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Reviews some of periodic patriarch astronomical compared with the Timurid period and Safavid dynasty

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ABSTRACT: Iran is a land which was historically attacked by alien natives during its life. The Mogul and Turk natives were always making significant developments including: their attacks and conquers which caused many Iranian people being killed. Among these natives, the Tatar led by commanders like Alagh Beig and Holaku who, unlike Genkhis Khan, were mostly regarding the cultural and scientific issues of Iran. The current research is intended to study comparatively the astronomical works of the Ilkhanian dynasty and those of the Safavid dynasty. Therefore, the astronomical works of different historical eras have been reviewed. The history of astronomy is considered as one of the most interesting scientific subjects of the Ancient Persian and Islamic eras in Iran. With entering Islam into Iran, the astrologists studied the Islamic astrology inspired by the ancient Iranian astrology. Either the astronomical works were observed by the astronomical instruments or they were discovered by them.

Keywords: astrology, the Ilkhanian, Teimourian dynasty, Safavid dynasty, observatory, observational instruments

INTRODUCTION

Astronomical literature review and comparison with periodic patriarch of the Timurid and Safavid period, the main objective of this research. Definition of work ahead of us puts two completely different areas. Works include several books and treatises on astronomy, observational instruments, observatories, and etc. Research in the history of astronomy and the second group studied the art category. Sun, moon, stars, constellations, planets, the bull and the lion, the lion and sun, and one of the symbols that have been considered in numerous works. Astronomy either science or the rules of the distant past in popular culture as the index has been backed rulers. The patriarch of the Mughal rulers, because they have believed in astrology and impact lives sky. This science was able to regain its observatory built after the destruction that results from it will seriously affect the Copernican astronomy. Before the Mongol conquerors Shmny faith and the faith to believe these people have strong beliefs about the sky and the impact on the lives of the stars. It can be said that the main reason for the construction of an observatory in the same period of the Mongols believed to have been the blue sky. But perhaps more important than politics scholars as Nasir rulers believe that they have been able to put a finger on the character of the development of astronomy and other sciences, to help. In this study, library research, writing and taking notes including a summary of the literature and historical geographers and historians of the early centuries of Islam, the logbook.

Astrolabe

Muslim astronomers Astrolabe altitude of the sun, moon and stars were measured. Astrolabe, graphics and pages that can locate the position of the stars relative to the horizon. The astrolabe was used in ground measurements. For example, in measuring the distances of objects, high mountains and deep wells Dasht.astrlab application of different types of astrolabe flat, spherical and linear is one of them. Among the most common type of flat astrolabe. This tool has evolved in the Middle Ages became one of the most important astronomical Islamic period (Ibn al-Nadim, 1971: 332). Abvashaq Fzay (second century AD) who were the first astronomers of the astrolabe Sakht.astrlab flat in the sky on a page, with the assumption that the earth is at the center and build a model of the sky, and the heavenly bodies around it Grdnd.bray for measuring angles, the parts are flat astrolabe (Varjavand, 1987: 463).

Quarter

Group of astronomical instruments for the quarter is 4/1 circle, they are Namydand quarter. These tools can be classified into four different types of ancient astronomy astronomical observations are used in calculations: 1. Sine quadrant (sinus) were used for the numerical solution of problems of spherical astronomy. 2. Spherical astronomy quarter Shkazyh to solve problems in different latitudes were used. 3. quarter Msstvy used for timing the sun. quarter Mqntr were used to determine the position of the sun Vstarh (Nasr, 1980: 30).

Essence Alshbtyn

The astronomical instruments, the ruler also called parallax, Drmjsty Ptolemy (Ptolemy, 1987: 244-247) is described. Alshbtyn to measure the angular distance from Essence the ridge months used. This observation was made in a moment of transition month from the meridian of the observer. The astronomer was determined by calculating the distance of the moon from the earth (Nasr, 1980: 20). Essence Alshbtyn. The astronomical instruments, the ruler also called parallax, Drmjsty Ptolemy (Ptolemy, 1987: 244-247) is described. Alshbtyn to measure the angular distance from Essence the ridge months used. This observation was made in a moment of transition month from the meridian of the observer. The astronomer was determined by calculating the distance of the moon from the earth (Nasr, 1980: 20).

