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Geometrical manifestation in Iranian Art of Mirrors According to Seyed Heidar Amoli`s Thought

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Abstract In addition to scientific and structural applications for geometry and mathematics in Islamic civilization, they have some philosophical and theological natures. Some verses in Holy Quran express that God created the universe based on a very precise geometry. For the very reason the Muslim wise men have used geometry in philosophical and theosophical texts to express the concepts of universe. In this paper, there is an attempt, by relying to the opinions of Seyed Heidar Amoli and vast and unique proportion of wisdom, geometry and architecture in Islamic civilization (especially in Iranian art of mirrors), to study and investigate about the following issues: role of geometry in clarifying and interpreting wisdom and philosophical ambiguities in Islamic civilization, the role of geometry in formation of wisdom fundamentals in architecture as a middle link between philosophy and architecture, possibility to deem that meaning as an example of wisdom effect on Islamic architecture due to the high similarity of Seyed Heidar's interpretation of candle and mirror analogy with art of mirrors in Islamic architecture. This paper also indicates that engineers and architectures have used theosophical and philosophical concepts in their architectural forms.

Keywords Seyed Heidar Amoli, Number, Geometry, Art of Mirrors, Islamic Architecture

1. Introduction

Art of mirrors is surely one of the most delicate architectural decorations in Islamic-Iranian civilization. It is an art defined as forming regulated shapes in various designs and images with small and big pieces of mirror, for decorating interior surfaces of a construction[1]. This kind of deliberate decorations, gives way to a bright and highly shining atmosphere created upon consecutive reflections of light in numerous mirror pieces. As the historical texts testify, this fine and delicate art is surely an invention of Iranian architectures. It seems that based on a distich in *Dohat-ol-Azhar* book (that comes then), some researchers attribute the first appearance of art of mirrors in Iranian architecture in decorating the Porch House of Shah Tahmasib Safavid (921-984 Hejira/1524-1576 A.D.) in Qazvin. Khajeh Zeinolabedin Ali Abdi Beik Shirazi (921-988 Hejira/1515-1580 A.D.), the author of the above mentioned book penned in 955 Hejira/1548 A.D. has brought the following piece of poem under the title "The remaining descriptions of the royal building and porch house garden":

"An auspicious universe decorating construction
Never seen by anybody across the world
One more porch at each corner
Like a single garden adding to the beauty of the world"

And in describing these porches he brings up another distich that according to some researchers indicating the manifestation of art of mirrors in such construction:

"Entering any new porch
You will face an auspicious full-length mirror"[2].

Although it seems that the distich is mostly indicating a metaphorical and figurative sense rather than art of mirrors as a skill[1] the vast spread of art of mirrors in the ruling domain of the Safavid dynasty and particularly Isfahan as a leading center for art of mirrors in architecture cannot be ignored.[2]

This meaning could be overtly seen in the travel accounts of researchers and travel account writers. In his well-known travel account for instance, Jean Shardan has written on a hall known as Ayneh Khaneh (mirror house):

"Through a roofed way, we move toward the palace. On top of the way there is a construction named Ayneh Kaneh (mirror house) for the very fine and precious stone mirrors placed in it"[5]. The mirror house which is surely considered as the climax of art of mirror in Isfahan and constructed through the years 1038 to 1052 Hejira (1629 to 1643 A.D.) has a roof and some mirror-walls each 1.5 m to 2 m in length and less than 1 m in width that the reflections of Zayandeh

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[1]. Since there are lots of such architectural and mirror-like metaphors in Persian literature and poetry. This poem from Nezami, for instance describes the observation of the great poet of the palace constructed by Sanmar for Noman:
"Polished by glue and milk
It looks like mirrors reflecting images" [3].

[2]. Also see [4].

Rood (Zayendeh River) and the northern plains in the mirrors have made a so eye catching and wonderful scene[6].

