Awakening to Reality

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Semiotics of Animal Icon, Lion

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ABSTRACT

Although modernhuman believes that beliefs and thoughts of the early human based on which their life spent and related they their life to these beliefs are superstitions and the result of lack of awareness, knowledge and culture, in unconscious mind, these symbols are connected to his/her basic beliefs. In this way, today, there are reliefs in all cultures by which human dealt throughout the history and they had pecific meaning in each era and beliefs of early humans evolved as symbols in the life of modern human and they change in accordance with the culture and thought of each era. With a quick look to historical, literal and artistic works, we find out that the figures of lion have important position in decorative arts of Iran either before or after Islamin various periods of Iranian culture. Concepts in astronomy and religious concepts of ancient and Islamic Iran are reflected in literature of Iran which are mixed with the roots of Persian poetry including works of Rumi, Hafez and Ferdowsi and or as an important symbol in illustration of great Shahnamehs of Iranian artistic eras such as Safavid age which is the golden age of Iranian art. This symbol is the most ignored symbols which remained unknown in our era despite of its historical greatness and archaism and is neglected. Iranian lion symbol to which sun is added historically, is registered in United Nations as one of the three medical symbol along with red crescent and red cross. Today, it is stated that this symbol is being replaced by red star o Israel. The aim of this work is to recognize and extract this symbol in Iranian thought before and after Islam. Each art in which an artwork is created must have an inextricable tie with culture and thought. Iranian artist must investigate this cultural background and utilize its concepts and values for culture- creation in his/ her artworks. The method of data collection in this research is through studying documents available in libraries and investigation of the symbol of lion using observation and library methods. In this way, various references are used and the type of research is historical, descriptive and analytical.

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Introduction

Historically, human attempted to revive his/ her religious beliefs and thoughts which have roots in his/ her soul and thought and make them tangible. Therefore, sometimes s/he transforms them into figures so that they can be expressed well. However, it can be said that roots of many of these figures date back to a time before their illustration. These reliefs sustained during the history owing to persistence of some beliefs and their dissolution in the new context.

One of these reliefs is lion icon which has an important position in Iranian culture before Islam in the form of astronomy concepts or the guard of sun in Mithraism. After years that Iranian artist inclined toward Islam this symbol was maintained. For example, we can see this icon in figures instead of Imam Ali in some illustrations specifically in Safavid era since in the religion of truth, Imam Ali is the symbol of god and is replaced by sun. it can be claimed that the origin of all religions is the same and they are on thing but in various forms and are dissolved in new circumstances.

This paper explores and understands the way this symbol and icon was formed in this land and how it is used sometimes along with other elements the most important of which is sun as a principal symbol in the history either before or after Islam and has been always present in artistic and religious works f Iranians and then, it investigates its various meanings in different fields such as Zoology, astronomy and ancient calendars, historical legendary look toward it as well as the Mithraism and its role in pre-Islam Iran in the form of flag symbol, coin signs and mystical poets of Iranian rich literature particularly those of Rumi.

Viewpoint of religions differ from each other but in essence, all of them worshiped god. Hence, all of them had a manner. Consequently, religions from the first to the last one utilized and are affected by each other and for this reason, it can be assumed that occurrences and events illustrated in figures made by artists are derived from various religions and thoughts of the ancestors of the artists and have roots in earlier eras.

Jong believes that artistic creation arises from the unconscious of the human and he explicitly states that in analysis of spiritual components and indices of a nation, its legendary symbols can be studied. These symbols are not created by a certain person since they arise form an eternal meaning and flow and live in our spirit regardless of our contribution to their creation. In other words, it can be said that what we refer to as "heritage" is our "ancestral unconscious" with which our ancestors lived with it and we and our children will live with it as well (Jong, 2006, 32).

Therefore, artwork is not inspired by a personal resource, but it has roots in the thought and heritage of ancestors. Investigation of symbols helps us in studying and discovery of secrets embedded in artworks. The main application of symbols is in religions and arts which is presented in a new form according to the cultural, temporal and spatial circumstances of each period.

