood Thy front with light **NAG (VIII. 12, p. 139)**

Moon with its light unwrapped the robe of night

Drink! No hindrance at the moment

It is the time to delight, no worry

Will you see the moon while under the soil **NAS (p. 70)**

Tomorrow, alas! From our eyes Hidden

Flying into the abyss of time, hasten!

Drink Lunolikaya! How a moon often

Rises in the sky and, cannot see us! Sunken

(Lunolikaya = Moon-faced, it means a moon-faced girl) **NAR (v. 018)**

Translation from **NAF (I) (v. 74)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 6.

The quatrain describes the grave reality that every event in the universe is irreversible. Most bitter is the fact that once gone can never be found again. No event can be repeated. The garden here means the earth, the moon of heaven is the outer universe, and moon of delight represents humans with all their ambitions which go on increasing with time. Humans have to disappear from the scene with all their ambitions and no one then can get a clue of them.

This quatrain is also not included in the English translations **AF** and **AS**. English translations are the same in the meaning but differ in wordings and arrangement of lines. The English translation **NAG** is different in the meaning and has the enhanced Sufi touch.

The Urdu translation **NAS** is very close to the Persian verses in wordings and theme. The Russian translation **NAR** is also close to the theme of the Persian verses.

Quatrain 7

This quatrain is not included in **AS** and **AS**.

Ah, with the Grape my fading Life provide,
 And wash my Body whence the Life has died,
 And in a Winding-sheet of Vine-leaf wrapt,
 So burry me by some sweet Garden-side

NAF (I) (v.67)

Ah, with the Grape my fading Life provide,
 And wash the Body whence the Life has died,
 And lay me, shrouded in the living Leaf,
 By some not unfrequented Garden-side

NAF (IV) (v.91)

Ye need not wail my death, but lave in ale,
 With lofty Spirits ye may sing my tale;
 Arisen if ye need me, then explore

The dust of Mystic Shrine, from there I hail!
 When dead, bathe Me with the Wine

NAG (IX. 22, p. 178)

And for red winemeorate

On the Day of Judgment Me if you yearn for
 Find me in the soil of tavern's threshold

NAS (p. 141)

Me, bathe with the juice of vines, when I die
 And over the grave, praises to blame, Sing high

Where the Day of Judgment my ashes to seek, you! I tell:

The blooming gardens around the taverns, Buried fell **NAR (v. 209)**

Here translation from **NAF (I) (v.67)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 7.

This quatrain of Omar Khayyam uses grapes and its juice (wine) as a metaphor for the juice of gnosis and the sources of gnosis. Human beings are considered as

clay vessels in the poetry of Omar Khayyam. This indicates the fragile material existence of human beings. Grape means some source of power enrichment. Winding sheet and sweet garden side indicate the suitable means and place for such power enrichment to be possible. This mentions the need to incorporate the link between humans and the cosmic manipulator.

This quatrain is not included in English translations **AF** and **AS**. The English translations **NAF** and **NAS** differ in line 3 otherwise are the same. They slightly differ in theme from the Persian verse. The English translation **NAG** is slightly different in theme from the Persian verse and enhances the Sufi touch.

The Urdu translation is exactly similar in theme to the Persian verse. The Russian translation is also close to the theme of the Persian verse.

Quatrain 8

It is included in (Ahmad, 2001, pp.8) but only in AF not in AS

I tell you this—When started from the Goal,
Over the flaming shoulders of the Foal
Of Heav', Parwin and Mushtari they flung,

In my predestined Plot of Dust and Soul **AF (v. 75)**

I tell Thee this —When starting from the Goal,
Over the shoulders of the flaming Foal
Of Heav'n Parwin and Mushtara they flung,

In my predestin'd Plot of Dust and Soul **NAF (I) (v. 54)**

I tell Thee this —When, started from the Goal,
Over the flaming shoulders of the Foal
Of Heav'n Parwin and Mushtari they flung,

In my predestin'd Plot of Dust and Soul **NAF (IV) (v. 75)**

The day they saddled sky to run its race,
When Jupiter and Pleiades decked the space;
My lot was I should crave, and for his grace,
I'm helpless 'tis my lot I can't efface

NAG (IX. 35, p. 182)

When heaven's foal saddled
 And with Jupiter and Pleiades decorated
 And like this written my destiny
 What the fault then Me made? Do not know **NAS (p. 138)**

The heaven's horse when bridled, since then
 And on top, the lights of Pleiades at night brighten
 Everything is predetermined, written! Verdict eternal

So blame to us how become functional? **NAR (v. 250)**

Here translation of **NASW (IX. 35, p. 182)** appears to be the most appropriate translation in the perspective of the original Persian Quatrain so the same is posted with painting 8.

This quatrain is the continuation of the first quatrain. All the terms here are symbolic. Starting point is the center of the earth. Flaming foal is the metaphor for Pegasus the horse of Perseus. The two are the constellations in the sky. Jupiter (Mushtari) is the planet and Pleiades (Parwin) is again a constellation both representing the high reaches of different order. This simply explains that with hard labor and using the intelligence inherited in humans they can reach the highest points of the cosmos. Humans made of dust can have limitations but their soul is beyond all conquest and can attempt to attain finer perceptions. Though as dust the human beings are at the lowest but their souls are free to attempt to reach any height.

This quatrain is not included in English translations **AS**. The wordings in **AF**, **NAF [I]** and **NAF [IV]** are similar except for some re arrangement. They are same in the meaning and the theme. English translation **NAG** is slightly different in theme and captures Sufi sense.

The Urdu translation **NS** is closest in theme to the Persian verse. The Russian translation is also close to the theme of the Persian verse. The English translations of Urdu and Russian translations are due to the first author.