The author of "Collection of Isfahan Historical Works" book written in 1294 A.D. has described the mirror house as a royal construction and as marvellous, lofty and strong as Chehelsotoon monument all deliberately worked and mirrored. Likewise, Mirza Mozafar Torkeh, as a secretary of the second Shah Abbas, composed some poems on this construction:

"The lantern and holy pile all in mirror
Let your eyes watch the beautiful morning of New Year
The great Painter illustrated your image
On the sky like-mirror
Whose manifestation it is that everywhere in it
Reflect each other through the mirror" [3][6]

In addition to the mirror house, Shardan has pointed to the well-known house of Mirza Mohammad Taghi (known as Saritaghi or yellow hair), the minister of the first Shah Safi who was murdered in 1055 Hejira/1645 A.D. and named that as the most beautiful buildings in Isfahan[5]. Shardan is not the only one mentioning the great-mirrored pond with walls in jade in that saloon, Adam Olearious, the secretary of Holstein embassy at the era of the first Shah Safi, has written about fine images on the walls of the saloon:

"The walls are mirrored at the bottom, with hundreds of small pieces of mirrors put up so artistically and regularly enabling those sitting in the saloon to see themselves in many mirror pieces simultaneously. It is said that the similar art of mirror or even better than that can be seen in the Shah's palace on the walls and the roof, next to his wives' rooms that are not made by hand and they should be something different from mirror"[8].

This art that seems, like other Iranian architectural inventions (such as muqarnas) to be invented by the Iranian genius architectures kept moving in the post Safavid era and reached its climax at Ghajar era in constructing saloons like Mirror Saloon of Golestan Palace and especially in constructing religious and holy monuments. In this period, some amazing and exceptional buildings such as Darolsiadah at Astan Ghods Razavi (in 1275 Hejira), Darolsoroor at Hazrat Masoumeh (peace be upon her) shrine in Qum and the architecture of roof of Imam Reza (peace be upon him) shrine, were constructed by using art of mirrors. It was in the very period that small pieces of mirrors in triangle, rhombus, hexagon, etc. Shapes were widely used instead of applying big and flat ones though application of this method dates back to applying colorful rhombus-like glasses and small pieces of mirrors to decorate the roof and walls of the porch and saloon in addition to applying full-length mirrors at Chehelsotoon Palace. As Olearious has mentioned applying some hundreds of small pieces of mirrors in a regular and so artistic way in his account.

No clear information can be found on the effective factors on formation of this marvellous art in the historical documentations. Some have attributed the formation of art of mirrors in Iranian architecture to economic reasons:

"The glass mirrors which were imported from Europe, especially Venice since 10th century of Hejira/16th century of A.D. were easily broken on the way. The Iranian artists made a trick and used the pieces in art of mirrors"[1]. However, settling merely to such reason to justify the appearance of such amazing and deliberate art, particularly considering the vast symbolic and figurative application of mirrors in the field of Islamic-Iranian wisdom, mysticism and literature is highly unfair. Surely, as a motive dominating all the Islamic arts and architecture, geometry has played a significant role in various forms such as muqarnas, plasterwork (like ornamental images of Aljaytu (Oljeïtu) Altar in Isfahan- Picture 1), knot works and some spiritual elements like light and water next to ornamental forms. Using mirrors as well, should be taken into consideration in the course of amazing religious and traditional concepts in the form of ornaments and the like elements.

Picture 1. Part of the Mihrab of Sultan Oljeïtu at the Masjid-i-Jomeh, Isfahan, Iran

Mirrors in one hand, were very significant and unique metaphors in theosophical and mystical texts in clarifying the proportion between the Right and the creation or manifestation of plurality from unity, [4] and Einol Ghozat Hamedani believed it was merely through mirrors that the Divine beauty and majesty could be realized and studied: "Alas! You do not percept what I mean. God is light of heavens and earth. The beauty of the prophet Mohammad is merely seen by mirror otherwise, eyes would burn. By mirror, the beauty of sun could be constantly studied and since it is impossible to see the beloved without mirror, she should be seen veiled. Love is doomed to be veiled and mirror is nothing but the majesty and greatness of God"[9]. And on the other hand, in the book "*Jame al- Asrar*" written by Seyed Heidar Amoli, there is a touching point on mirror metaphor that perhaps art of mirrors is not directly under the

[3] There is a similar poem in Nasrabadi *Biography (Tazkerah)*:
"This magnificent seat
That is wonderfully similar to the heaven
Has pleased eyes by its roof and illustrating mirrors
Each mirror has given life to the building
As heart gives life to human body" [7].

[4] For more information on the issue of mirrors in mysticism and wisdom, please refer to 6th chapter of [10].

impression of that but the high degree of similarity between art of mirrors in Islamic architecture and interpretation of Seyed Heidar is highly amazing.

This paper is intending to pose this question in the form of an assumption that if it is possible, by relying to historical reasons such as this fact that this industry and art of mirrors in architecture are quite an Iranian initiative and they came to life in the 10^{th} and 11^{th} centuries of Hejira, right about two centuries after the comments of Seyed Heidar Amoli, to conclude that the Iranian Muslim architectures and engineers proceeded with using mirrors in decorating sacred monuments just by relying to such text or texts and likewise, they did not limit the texts to *Jame al- Asrar* and they rather preferred to pose some other literary narrations like the narration of Nezami about Sanmar's palace that had described the mirror-like saloons for being well polished.