Provisions Astronomy

The oldest surviving document of astronomy and astronomical document is only a text of astronomy and astronomical texts belonging to the ancient Babylonian astronomy Ast.mtn with predictions based on the Moon and the day when the situation sky the moon, at the beginning New Year, was seen (Vandrvdn, 1993: 66). Perhaps motivated by the observation only pure scientific curiosity, and because of it, the Kindle Fire enthusiasm, of poetry and music was phenomenal and Venus disappeared. This possibility is not ruled out the presence of text in between the two halves of the observations can be evidences of this. Venus steps with simple arithmetic rule discovery and calculated. About three thousand years before the time of Christ ((Fouhy)), the first emperor of China, several observations made in this timepiece Bvd.chynyan believe their Creator summary schedule was incomplete towers twelve animals in the same period, the number number Shstgany and then number is a decimal number (Hosseini Shkrayy, 2010: 49). One of the most advanced civilizations in Mesopotamia and Babylonia to the center of Babylon, founded and invented ways to calculate the motion of the moon and planets. Babylonian mathematics was also developed. They number 60 on them. Now a circle into 360 degrees for one hour to 60 minutes and 60 seconds in a minute that this is the way they adapted (Vandrvdn, 1993: 7).

Astronomy in India

Astronomy in Ancient India was initially Tnjym less scientific aspect, and basically "Indian astronomers and theoretical methods to promote innovation or no attention Astronomical Observatory. The basic concepts of astronomy, mathematics (such as day length and period of the late fifth or early fourth century leap BCE Akkadian sources, by the Iranian Achaemenid Empire was the Indian astronomy. General characteristics of astronomical legacy of this period is that the description includes detailed astronomical They stated that today it is difficult to understand and analyze the history of astronomy for the experts. In the seventh century Indian astronomer Brahmagupta lived in the name of two of his astronomical knowledge Ynybrahmasphvta SM Hanth and one more in the second century AD Perched K·hnd both these works were translated from Sanskrit into Arabic and Islamic astronomy found Let the effects of the first term (Sydhanth) to distort the Arabic (Indian instrument) was read in the second and third centuries AD led to the exhilaration of a new school of astronomy (Document India) was (Nalynv, 1970: 189). 156 A man in India to serve Mansouri, Abbas and his book with the astronomical order of M, the book was translated into Arabic and Fzary book written on it that astronomers called it Hndalkbyr Alsnd horoscopes, as well as astronomers Khwarizmi Vhbsh other calculations as well as horoscopes document written works that were considered in the Islamic away. The second effect is called Brahma Gupta's Muslim astronomers knew Arknd (bironi, 1973: 346). The concept of "universal time" means community Kavakeb (planets) in long-term period of Indian astrology and astronomy were of course part of the year or during Arjbhr / Arjbhz called the name Dygrstarh Indian astronomer, Aria Bhth had been taken (Nalyv, 1970: 193-192). According to new research, the Indian astronomy, astrology and astronomy Iran's pre-Islamic Iran during the Islamic period, especially in the second and third centuries AD has a great effect, but in the next century Basytrh gradually more Greek astrology, Indian astrology application Islamic territory was reduced to the seventh century AD this time, under the influence of the Persian astrology, horoscopes Mahmoud Ben Nasser's life in India was written in Persian. It also has the thirteenth century AD, when writing horoscopes Bhadrkhany (Last horoscopes in the Islamic period), horoscopes several books on various branches of science Hey, were written in Persian in India (Ghasemloo, 1994: 47-46).