For instance, Zoroastrian religions can be noted which was ignored, forbidden and eventually disappeared after a time. However, some of its teachings remained and affected next religions and mixed with them. In fact, art – like a culture –is the reflection of belies and view of the human to existence and altogether, it reflects the identity of human throughout the history. Art and artistic creation has been always constitutive elements of each religion so that all religious beliefs manifest themselves in the art and according to Titus Burkhart, religious art may be the easiest way for understanding the religion (Pak Baz, 2004: 725).

In Iran's art, figure of lion or some parts of its body are seen frequently in works which has roots in ancient history. The role played by kings and heroes was very pronounced. For showing the brevity and power, king hunted the lion and young men who were sometimes military commanders battled with lion.

Figure of lion found significant position in decorations of palaces as well. It is frequently seen in relieved of Persepolis and or remnants of Sasanian period, handicrafts remained from 16th century and many other works remained from the past either in kingdom position or after prevalence among people. This symbol which became royal was a sign of power and brevity and hence, in both Persian and Arabic language, lion predicated brave men.



Fig 1. Golden cup with lion head figure, 5th century B.C (metropolitan museum).

Lion

Zoology

- 1. Lion: is a strong animal, predator, from carnivorous, yellow-colored, with powerful arms and claws, male animal has forests and canebrakes.
- 2. (adjective): brave
- 3. (astronomy): Leo (Amid, 1963: 716)

A strong and huge mammalian from carnivores belonging to cats which has strong claws, very high muscular power as well as powerful jaws. This mammalian lives in tropical regions. However, it is nearly exclusive to the central part of Africa. Male animal has massive mane around its head and neck (Dehkohda, 1998: 192).

- 1. It is a wild and carnivorous mammalian from the order of cats which is very strong and fast. Male animal has mane.
- 2. Successful, victorious, ~kid is an irony for a young person who is very brave, making~persuading someone, encouraging

or stimulating someone, throwing ~ and line lottery and gambling (in coins before Islamic revolution, on one side of the coin, figure of lion and sun and on the other side value of the coin was carved) (Moein, 1983).

Lion in astronomy

Many of the beliefs and thoughts of ancient people which manifested as figures and symbols in artworks and religious works and are inspired by cosmic and terrestrial phenomena which surrounded them. In the collection of texts and teachings of astronomy, lion which is itself one of constellations is found frequently in literature and figures remained from Iranians and ancient easterners. In these figures, there is usually a combination of lion and sun god which is mounted on the lion or sits beside it or even sun between two lions. These figures can be seen frequently in Achaemenian inscriptions and bronze items after them in which the reason of the relationship between these figures and beliefs can be attributed to the astronomy.

The biggest and brightest start in Leo constellation is Regulus (lion's heart) to which is sometimes referred as Leo constellation. This star is seen blue to some extent in the constellation and is one of the most auspicious and most cherished stars for Iranians and has been considered as the symbol of kingdom and imperialism.

Regulus approaches the sky in the last days of Bahman (mid-February) and appears during sunset. That is, the time of appearance of sun is accompanied with the appearance of lion. Sun and lion then come close to each other and lion rises a little sooner every day and then, after six months and in first days of the summer, conjunction of lion and sun occurs and sun is mounted on the lion.



Fig 2. Bronze penner decorated with astronomic believes, bronze inlaid with silver and copper, 680 A.H, Mohammad Bin Songhor (western Iran, probably Mosul, British Museum, Reg. no.: 1891-6-23/5)

In ancient times, people thought that light and blessing of the sun heat is due to and under the influence of the lion. The belief that combines lion and sun is taken from ancient Iranians' belief and they mounted the sun over the lion as shown in Fig. 2.



Fig 3. A part of penner illustrated in Fig 2.

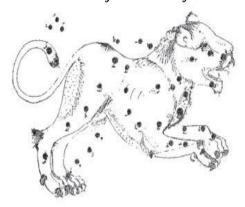


Fig 4. Regulus in Zodiac constellation.

Leo is the house of sun. according to astronomers, when sun falls in Leo constellation, it is time for comfort, security, safety, grainabundance and affluence. For this reason, figure of sun together with the sun which is mounted on it is regarded by astronomers and artists as the symbol of good luck (Samakoush and Khazaei, 2006: 98).

Lion in Iranian calendar

One of the constellations which is detected in astronomy is lion or Leo which is considered as the symbol of Mordad (end of June and July) and is observed in artworks of Elamites. In other figure – Gavavajan or the attach of lion to bull – dating back to 4000 B.C, the initiation of summer heat and the peak of lion's power at the end of winter is represented. This is Nowruz and renewal of the nature.