Getting to know about the manifestation of numerical and geometrical metaphors in explaining complicated theosophical, mystical and philosophical issues in Islamic civilization and particularly the comments of Seyed Heidar Amoli, could somehow shed some light on the issue.

2. Seyed Heidar Amoli and His Works

In his introduction to *Jame al- Asrar and Manba al-Anwar*, written by Seyed Heidar Amoli (720-782 H.), Henry Corbin, the French researcher, considers comparable the prominence of his works in philosophical term to the works of Molla Sadra[11].

With no doubt, due to its depth, prominence and more importantly belonging to Shiite, this work had a significant impression on elevation of Shiite philosophy in the Safavid period. Writing some footnotes on the lengthy work of *Jame al- Asrar and Manba al-Anwar* by Sheikh Bahaee, is a clean proof for accessibility of this work and references of the great learneded men of that period to that. The effect of Sheikh Bahaee's teachings on Molla Sadra and the reflection of some of his opinions in the works of the greatest philosopher of that period, plainly indicate that meaning. Seyed Heidar, who is one of the greatest interpreters of *Fosous* and *Fotoohat* among the Shiite learned men, deems the opinion of Ibn Arabi on "Seal of Guardianship" fully wrong despite his deep respect to Ibn Arabi. According to Seyed Heidar, Imam Mahdi (peace be upon him) is the seal of guardianship. He strongly denies the demand of Ibn Arabi in Fotoohat, in which he had introduced himself as the seal of guardianship based on a dream[12] and deems the lowest rank deputies of Imam Mahdi much higher than Ibn Arabi and the like[11]. Seyed Heidar and especially his *Jame al-Asrar* (despite remaining unknown and unfortunately his low and unfair fame in the history of Islamic thought) are enjoying such a status that he is named as a great representative of Shiite mysticism[13] and Seyedol Orafa Val Motaalehin[13].

Seyed Heidar wrote *Jame al- Asrar* to the request of some of his religious brothers and the followers of the divine path intending to explain the secrets of the Right, prophets and imams and especially the secrets of Unity and in his own words he wrote that to explain those secrets to the men of God (known as Sufis) and in accordance to the sect of twelve Imams Shiism[11]. Therefore, the references of this great Iranian wise and mystic to deliberate mystical points in one hand, and to Quran verses and narrations of prophets and imams on the other hand are fully clear.

3. Quran, Philosophy and Geometry

Since this paper is grounded on clarification and proving the vast proportion of mystical principles of Islamic civilization to geometry based on numerical and geometrical metaphors for shedding light on the secrets and codes of divine facts, it is inevitable to refer to the Quran verses and the imams' traditions in this respect. Because the Shiite mystics wise men believe that the criterion text and word are merely there in such sources. There are various verses in Quran emphasizing on the presence of holy geometry and mathematics in the universe that a few of them are mentioned here as follows:

"It is He who made the sun a shining light and the moon a derived light and determined for it phases - that you may know the number of years and account[of time]. Allah has not created this except in truth. He details the signs for the people who know"[14].

"He to whom belongs the dominion of the heavens and the earth and who has not taken a son and has not had a partner in dominion and has created each thing and determined it with[precise] determination"[14].

"And He placed on the earth firmly set mountains over its surface, and He blessed it and determined therein its[creatures'] sustenance in four days without distinction - for[the information] of those who ask"[14].

"Indeed, all things We created with predestination"[14].

"And will provide for him from where he does not expect. And whoever relies upon Allah - then He is sufficient for him. Indeed, Allah will accomplish His purpose. Allah has already set for everything a[decreed] extent"[14].

"And there is not a thing but that with Us are its depositories, and We do not send it down except according to a known measure"[14].

There are a large number of traditions quoted by Imams whose sayings for the Shiite religion come next after holy Quran, all intending to clarify the above verses particularly the concept of mathematics which was led to unique evolution of this science in Islamic civilization to perform some certain studies on Qiblah, sun and moon rise and set in order to set the exact times for saying the prayers as well as constructing Islamic monuments especially mosques. Here we just settle to a tradition on the concept of measure in Quran and geometry:

"Ali Ibn Ebrahim quotes from his father and his father from Esmaeel Ibn Marvan and he from Younes Ibn Abdolrahman that Imam Reza asked him: "Do you know

what will means?" He answered "No". "That is the first reminder" Imam replied and then he asked what desire meant and in return to his negative reply he answered that was a strong will on what you were seeking and then he asked about the meaning of measure and after a pause he added that measure was geometry and geometry meant specifying limits across existence and extinction"[15].