Astronomy in India

In India, the major periods or "Yoga" is important. ((One of the Gods)) is equal to three hundred and sixty year. 4320000 twelve thousand years of the gods, or a "yoga gods", later astronomers of this period ((Mhayvga)) or ((great yoga)) or in ((the Great)) called. Yoga is the oldest of the four major sources of yoga which is smaller length ratios Ast.khryn 1,2,3 and 4 of this period ((Kali Yuga)) is that they believe we are living in now we included 432 000 years. In the four course evening as gold, silver, bronze and iron and distressed situation becomes worse. Indians saw the thousands of yoga a day (Brahman)) or ((kelp)) is. After a day of Brahman, Brahman, including 4320 million years Ast.shb equally long and each day Brhmndr Recreate the universe and all living creatures of every creation of new and behave the same way in all the 60 Indian Azqam creation Pyshyn.ayn divided. If the Indians from the start based on the decimal notation was, therefore, concluded that Mhayvga and yoga are smaller than the Babylonian Mensah (Vandrvdn, 1993: 443-441).

Pass on the history of the Mughal period

Ilkhanan in Iran (756-651 lunar)

Hlakvkhan (633-651 lunar), multiplied by the rulers and people of thumb that Genghis Khan was shown not leave room for the emergence of a new government. Therefore, in 618 BC after the Mongol conquest of Khorezm, one of his generals were determined to rule the kingdom of Kharazmshahian and then for thirty-five years of management were carried out in the same way. Hlakvkhan rest areas conquered by Mango agent Mandh Iran. Later in 651 BC, he moved to Iran. First, one of his commanders that the war was called Quito Bvqa Isma'ilism Quhistan and roudbar sent. Ismaili sect were small, but they were very afraid, and the fear of death itself was not so hard Kytvbvqa resistance against them. But with the arrival Holaku and close all loopholes Ismailia victory of the Mongols and Holaku in 654 BC Rokneddin Khvrshah, the last president of the Ismailis were forced to surrender, and the fortress "Mymvndz" in the roudbar and Taleghan down. Thus ended the authority of the Iranian Ismailis (khand Meyer, 1954: 37-34). Then Holaku going to Baghdad. Although the trustees of the Caliph of Baghdad, officials showed their allegiance, but were not accepted Hlagv and he went to Baghdad. The caliph's court was troubled Almstsm of God. In Bhbvhh it all affliction and adversity, the war of words between the followers of various sects were not reduced. Allqmy Minister Khalifa bin Shyh religion, because the action of the Caliph's son was sad loot Shiite neighborhoods, apparently coming Hlagv to Baghdad was not unhappy Hlagv in 655 BC, sent ambassadors to the caliph and his Mongol called absolute obedience, but Holaku Khalifa from his spiritual power and eventually Trsanyd Laith people like Jacob. Life and Laith Sultan Muhammad Khwarazmshah, after which the caliphate revolted, they noted, Holaku the statement ignored in the month of Safar 656 AH to anger and anger to Baghdad and the Caliph and his son, Abu Bakr was killed and the rule of five Twenty-four years after the Abbasids (656-132Q) ended. Aleppo and Damascus Kytvbvqa Holaku then opened and sent to Egypt. But the Egyptians in 658 BC at the "same Goliath" Kytvbvqa and his companions killed. Holaku his death in 633 BC as the capital city of Maragheh .hlakv chose Tusi, the Shia scholars Aazm observatory built in the city (Grvs·h, 1974: 58-557). Abaqa Khan (680-663 BC) by the Mughal rulers in Iran, with links to the center field of the tribe, was cut Pagrft independent state in Iran. So Hlagv and his successors "of the Mughal kings" or "Ilkhanan" are. Holaku Khan's death, his son patriarch Abaqa Khan sitting on the throne, and the city became the capital. He is an independent, non-self-governing court of the Mongol Khan knew, and to indicate the degree of independence, the son of Genghis Khan, the Mongol pool Joji Khan, son of the king, and shiny Chghtay Alves, who will reign over the Turkistan and Transoxiana, defeated. He also fought with Muslims in Egypt, but there was no significant result and outcome in 680 BC, died following Farewell (Ashpoler, 2007: 82-72). Sultan Ahmdtgvdar (683-681Q) "Tekuder Abaqa Khan's brother was in Muharram 681 AH officially as the" patriarch "Rsyd.ama some Mughal rulers, calling patriarch Arghun Abaqa Khan's son, thus there was animosity between them. Tekuder to find a new sponsor that can be the enemy of the house of his helpers, and also in line with the Pschent the Vpas for them, Islam became and mobilize them, eventually he won, and in 683 BC he murdered construction (Iqbal , 1985: 502-499).

