

ASTRONOMY IN ANCIENT IRAN

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Stars have fascinated humans for ages; while some have worshiped it others have studied it. Astron in Greek language means Star and Astronomy is the science of the heavenly bodies. In Ancient Iran the study of stars and planets and its effect on humans had been a subject of research and they made good use of the knowledge they gained from such research. Among the fragments of the ancient Iranian knowledge that have survived the onslaught in history and the misinterpretation by scholars, we find information's that are among the latest discoveries of modern science. An example is the "Mah Yasht" which is to be found in the Avesta. It says to the effect that " In spring with the new moon if a seed is sown the fruit of that plant will be sweet and in abundance." In the late sixties scientist in Russian and Japan came to the same conclusion.

Truly the knowledge derived
By the good mind
Never before known
Among the wise and in the universe
With it make good rules and never waning
Increasing righteousness
Leading us towards Perfection
ZARATHUSHTRA -Yasna Ha 28.3 (FR)

In ancient Iran the Wisdom in Creation (nature) was researched and the knowledge so gained was put to practical use to organize and improve human life on earth. Their aim in life was to march towards perfection in a righteous way in all walks of life. They were very successful in their mission and we can see this if we correctly analyze the very little information that has survived.

Today one of the important unification tools of world communication, trade and commerce is the use of the Date Line. This notion of having a Date Line is an Iranian one and the ancient Greenwich was located in Sistan in Iran and called NIMROUZ meaning Half

Day or Noon. An Observatory was built and called the Nimrouz Observatory it was located on 33.5 degrees latitude and the Date Line passed through it. The choice of the location was based on the information that beyond 67 degrees North there was no civilization and so they took the halfway point at 33.5. On the other hand considering from East to West, Sistan was in the center of the ancient civilization thus when it was Noon (NimRouz) in Sistan all the countries of the Ancient Civilization had sunshine, in the Eastern most corner there would be sunset and the Western most corner it would be dawn. Many scholars attribute the NIMROUZ observatory to Zarathushtra.

The Ancient Iranians had also extensive knowledge about their own planet. They knew that the Earth consisted of seven separate landmasses, for in Avesta we repeatedly read of "Haft Keshvar Zamin" - Seven Continents.

More importantly the Ancient Iranians knew the relationship between the Sun and the Earth. While Galileo in 1616 CE was imprisoned for life for saying that the earth went round the sun, the Iranians two millenniums before that date had all their calculations in place with regard to the movement of the earth round the sun. The celebration of the NEW DAY (Nou Rouz) as against the NEW YEAR (Saal e Nou \ Sool e Nou) is a matter of great significance astronomically.

Today we are aware that the Earth as a planet is riding on its path round the sun along with the other planets while the sun itself is also moving on its own path along with the rest of the universe. The journey of the Earth around the sun does not end in a whole number of days but it ends in a fraction (365.24190) that cannot be added up to form a whole number. The beginning and the end of the journey are marked in spring with the Vernal Equinox. This equinox does not happen at the same time each year but it happens with a difference of about 5:48:20:16 hours (give and take a few seconds). These facts were well known to the ancient Iranians and taking them into consideration they devised a method of maintaining a calendar that could be fine-tuned with nature. Today in spite of starting the New Year with the Vernal Equinox the year ends up with a fraction, which by even having a leap years every four years and skipping one

every 120 years does not help in solving the fraction. The solution was in nature itself, the Ancient Iranians who researched the "Wisdom In Creation" had come to a conclusion. To zero in the difference the Iranians waited for the Equinox to coincide with the Sun Rise at a given location in their country and called the *New Year (Saal-E-Nou)* of that year a *Nou Rouz (New Day)*. One such Nou Rouz that has been archeologically recorded in history was in 487 BCE when the Vernal Equinox coincided with the Sun Rise at Takht e Jamshid (Persepolis). A square stone was placed in the central hall where the first rays of the rising sun would fall at the same time as the equinox. Today this knowledge is lost to the Iranians and they do not see the difference between *Nou Rouz (New Day)* and *Saal e Nou (New Year)*.ⁱ

The Iranians also used their knowledge of astronomy to influence others in the ancient civilization. The Jews anticipated a Messiah at the turn of the millennium and they were disappointed that this had not happen. The Iranians help them recalculated their calendar by introducing a solar calendar, which was accepted and thus paved the way for the introduction of Jesus Christ as the Messiah.ⁱⁱ

What the Ancient Iranians did has to be compared with what other civilizations of their time did. An example related to astronomy is that of the Egyptians who are believed to have plotted the stars on the ground and built a pyramid representing each of the stars and buried their king in it with a hope that he would go to the star represented by the Pyramid in which he was buried. The manpower and the wealth of the nation were spent on their belief of life in the after world while their people in their present lives lived as slaves and in poverty.

So did the Babylonian civilization before it came under the influence of the Ancient Iranians. The Bible tells us how they built the "Tower of Babel" to reach the gods who lived beyond the clouds and among the stars.

The Moon the Sun and the Stars are worshiped even today by many and the fact that, man has landed on the moon is not believed by them and they believe it was enacted in the studios. For the Ancient Iranians, based on the teachings of Zarathushtra, the skies had practical use; it

was not the location of the imaginary Paradise, because Zarathushtra's heaven and hell was on earth. Paradise is where you create it, it can be in your home in your city in your country and enjoyed while one is alive.

The Ancient Iranians had immense knowledge in astronomy and they used it to improve and organize their life and the life of their fellow men. They studied nature and copied it to their advantage. The correct translation of the Avesta will reveal their advanced knowledge.

ⁱ See Iran Zamin Vol-1 No 2 Feb 2001 - "What we are never told about Nou Rouz and Haft Seene" www.ancientiran.com

ⁱⁱ According to the Dead Sea Scroll,' The Qumran sect rejected this seemingly artificial system and adopted instead a chronological reckoning, PROBABLY OF PRIESTLY ORIGIN, based on the sun.'(The Dead Sea Scrolls in English By G Vermes III Edition 1987 Penguin Books. pg 47)

In 44 BC Menahem a talented man of Babylonian** culture is said to have found the **Magians in Judea**, Menahem is also said to have conceived the idea of a 1000 year empire of the Jews, and after a revision in the calculation arrived at the year 41 BC as 3900 years from creation which meant that from 41 BC the last millennium of world history began. The world history was limited to 4900 years according to Enoch prophecy.

(Jesus the Man by Barbara Thiering 1992 Doubleday, Batman Books 1993 ch-5 pp 38)

(**NOTE: Babylonian Culture from 550 BCE to 640 CE was Persian Culture).