Of course, it was Ikhwan Al-Safa, who before Seyed Heidar, applied numbers and geometry in clarifying the universe levels both under impression of the Pythagoreans and Plato's views as well as the verses and traditions. Ikhwan al-Safa are the first philosophers in Islamic civilization who take advantage of numbers and geometry to express their religious beliefs and since many of Muslim theologians followed this method under their impression, it is essential to think their thoughts and ideas over. Their approach had a significant role in formation of a kind of sacred art and architecture in Islamic architecture in general and Iranian civilization in particular and this concept has been discussed in details in the book named "*Geometry of Imagination & Beauty*". In their book named "*Jamieh*"[16]which is an abstract of 52 thesis of them, by using numbers metaphor, they make a note that as number one is before all the numbers, God is also the first being in the universe and since all the numbers are rooted in number one and number two, for instance means two of number 1 and three means three of number one, etc. all the beings are resulted from the Right and as number two comes immediately after number 1, the first intellect is the first thing that God created. Ikhwan are trying to clarify the order of beings by the numbers from one to nine. They believe that soul is the being after the first intellect that is divided to vegetable soul, animal soul and rational soul, then, at the fourth stage, God created matter (Hyle) which is the very substance or a dish to have the soul and intellect forms. According to Ikhwan, there are four types of matter: primary matter, general matter, nature matter and craftsmanship matter. Then there is nature which is divided to five parts: one of them is heavenly nature and the rest are under heavenly. The sixth stage is for bodily substance which has six aspects. Then celestial sphere is resulted out of bodily substance combination and seven celestial spheres come out (known as seven celestial spheres). Ikhwan go on the issue based on numbers up to the pillars under the celestial spheres that have eight tempers, for instance, cold and dry land, cold and wet water, air with humid heat and fire with dry heat. Therefore, as in numerical system, number nine is the last rank of units, the triple secondary acts of classes, that are the end of general beings come to life. These general nine folded are the very dimensions of three generables (mines, plants and animals). Therefore, Right is a single issue (of course not describable by mathematical tools). Intellect is like number two, soul like number three, primary matter like number four, nature like number five, bodily substance like number six, celestial sphere like number seven, foundations like number eight and three generables[17].

Likewise, in Rasael they remind that: "Once God created creatures for earth, He distributed their bodies to two parts of left and right and such distribution is as per the first number which is two parts of three floors inside and in both sides to be as per the first odd number which is three. Then He made number four as the temper of live beings, which as per number four (the first square number) and four foundations (water, wind, soil and fire). Later, He placed five senses in humans enabling them to percept tangibles forms (and that was as per the first number of circle, that is number five and the four natures as well as celestial nature). Then He placed six powers in live beings enabling them to move in six directions and that was in accordance with cubes surfaces and then He put seven active forces in human bodies as per the first complete number and the number of planets. Then eight tempers were placed in humans that four of them are odd and the rest are even which is in accordance with the first cubic number and the music arrangements. Creation and composition of bodies are formed in nine floors in accordance with the first odd square number and the nine floors of celestial environment. Then God placed twelve channels for senses which are as per the first surplus number and the celestial towers. Further, the bodies' foundation was placed based on twenty eight Kharzeh as per the moon stations and round number. After that, three hundred and sixty veins were placed in human bodies through which blood may flow and that was as per the celestial towers and the number of days in a year. After mentioning all these examples, Ikhwan conclude that if counting all the body organs, we will come to this idea that these numbers are equal to the number of all beings[17].