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Fig 5. Calendar of S. Jalal Tehrani, 1314 Hijri (1935), central library of the holy shrine; 27372 Lion in Iranian myth and ancient history

For understanding the world which has been always full of secrets, understanding Iranian myths is of great significance and for doing so, it is necessary to be familiar with the rich culture of this land. Myths are the symbol of human experiences and are scenic of spiritual values of a culture. Each society maintains its particular myths and tries to protect them since beliefs embedded in them is the definite factor of permanence and immortality of that culture (Rosenberg, 1999: preface).

According to god of Mithraism who has lion head, issues corresponding to this religion can be explored. Numerous statues are discovered in Mithraist temples and researchers believe that this the devil itself and is called Satan in Zoroastrian religion which has frightening characteristics. On

the other hand, they believe that this is a representation of the Zurvan god who creates good and evil.

Sometimes, by relying upon the characteristic of time which swallows everything, this figure is considered as the symbol of fear and panic and sometimes, by reasoning that statues with lion head which have acceptable appearance and seem to be suitable, researchers cast doubt on the satanic characteristics of this symbol.



Fig. 6: Statue of Zurvan or god of time (Vatican museum)

In ancient times, application of lion figure was very highlights in Persian land which can be seen in reliefs remained from that era and or on the works and objects belonging to Sasanian period. This figure which was a symbol of royal glory and splendor, was used to show that power and greatness of kingdom.



Fig 7. Sasanian stamp with sun and lion relief

In history of art of ancient Iran, figure of murder of bull by lion is frequently seen particularly in the art of Achaemenian which is seen 27 times in Persepolis and can be seen in many artworks remained from that era.

There are numerous interpretations for the cow-breaking lion. It can be considered as the initiation of agriculture (Beckerman, 1995: 186) and or the victory of good power over devil (Girshman, 1992: 157). Busoni considers the murder of bull of Mithraism like the figure of the fight of lion and bull (Oulancy, 2000: 5). According to Bahar, maybe the moon can be regarded as the symbol of life and lion as the symbol of death since lion is powerful for murdering and the head of Zurvan was drawn as lion which was the symbol of fatal power of time (Esmaeil Pour, 2002: 198).

Maybe the lion is the symbol of light (sun) and the bull is the symbol of moon and murder of bull by the lion is equivalent to its being ripped off by the Mithra in which the lion is the alternative for Mithra. This duty was later assigned to Satan in Zoroastrian religion. Here, bull replaces the moon and blessing is brought by the lion and growth of plants starts. It can be considered as the end of darkness and in Achaemenian era, it was the symbol of Nowruz and renewal of nature.



Fig 8. Fight of lion and bull in Persepolis walls Other instances of lion and bull in historical objects.



Fig 9. Decorative pendant, Achaemenian (Louvre museum, Paris – France).



Fig 10. A creature with two heads; lion and bull, made of bronze, 3500-3000 B.C, western Iran (Cleveland museum).

In ancient era, stone lion statues were put over some tombs. This tradition is seen in pre-Islam Iran in many regions such as Arjan hill of Fars and or many of Bakhtiari tombs. Tradition of putting stone lions was carried out for the tomb of young people who were killed bravely. All of the statues were lions with an open mouth which stood firmly and looked forward and their teeth are obvious. In post-Islam Iran, this tradition continued as well so that the age of some statues dates back to more than 300 years. For example, statues of stone lion of Ahmad shrine or statues around the Khajoo bridge of Isfahan can be noted. It can be inferred that the application of lion figure changed in post-Islam Iran in single form in Safavid era.



Fig 11. Tombs of Charmahal Bakhtiari.



Fig 12. Statues of tombs, Lorestan.

Since it is talked about the importance of lion in history of ancient Iran, very old civilization of Iran which dates back to pre-Arian era cannot be ignored. According to Hegel, Iranians were the first historical nation and the Persian empire is the first emperor of the history (Stace, 2002: 173). People were living in current regions of Iran land and lion had a specific importance and position in their culture and religious beliefs. In stamps discovered in this civilization, various types of animals live in hills and forests and they are either grazing or escaping from lions. Then, Elamite hunter appears in the scene who is completely bare or wears a lion skin and his weapon is spear, arc or axe (Hannes, 2004: 28). In Elamite civilization, works are discovered which have divine aspects and in some cases, divine gods along with lions announced the blessing and added to the decoration (same: 56). Sacrifice has been probably a part of daily rites of Elamite temples. Usually, at the time of going to battle fields, wethers were sacrificed in front of huge statue of lion probably in front of the gate of the city (same: 68).