Before the date of birth of the role of astronomy

The study of prehistoric pottery and demodulation of symbolic signs on them Hmang·h work began exploring ancient sites, making it attracted the attention of archaeologists. So far, some of the signs and designs on pottery in relation to nature and its manifestations were analyzed. But still interpreted as if it has not been achieved. Because they are conscious of a deep and comprehensive knowledge, such as the attempt to discover the ancient mysteries of reading done, that the role and logs Ast.bayd prehistoric symbol symbolic aspects of realistic they should was unaware (Varjavand, 1987: 450). Nowadays justify sign (symbol), such as: mountain-water-Sun Moon and unity among archaeologists as to the extent they exist. The interesting thing about these symptoms while some of them as "Sun", with diverse and often geometric designs as well (in various designs) - cogwheel swastika and circle as we can as they hit the concept Beyond the appearance of the sun is recited. As some of the examples of the heavens and the Svrtmsls or semicircle with three points, horizon-middle east and west Alsma’ Tvjbh. We have examples of the

paintings of prehistoric pottery of the ancient sites such as:, the manifestation of the wisdom of the people of this land before the constellation of issues to be obvious to everyone. (bironi, 1973: 32).

The coins found in excavations in Maragheh observatory

Following the introduction of coins found in excavations are discussed Maragha observatory. The total number of coins during the three seasons of excavations yielded only 17 numbers in each group, 8 of them in full and there is no indication on the carpet. From 17 coins from sixteen to one end of the copper and gold. About eight copper coins, which works on them can be seen, it must be said that no one in a position not to be able to clear all the posts, date and place of their beat identified (Varjavand, 1987: 426).

CONCLUSION

The patriarch of the Mongols and the destruction of cities, thus destroying the sciences such as astronomy and mathematics education centers are paid.Mongolian language and some astronomers with the Chinese and Uighur Mongolian and Chinese astrology books to read information and informed Krdnd.chnankh Nasir Tusi in Maragheh observatory Chinese astronomers used the information. But with the creation of Kazan during the next quarter Shnb Rashidi and even astronomy in the downhill. Manifestation of the decline of the addition of twelve superstitious Mongolian chronology chronology of Iran. But as Timurid Samarkand observatory built by the order of Tamerlane, concurrent with the introduction of the Copernican astronomy Iranians Renaissance encouraging progress of astronomy Iran. After the Timurid again transformed some astronomy in the Safavid period with weakness. The origin of this weakness, depression, lack of interest in science and rational Safavid court and was traditionalist scholars. From astronomy to astrology and determine just had enough time Saad and crossed astronomy and astrology transformed into sentences. That's why the industry flourished in this period so we astrolabe. By comparing the book on astronomy in the eras witnessed frequent imitation of the books written volumes are lower than in previous volumes. For example, the book is full of wonders Almkhlvqat the images taken from the book is the Book of Fixed Stars At the beginning of the decline of the Mughal Mughal period because of continuous attacks and Tile Hnrmmary because these attacks are causing havoc in the next period, Timurid monuments come back to prosperity reached. Maragheh observatory building is a beautiful example of this period in order to observe Kavakeb Holaku under Khajeh Nasir was founded in Maragheh. Scientists and astronomers were able to gather and explore through the center of astronomical pay.

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