They also used geometrical shapes to explain human body engineering: "God placed three seasons in our bodies and put a cubic square inside our bodies and made the other side of them curved and made our heads round, placed four hands and feet in our bodies in logical sizes enabling us to stand up, sit, move and construct our houses and our houses are six folded and we may find spiritual inspirations and rationality there and even the mathematicians fail to understand the purpose of the matter and the six folded houses and the secret of the equal sides is that without them, a disruption occurs in air flow, our children will suffer and the edibles and beverages will be damaged[17]. In addition to mentioning other proper functions of body powers, here Ikhwan, point to the inability of Greek physicians and natural philosophers in realizing such tempers and then they point to an interesting fact: "In forming our bodies, God used such six folded things as well as the order of equal angles and made them as remedies for human souls." It seems that they mean the geometrical miracle of beehives (in six folded form) which is emphasized in Quran and pointed to by Ikhwan occasionally.[5]

In these discussions, Ikhwan are clearly impressed by the Quran verses, Islamic traditions as well as views of followers of Pythagoras and Plato's Timaeus in particular in which Demiurge creates the world by two triangles and the five

[5] For this issue refer to [18].

shapes resulting from these triangles establish a foundation for the universe.[6]

Therefore, Seyed Heidar in Islamic civilization is not the only philosopher using geometrical and numerical metaphors in explaining the ranks of universe and the relation between the Right and creatures but he is the first in using geometrical metaphors of mirror and light.

In the last part of *Jame al- Asrar*, in explaining two ways of Imams (Shiism) and masters of Unity (the Sufis) and proving this concept that all attentions are toward the Right, Seyed Heidar uses circle metaphor. He believes that according to the Quran verse of "And to Allah belongs the east and the west. So wherever you[might] turn, there is the Face of Allah, indeed"[14] and the saying of the prophet Mohammad "Ways toward God are in number of all creatures souls" all beings are moving toward the Unity truth point as all circle lines are toward the center.

This issue is an introduction to explaining the Right manifestation on beings in clause 368, principle 4 of *Jame al- Asrar* and *Manba al-Anwar* which is most likely under the influence of Ikhwan al-Safa in Addadol Rasael believing that the Right manifestation on the beings is like manifestation of units on numbers forms.[7]

The reason for such manifestation is that unit is rich in numbers but for being manifested the numbers need that as God is no need of His creatures but he is manifested on their forms.

In view of Seyed Heidar, in term of its specific advantages, unit is in need of numbers and manifestation to find a chance to express its unlimited advantages. The right is in need of manifestation for such a reason but such requirement will not cause any damage to His divine essence because that is not an essential need (Seyed Heidar believes that essential need causes damage not accidental need) and for this reason, existence or non-existence of numbers, causes no damage or adds no advantage to unit, existence or non-existence of beings have no impression on the Right essence and it should be mentioned that advantage or defect of beings come back to themselves not to God. For instance, the advantage or defect of number ten are merely in the number and in other words this is the number asking unit for being manifested.

According to Seyed Heidar, manifestation of unit on number ten is deemed as an aspect of number ten elevation in one hand and a defect on the other hand. Because comparing to number five, number ten is superior but comparing to number twenty, hundred, thousand, etc. it is inferior. The reasoning of Seyed Heidar is for proving this concept that in such a hierarchy, every number is imperfect comparing to its superior number and perfect comparing to its inferior number. This rule includes persons like Adam, Satan, Nimrud, Ebrahim, Muses and Pharaoh. The imperfectness of each of them is for incomplete manifestation of the Right on them although the rank of each of them in soul scale is deemed their perfection. The main common part in God and number that is expressed in the form of unit requires further explanation and giving reasons for the aspects of such similarity or philosophy. Therefore, in the next chapter, part 372, Seyed Heidar speaks about the similarity aspects of unit and God from five viewpoints:

First: unit is the origin of all the numbers exactly as God is the origin of all creatures.

Second: Unit is not in need of numbers while numbers need that. The same is true about God. All creatures need Him but He never needs either of them.

Third: when there is no unit there will be no number (the opposite is not true) as all creatures come to existence by Him and the opposite is not true.

Fourth: if unit is multiplied by itself or another number, no reproduction happens and it will be as it was before and if God is considered with His qualities, reproduction of them (attributes multiplicity) will not be required. Because in fact, He is the same as His essence and it will be true if He is considered with others. In other words, considering the Right with others will not be led to a duality because the Right is what He already was and this concept is clearly seen in the saying of the prophet Mohammad ("God did exist and anything was with Him") and narrations of Imams ("God was what He was)".

Fifth: unit is indivisible for it is a unit and God is indivisible for He is God.

In other words, unit is the reason origin for numbers as God is the cause and creature of the entire beings and as unit has no element and the like the Truth has either no element and the like, and as unit gives life to all numbers God give birth to all creatures by manifestation and as numbers are depended to unit for their existence, the entire creatures are alive because of God's existence and as repetition of unit reproduces numbers, God's emanation bring beings to life and help their growth.