With a brief look toward the remnants of the Elamite civilization, it can be inferred that they had wonderful inclination to thinking about spiritual issues and metaphysical events which showed the dark side of the nature. Therefore, they drew cross animals (combination of two animals). For instance, one of the most important creatures for them was an animal named Griffon which is a winged lion whose front legs belong to eagle. According to Hannes – the great researcher of Elamite civilization – Griffon was an Elamite invention which proves the presence and significance of lion in this region (Hannes, 2004: 193).



Fig 13. Griffon cup, 7th century B.C, discovered in Kalmakere cave, Roumeshkan, Lorestan

Other instances of the importance given by Elamites to the lion can be seen in their works such as stamps and warfare discovered in Lorestan is the figure of a lion seating among two standing bulls or a bull seating among two standing lions. Researchers considers these works which are sometimes abstract as the balance between events of the world and it can

be said that maybe it is the image of winter and summer and it can be said that it is the image of summer and winter which follow an eternal intermittence.

Lion; the symbol of god in Mithraism

From its origin which is not completely known, Mithraism has been respected by Iranians particularly Achaemenian. In inscriptions of Ardeshir, three gods; Ahuramazda, Anahita and Mithra are worshipped. Mehr in Persian means friend and affluence as well as sun and the 7th month of Persian calendar.

Setaltius – roman poet –states that Mehr dominated the horn of the tough bull under the stones of caves of Iran. From that time, Mehrwas considered as the famous murderer of the bull and its figure is seen in temples (Varmazan, 1996: introduction).

In fact, since Mithraism was originally a religion for all groups and small categories, Mithraist people worshipped in the caves and selected this place for their gods. In Mithraist caves, figure of lion and Zodiac is seen frequently. In these places, images of the god are seen which have lion head and stand while a snake wraps around them and they are sometimes called Satan and sometimes Zurvan. These figures are gods with long legs and sometimes bare and their male gender can be recognized.

Regarding this god, it can be said that Zurvan is the father of Ahura and Satan and these are the origin of good and devil. What is made by Ahura is good and suitable and against each creature of Ahura, there is a bad and unsuitable creature. Therefore, existence and the world evolve around the combination of these two origins (Bagheri, 2006: 71). Sometimes, in some of the discovered statues, on the body of this creature, head of three lions on its stomach and knees are seen and it is probable that the lion in Mithraism is the symbol of fire and three heads represent the triple nature of god; morning, evening and night.









Fig 14. Zurvan; god of time, discovered in Mithraist temples

Role of lion, an important figure in Islamic art

The figure of lion; either individually or along with sun with religious concept is seen mainly in artworks of Seljuk period in 5-6th century of Hijri. Name of Imam Ali is accompanied with a specific greatness and significance among Muslims and he is described as lion in poems and works of artists. Figure of sun and lion found a new meaning in Islamic art so that the sun is the symbol of prophet and the lion is the symbol of Imam Ali.

As can be seen, after the attack of Arabs to Iran and conversion of Iranians to Islam, modern and excellent civilization doesn't disappear but it adapts itself with new circumstances. Lion symbol which had a specific position in Mithraism as one of the oldest religions of Iran, finds a new utility after Islam thanks to the intelligence of Iranians and it becomes one of the traditional elements of the new religion.

For example, application of this figure in illustrations of ascension letters can be noticed. In these paintings, prophet is riding Burak in ascension night while he is giving his solitaire to Imam Ali. In this figures, Imam Ali is drawn as lion (Khazaei, 2001: 55).

Moreover, together with sun, this figure had numerous applications in Islamic concept at the end Seljuk and Safavid era. In Seljuk period, it was used in shrines and Shia centers. Even in Safavid era and after that, in Qajar dynasty, this figure is seen frequently on coins. For instance, the 20 tomans golden coin belonging to kingdom of Mohammad Shah which was conined in 1831 in Tehran has the figure of sun and the word "Ya Ali".