6. Paintings of the Cosmic Quatrains of Omar Khayyam

Finally, the artistic illustrations of eight quatrains of Omar Khayyam mentioned in section 5 above by one of the authors Victoria Nikulina using Batik are now

presented here. All these paintings expose the Artist's intuitional, philosophical and aesthetic approach inspired by the poetry of Omar Khayyam. These eight paintings are made in batik. With each painting the most appropriate translation is mentioned. Also a commentary on each painting is added. These paintings are the intellectual property of the first author.

Painting 1

Title: Through the seventh gate

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 30 cm

Production year: 2014

Description: It is an illustration of the quatrain of Omar Khayyam. It mentions that mind sage through the mental eye and can reach any point of the universe. The painting interprets fully the cosmic message of Omar Khayyam. On the right top corner a point resembling an eye. This internal vision extends higher to Saturn. There are seven galactic shapes illustrating the seven gates.



Up from Earth's Centre through the Seventh Gate

I rose, and on the Throne of Saturn sate,

And many Knots unravel'd by the Road;

But not the Knot of Human Death and Fate

NAF [I] (v. 31)

Painting 2

Title: Spring

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 40 x 40 cm.

Production year: 2014

Description: Ceramics are reminiscent of the impermanence of life, but blossoming branch says that life is renewed from year to year. It is consonant with the poetry of Omar Khayyam. The painting reflects the vision of the poet about life. He compares humans with clay vessels both being helpless, humans in the hands of destiny and vessels in the hands of the earthenware maker. The painting illustrates two vessels one standing on its base and the other standing supported by the wall. Broken vessels in the preparation of vessels are again mixed in the clay to make new vessels.



Shapes of all Sorts and Sizes, great and small,
That stood along the floor and by the wall;
And some loquacious Vessels were; and some

Listen'd perhaps, but never talke'd at all

NAF [IV] (v. 83)

Painting 3

Title: The soul in the colors of hope

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 40 cm

Production year: 2014

Description: Dreamers sore to heavens, as a fantastic bird. The human soul is looking for confirmation in music and in poetry for the dream to come true. The concept of the magic lantern with Sun as its candle is illustrated in this painting with humans as the images formed. In the right top corner sun is illustrated and in the left lower corner the waving images are shown.



This Wheel, amazed at which we gaze below,
Is like a magic lamp in shadow-show;
The Sun the candle is, the world the shade,
Whereon we, phantom figures, come and go

AS (v. 63)

Painting 4

Title: They know what the world needs

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 30 cm

Production year: 2014

Description: Communication of the universe, man and animal. Women and cats know that the world needs only love. Globe lying in woman hand favored by her loving gaze and stored in her tender hand. The palm is considered to give clue of the human fate. Sky is considered as controller of human fate. The quatrain considers the sky too as helpless as humans. The painting expresses the inverted bowl on the palm of a woman giving the sky the same status as the lines of fate on the palm. The lined cat represents mysteries and secrets of the human destiny.



The good and evil in the mold of Man
The joy and grief in Fate and Fortune's plan,
To Wheel impute not, for in fact the Wheel

A thousand times is more helpless than Man

AS (v. 71)

Painting 5

Title: Old Windmill

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 40 cm

Production year: 2011

Description: The wings of a forgotten windmill keep on rotating randomly. In view of these rotations the painting illustrates the continuous alternation of night and day or the continuous passage of time. This rotation also displays the continuous changes in the perspective of the passage of time. Particularly, replacement of majesties one after the other is represented by the movement of the wings. The ruined inn and the old windmill forgotten by their owners are the same in analogy. Sometimes winters overcast the sky. Sometimes the wings of the mill stop moving and put a question mark that weather the cosmic mill will stop working some day?



This ruined Inn of yore is world we call,
The mules of day and night lie in this stall;
A hundred Arthurs grace this golden hall,
A thousand Canutes lie in state—for all

NAS (IV. 33, p. 60)

Painting 6

Title: Moonlit winter night

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 40 cm

Production year: 2005

Description: The moon is shining lantern illuminates and brightens winter night. Even light clouds cannot outshine its bright face. In view of the poetry the painting mentions the bitter fact of human fate that departed faces even resembling moon can never be looked again though how many time the moon of rise to find. It confirms that no event can be repeated in the cosmos.



Moon of my Delight who know'st no wane,
 The Moon of Heaven is rising once again:
 How aft hereafter rising shall she look
 Through this same Garden after me—in vain! **NAF (I) (v. 74)**

Painting 7

Title: Clay Jug with Grapes

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 40 cm

Production year: 2009

Description: Clay jug and grapes have great affinity. They are inseparable: the pitcher and grapes in the garden, and a jug of wine. Harmoniously they need each other. In the perspective of the quatrain the painting expresses the clay vessel (human beings) dumped in grapes, its leaves and juices (inside the flask).



Ah, with the Grape my fading Life provide,
And wash my Body whence the Life has died,
And in a Winding-sheet of Vine-leaf wrapt,
So burry me by some sweet Garden-side

NAF (I) (v.67)

Painting 8

Title: Globes

Artist: Victoria Nikulina

Medium: Painting – Batik on Silk – 30 x 30 cm

Production year: 2014

Description: Arbitrary representation of the artist describing the evolution of the Earth. The painting interprets the sense of the quatrain by a series of globes. The Sun is in the right upper corner. There are different planets and constellations. Jupiter (Mushtari) the planet and Pleiades (Parwin) the constellation represents the high reaches of different order. Dust again represents the human being at the lowest but the soul is free to attempt to reach any height. Cosmic dust is all spread in the back view.



The day they saddled sky to run its race,
 When Jupiter and Pleiades decked the space;
 My lot was I should crave, and for his grace,
 I'm helpless 'tis my lot I can't efface

NASG (IX. 35, p. 182)

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