The emphasize of Seyed Heidar in taking into consideration the similarity of numerical with existence degrees is remarkable: as number two is the first number made by repetition of unit, the primary intellect is the first being emanated by God's blessing and since number three comes after number two, in existence terms, soul comes after intellect and since number four comes after number three, nature comes right after soul and since five comes after number four, matter comes after nature and as number six comes after number five, bodily substance comes after matter and as number seven is after number six, in universe, celestial comes after bodily substance and as number eight comes after number seven, pillars come after celestial sphere in the universe and as number nine is after number eight, secondary acts come to life after pillars and as number nine is the last in numbers hierarchy, secondary acts are the last rank of beings hierarchy of mines, plants and animals. Therefore, mines are like decimal, plants are like hundredth and animals are like thousandth and temper is like unit. Of course, God is fully aware of the facts about matters and their principles and the aim of mentioning all these examples is to reminding the readers of the fact:

[6] For further information refer to [19].
[7] Also see [11].

"Indeed, we have struck of every manner of parable for mankind in this Quran in order that they will remember"[14].

Relying to the philosophy of example and analogy in Quran, as well as number in chapter 375 of *Jame al- Asrar*, Seyed Heidar reveals his main purpose of citing such examples and declares that the Right is manifested in all forms not only in terms of unity and essence but also in terms of entirety and generality, because whole is not appeared merely for being whole. And whole here is a title to the credit of presence of attribute monism not to the credit of presence of essential unity (unity differs from monism; unity is the station of absolute existence and monism is the station of absolute manifestation on beings).

As it was already stated “He is unit in essence and whole in form of attributes”. Therefore, in case the Right manifest on the whole, His essence and existence will not be reproduced and that is why mystics believe the same.

It should be noted that it is not essential that all His manifestations should be Him as it is not essential all the members of soul should be whole and that is a very proper and deliberate point. Here Seyed Heidar asks for more attention and care for this point because in his view, this concept, will bring lots of benefits for human in his way toward Unity. According to Seyed Heidar, this analogy and actually the interpretation, resolves all the paradoxes about the Right manifestation on various phenomenon; the paradoxes that according to him are the result of false illusions by which, men of wrong, blame men of right that if they believe that He is the Whole, so inferior animals like dogs and monkeys should be right as well, while "Glory be to Him and exalted be He in high exaltation above what they say"[14].

In his view, they would never put forward such paradoxes and ambiguities if they realize the real meaning of this concept and their thoughts were clearly rooted in illusion and ill and confused minds otherwise they should have realized the words of wise men and mystics on the issue which are brighter than sun when shedding lights on snow. Seyed Heidar believes that those who are deprived of such understanding are like bats before sun. In other words, anyone who is away from the Divine light he will be a true example of "And to whomsoever Allah does not give light, he has no light"[14].

Of course, proper understanding of words and phrases is an important factor in perception because no contemplation on words, keeps the meaning out of reach.

Seyed Heidar goes for another point of view to explain the Right manifestation on phenomenon and that viewpoint is indeed a prominent term in investigation about facts and natures that are named to capabilities and it has various forms and aspects. According to Seyed Heidar, realities are the Divine knowledge both pre and after eternity. If this knowledge is fabricated by God, that will not be an eternal knowledge because know or object of knowledge should be posterior to the Knower and that is impossible so these realities cannot be fabricated.

To clarify the issue, from view point of a mystic, reality of a being is the specified proportion of that to the Right knowledge which exists in an eternal form. It is what named as fixed entities by some mystics and scholars and nature by some others. In this concept, the realities being known or unknown is not described as fabrication because fabricated or forged thing is what exists (and the very fixed entity does not exist in the external universe to be named forged or apply the word forgery or fabrication on that). In other words, the fixed entities have no other subsistence except in the Right knowledge. So if it is said it was forged or fabricated, there should be a concurrence in existence with the universe or the universe should be a host for the effect and a place for the ones aside from that and they both are null and void.

The example of Seyed Heidar works well here. A growing tree, is aware of has happened to that to the order of God. Here it is impossible to suppose the priority before its manifestation and named that a forgery or fabrication. Because growth does not let the tree be fabricated and in other words an object cannot fabricate its soul. Definition of forgery or fabrication will shed light on the true meaning. According to Seyed Heidar, fabrication means fabricating something outside. In other words, fabrication means making and fabricated means what fabricated outside. A tree growth takes place outside the tree. After mentioning this complicated philosophical concept, Seyed Heidar goes back to the world of numbers to have a better decoding. He emphasizes that unit in its essence is constantly a knower so unit and numbers do not forge their own souls and essences because the unit perfection and numbers perfection are non-fabricated due to their essences. It means they do not have external manifestation. It seems that Seyed Heidar is looking for a more deliberate and proper analogy for a better clarification of the Right manifestation on phenomenon. That is why, in the next clause, that is clause 384, he goes to geometry and mirror in particular.