Fig 15. Figure of sun and lion on the coin of Qajar dynasty.

In post-Islam history, figure of lion or lion and sun is seen on the flag of different states and instead of advices and slogan, declaration of faith, Quranic expressions and or the sword of Imam Ali with sun and lion below it are seen and sometimes, the lion is used individually which is not unrelated to the astronomic concept explained earlier.

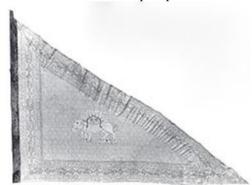


Fig 16. Sun and lion figure on flag of Qajar dynasty Lion, symbol of Imam Ali in poets of mystical literature of Iran

Literature and literal words is a specific type of verbal communication which intends to make spiritual joy, expansion and even hatred in audit. This effective word tries to move away from the daily materialistic goals and attract the audit with a new creation and in this way, contrary to the language whose purpose is to transfer the content in minimum time, it intends to wrap itself in an artistic complexity and poetic ambiguity so that it can create imagination in minds and open a world full of secret in front of the readers.

According to what stated above, it can be said that in the literature of the world, Persian poetry and literature is one of the richest ones. Goethe believes that Persian literature is one of the four columns of the lietature (Levinson, 2002: 48) which has a 1,100-year history. Its roots date back to ancient literature of Iran which are created under the influence of Avesta texts of Sasanian era. Some of the greatest persons in

Persian literature and poetry are Roudaki, Ferdowsi, Khayyam, Hafez and Rumi.

In poems of these great persons of mystical literature, Rumi has a specific position. Within poems of his books, there are a lot of keywords which have various meaning and interpretations. Among these keywords, lion is seen frequently which reveals the importance of this term in mystical literature of this famous person.

Application of the term "lion" in poems of Rumi can be divided into seven parts and we study the second part in which the meaning of lion refers to Imam Ali with some examples:

- 1. Lion as the symbol of brevity
- 2. Lion as the symbol of Imam Ali
- 3. Lion as the symbol of love
- 4. Lion as the symbol of hunting
- 5. Lion as the symbol of dealing with confidence
- 6. Lion as the symbol of knowledge
- 7. Lion as the symbol of spirit of soul

Symbol of Imam Ali

In sonnet of Rumi for describing Imam Ali, lion is used in a grammatical combination with another term including:

Male lion: first chapter, sonnet 203

Lion and lion hunter: first chapter, sonnet 243

Gods' lion: first chapter, sonnet 441 and 508 and $4^{\rm th}$ chapter, sonnet 1705

Example:

Don't foresee to become a foreseer

So that you can be unique such as the lion of god

This sonnet is considered as one of the complex poems of Rumi which is around two aspects; Imam Ali and Shams and describes both of them. This sonnet starts with the description of love by Rumi and then, it faces Imam Ali and in this line, lion refers to Imam Ali.

Another example:

Lion of god started breaking the ties

And soul started to breaking the glass

and

feed the child of my soul

while your breast is full of milk

and

my soul learned lion hunting from you

and it abandoned the confidence (sonnet 508, 1st chapter)

in this sonnet, name of lion comes in a grammatical combination with the name of god and implies to the belief of Muslims who selected this attribute for their first Imam and it is a lovely description and refers to the excellent position of Imam. Tie refers here to material life and soul is Imam Ali who breaks the glass of life and expresses being free from material life and love to the god.

Another example:

Learn crying out from the lion of god

Who didn't cry out but in the well (sonnet 508, 1st chapter)

This line implies to the attribute of Imam which is dipping the anger. Only the god knows his secret and he talks only in well. In the line child of my soul ... full of milk breast refers to the abundance and implies to the generosity of Imam Ali.

As stated earlier, many of famous poets used the term lion for describing Imam Ali in their poems. However, that of Rumi are different and multiple usage of this term is a sign and it can be claimed that he is one of the best poets which had this power and did so diversely.

Conclusion

Signs and symbolism must be considered as fundamentals and principles of artistic aesthetics. In this way, two principles are fixed which create and process the sign and symbol. These two principles; religion and legend, surround the mind of the artist and creator and combine with his/ her soul and a symbol is created.