4. Mirror, Geometry and Light

Emphasizing on citing a better example to show the quality of the Right manifestation on phenomenon, Seyed Heidar propounds candle, mirror, light and geometry. According to him, existence of realities is like an inflamed candle set up in a certain place and surrounded by many polished and radiant mirrors. The mirrors differ in sides, states and shapes. Some are round, some triangle and some hexagon in shapes. So when candle light is reflected to the mirrors, depending to the shape of the particular mirror, the radiated light takes the shape of its host. So it is not justified to ask a candle (which has taken the shape of a hexagon in a hexagon shape mirror or the shape of a square in a square like mirror) about its shape because the answer would be that it took its shape as per the shape and faculty of the host. This kind of reply indicates the existence capabilities:

“My manifestation is not to the amount of my essential capability and power, because I am absolute and you are bound and a bound object cannot be an absolute

phenomenon. So inevitably, absolute manifests on bound to the extent of its capability and faculty. So the imperfection is due to you not me. Your shape told me to manifest on you on the same shape or I am rich in my essence and free from you as a phenomenon. Your particular shape is your essential requirement. I did not make you in square or hexagon shapes and I was aware of your capability and my different capability before your existence. So manifestation is due to me and square and hexagon are due to you and no one can object to that"[11].

Seyed Heidar's reasoning is that Satan, Pharaoh, Adam and Muses act naturally as they are just because of their essential considerations and capabilities and that is an eternal knowledge of the Right not His fabrications. In other words, His knowledge is not the reason for the fabrication or damaging such capabilities, because God Has not specified such capability and that is dependent to existence faculty of capabilities and unchangeable:

"…the word of Allah is unchanging, …"[14].

"…, Such is the ordinance of the almighty, the knowing"[14].

Referring to the issue of unity and multiplicity is a return to light and mirrors multiplicity. Because when a person looks at mirrors he would judge on mirrors and light multiplicity, because there is always a light (candle) in every mirror. But the fact is that the image in the mirror is not the very candle in reality because according to Seyed Heidar, there is only one candle in the universe and the candles in the mirrors are just images. In other words, there is no reproduction in essence and the observed multiplicity is just due to the mirrors or the capabilities.

The interpretation of Seyed Heidar in chapter 390 reveals the utmost expression of the rule and its analogies. Observing the Right aspect in various mirrors means that the observer may observe both the face and mirrors both in reality and virtually. By saying that he means that both aspects and God, Himself are observable when seeing skies and earth as we may see both candle and mirrors and Quran verse testifies this fact: "… Therefore, whither you turn, thither is Allah's purpose"[14]. It clearly means that both multiplicity in unity and unity in multiplicity can be observed. In other words, it means essence together with attributes and attributes together with essence, aspect with mirror and mirror with aspect because first (unity) is not veiled from second (multiplicity) in all ranks and that is for this reason that since the Right is the real Unitarian, He is consistent of multiplicity and unity and united with station of Differentiation after station of Combination which is one of the highest ranks in Islamic mysticism. To answer the question of how place multiplicity may be a host to unity manifestation Seyed Heidar refers to the principle of observed and observer unity despite their difference and this question that if servant is mirror of God and God is mirror of servant or not.

Seyed Heidar believes that perception of candle and mirror is not possible unless two manifestations in the same type are imagined (like imagining candle and mirrors no matter if the mirrors are in kind of polished iron and reflecting images or in kind of colorful and clear glass). Because when looking at them and supposing candle and mirrors in kinds of iron and glass and believing that the real knowledge of mirrors is the very real knowledge of candle, that is true because of knowledge, is perception of reality of mirrors' images. Aside the kind on manifestation either in glass, iron or mirror and the shapes that appear on images in different times and places, thinking about the reality of candle and forms, make one believe that mystic and known, witness and witnessed, lover and beloved are the same and there are no veils among them and when a Sufi disciple reaches such intuition he is dead to self in known and the same happens to witness in witnessed and lover in beloved and this station is removing creation multiplicity and reaching essence unity is a reality that the Right has promised: "The obedience of God goes near of God by doing recommended[8] works. Then I love him and I will be his ear, eye, tongue, hand and feet. So he hears, sees, talks, does and goes because of me"[11].

According to Seyed Heidar, some verses of Quran, traditions of the prophet and Imams as well as mystics' sayings indicate the existence of essential unity station. The following is one of those Quran verses:

"And you did not smite when you smote (the enemy), but it was Allah Who smote"[14].

Here are some well-known traditions (Hadith) of the prophet Mohammad:

"For me there are many times to be with God in which there are no angles and messengers",

And Imam Ali: "I am God's manifestation, I am His Hand, I am His Empyrean and His Throne."

And a saying of a mystic: "How glorify I am"[11].

And this is the end of Seyed Heidar discussion on multiplicity manifestation on unity mirror by using geometry and number analogy in *Jame al- Asrar* but in his other works such as "Nas al-Nosus Dar Sharh e Fosus al-Hikam" which is an interpretation of Ibn Arabi's "Foso……", Seyed Heidar deems the observance of unity in multiplicity and multiplicity in unity impossible: "unless by expression of an example on candle and mirror in a way that a candle is in the middle surrounded by a variety of mirrors so that the image of the candle is reflected in each mirror depending to the shape of the mirror. That is exactly the proportion of absolute existence and bound existence"[20]. The interesting point is that he has illustrated his book with this analogy (picture 2).

5. Conclusions

What this paper was trying to depict was that to prove and clarify the hard to understand and complicated theoretical concepts and thoughts, the Muslim theologians and philosophers used numerical and geometrical metaphors. By using amazing role of light as well as metaphorical roles of mirror and geometrical shapes, Seyed Heidar Amoli

[8] . Religious precept.

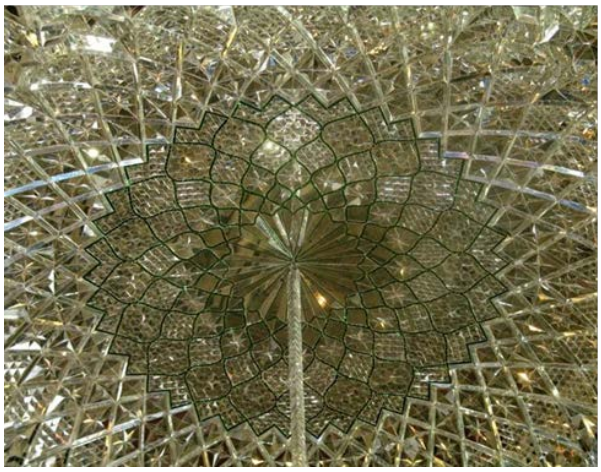
provided a great and helpful analysis of unity of being. That is one of the most mystical and philosophical principles of Islamic thought that has encouraged some great theologians such as Ibn Arabi and Molana to speak about. The artistic and architectural works from the third and fourth centuries by great thinkers like Ikhwan al-Safa, Farabi and Abolwafa Boozjani, made a relation between philosophical and geometrical texts (pictures 3-5).

Ikhwan al-Safa, for instance, spoke about intellect geometry and tangible or sensory geometry in their works. Farabi defined "Elm ol-Hial" as materialization of subjective concepts on external evidences that is the very conversion of idea to form in art and architecture. Or Boozjani in a book spoke about the need of calligraphers, engineers and brick layers to geometry and mathematics. Chivalry letters (Fotovvat Nameh),[9] that are deemed the spiritual by-law for arts in Islamic civilization, have spoken of the relationship between the theoretical men and men of act.[10]

دایره شماره ۱۸ تابع فقره شماره ۸۳۹

Picture 2. Candles and mirrors illustrated in Amoli's book

Picture 3. Mirror decoration in Holy Shrine of Imam Reza. Mashhad, Iran



Picture 4. Mirror decoration in Holy Shrine of Hamze, Rey , Iran

Picture 5. Mirror decoration in Holy Shrine of Ali ibn e Hamze, Shiraz, Iran

Therefore, it was common for the architects and artists to refer to theoretical texts in artistic and architectural tradition of Islamic civilization, particularly Iranian civilization. Ms. Golro Najib Oghloo, a professor of Harward University, has clarified this concept in her book named *Geometry & Decoration in Islamic Architecture*.

It is most likely that the great picture that Seyed Heidar

[9] Refer to [21].
[10]. Refer to [22].

Amoli has made of the proportion of mirror, light and geometrical shapes in his book, may have contributed to the formation or aesthetics of mirror work in Iranian architecture.

This paper emphasizes on this issue relying to the numerous reasons that are in Iranian culture.

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