Artists intervene in the nature and essence of the elemental characteristics and sometimes present it in a simple and elementary form and concentrate on its spirit and reality beyond the basic appearance. In this way, lion has a lot of traces in the art and beliefs of the people of this land, became a symbol and is seen by the audit with excellent attributes. Lion has always been the symbol of power, brevity and audacity. Furthermore, in religions, lion has been always accompanied with gods and sun. it was a powerful guard in temples which is always awake and rips off the timer and makes fires and burns the devils. This enraged lion climbs the skies and approaches the sun, creates sunrise and light and leads to regrowth of beauties. Sun is mounted over it and it seats in the Kavian flag of this land for a long time.

It attacks the bull which is the symbol of darkness and devil to achieve victory and it can announce the sunrise and a new year. In love and mysticism, it remembers someone who excels everyone in respecting the promise.

References

Jong, G., human and his symbols, Jami press., Tehran, 2004 Pak Baz, R., art encyclopedia, FarhangMoaser press., Tehran, 2002

Ettingshausen, R., lion carpets of Fars, art cer3emony organization, Tehran, 1977

Amid, H., Amid dictionary, Ibn Sina press., Tehran, 1963

Dehkhoda, A., Dehkhoda dictionary, Tehran, Tehran University press., 1958

Moein, M., Persian dictionary, Amir Kabir press., Tehran, 1983

Khazaei, M., constellations and Zodiac, Ghatre press., Tehran, 2005

Safa, Z., Persian calendar and Iranian national ceremonies, center of studies and cultural conferences, Tehran, 1976

Ayatollahi, H., Abed Doust, H., evolution of calendar in Iran and analysis of ancient symbols in Persian calendars in Islamic calendars, ISC quarterly of Negare, 5th year, no. 16, 2010

Bruce Ford, M., signs and symbols in the world, Kalhor press., 2009

Dictionary of legends and stories of Persian literature, FarhangMoaser press., 2001

Dictionary of symbols, Hall, J., Tehran, FarhangMoaser press., 2001

Rosenberg, D., mythology of the world, stories and epics, vol. 1, Asatir press., Tehran, 1999

Jane Green, M., Celtic myths, national library of Iran, Tehran, 1997

Sarkhosh, V., Iranian myths, Markaz press., Tehran, 1994

Hannes, J., introduction to Iranian myths, Babol library, Cheshmeh press., 1989

Beckerman, H., Hunter, W., science in Iran and ancient east, Ghatreh press., 1st ed., Tehran, 2005

Boyce, M., history of Zoroastrian religion, vol. 2, Tous, Tehran, 1995

Girshman, R., art of Iran in Median and Achaemenian period, scientific and cultural press., 1992

Philosophy of Hegel history, Stace, W., scientific and cultural press., 2002

Olanci, D., a new research about the origin of Mithraism, Cheshmeh press., Tehran, 2000

Esmaeil Pour, E., from myth to history, Cheshmeh press., Tehran, 2002

Abed Doust, H., Ayatollahi, H., analysis of the concept of the fight of lion and bull in Iranian carpets, proceedings of the national conference of art, culture and carpeting of Iran and the world, Islamic Azad university of Najaf Abad, pp. 309-323, 2011

Hints, J., lost world of Elam, scientific and cultural press., 2004

Razi, H., Mithraism, Behjat press., Tehran, 1992 Varmazan, M., Mithraism, Cheshmeh press., Tehran, 1996 Bagheri, M., religions of ancient Iran, Ghatre press., Tehran, 2006 Bahadori, N., lion of love, Roudaki magazine, 1999, no. 24 Von David Levinson, Karen Christensen, Encyclopedia of Modern Asia, Charles Scribner's Sons. 2002

Bozorgi, A., 2002, study of the metallic works of Seljuk period, unpublished thesis, Soureh nonprofit university

Soufi, A., 2002, fixed constellations, Ghoghnous press., Tehran

Motamedi, N., report of excavations in Kalamkareh cave, heritage 4 magazine, pp. 3-15, 1993

Beckerman, H., Hunter, W., science in Iran and ancient east, Ghatreh press., 1st ed., Tehran, 2005

Ayatollahi, H., Abed Doust, H., evolution of calendar in Iran and analysis of ancient symbols in Persian calendars in Islamic calendars, ISC quarterly of Negare, 5th year, no. 16, 2010