# ANCIENT PERSIAN MAZDA YASNI CALENDAR FOR THE 21<sup>ST</sup> CENTURY

# Fariborz Rahnamoon

Keeping track of days has been of interest from time immemorial. The obvious unit of time has always been the day and night, the determinant of which has been the Sun. In spite of that the moon had captured the imagination of mankind in their endeavor to keep count of days, and for that reason many cultures started their day at sunset. Even today we start our day at midnight. There were of course some who started their day at sunsise and the sun was of great importance to them, to the extent that it was considered as the god that gave life, for they argued that without the sun there would be no life on earth. The fact that other planets in the solar system have the sun but no life form was not a counter argument at that time. What was for sure obvious was that human life, as we know it on earth, would not be possible without the sun.

During the early stages, record was kept by scratching the days on rocks or trees and we have evidence of this method among the archeological findings in Egypt and Mesopotamia. Very soon the moon with its regular waxing and waning made it easier to keep count as against the system of scratching on a rock or on a stick that had to be religiously followed and preserved, if they were to keep a correct and continuous record. On the other hand the moon flawlessly kept its own record and people had to only observe the phase of the moon and tell the day.

But the moon as a means of timekeeping had drawbacks, for the time it kept did not coincide with the seasons and fell short of a solar year, so civilizations that had settled down and were farming found the moon lacking the qualities of an efficient timekeeper and the intelligent among them invented a method to divide the year based on seasons rather than the moon. In other word the Solar system was used to divide the year. The various positions of the earth in relation to the sun were the determinants and most of them were celebrated as festivals.

In ancient Egypt and Babylonia they had the solar year but the months were lunar, and the length of the month were not fixed but were based on observation. Priest-astronomers were assigned the duty of declaring the beginning of the new month, which would start on the physical sighting of the moon by the priest-astronomer. Weather played a role and sometimes the priest-astronomer could not see the moon for various reason including heavy clouds, as is the case even today among the Muslims while declaring the Eid e Fetr.

The Romans also announced their new month by sighting of the moon by the priest. The priest would observe the skies and announce solemnly (CALARE) to the king the beginning of the new month. They called the first day of each month as KALENDS taken from the word CALARE and the word CALENDAR is derived from this custom.

We know that consecutive period of time was maintained in ancient Iran to measure the reign of various kings or rather various periods. The Shahnameh says that Shah Jamshid reigned for 700 year. We do not know of anyone ever having lived so long. But Ferdowsi has warned us that if the information in his poem does not sound right it's a riddle. There can be two solutions to this riddle.

First since Ferdowsi was living at the time when the lunar calendar had been forced on Iranians he could have meant 700 moons, in which case it would calculate to about 55 solar years. ( $700 \times 29/365 = 55.6$ ), now a reign of 55 years is closer to truth and closer to a life span. The second solution is based on the Avesta rendering of the name Jamshid (Yama), in which case the 700 years is a period in history. It is the period in history after the Aryan survival of the ice age, when Jamshid celebrates the first spring after many years of ice and cold.

Other means for keeping track of time were the stars and constellations. The night sky was divided into sections called Zodiac and each section had a group of prominent stars which were connected by imaginary lines forming various shapes, the revolution of the earth placed it in front of a different constellation every month and under this system the year began with Spring Equinox and the constellation Aries happened to be seen in the night skies. This was followed by Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn, Aquarius and Pisces.

Over the last 2000 years Pisces has gradually replaced Aries as the constellation that appears in the sky in the beginning of spring. This is so because of the solar system is moving ahead on its path at a different speed from that of the stars in the constellation. In spite of this being an evident fact, people all over the world and newspapers and magazines in their horoscope section show Aries as the constellation in the beginning of spring namely 21 March to 20 April. **Here is where blind faith defeats Truth and stalls progress.** 

#### EGYPTIAN CALENDAR

The original Egyptian calendar was based on the moon's cycles; this lunar calendar did not serve the Egyptians well in their prediction of the time of the most critical event in their lives, namely the annual flooding of the Nile. They very soon noticed the consistency of the appearance of the "Dog Star", which we call "Sirius", in the Canis Major, right before sunrise, which was closely followed by the flooding of the Nile. This solved their problem, now they were able to predict the flood and be ready for it. Their calculations led them to a 365-day calendar and the Egyptians according to Egyptologist J. H. Breasted, recorded the earliest known date of this solar calendar, corresponding to 4236 BCE. After that the Egyptians had two calendars, they still followed the variable lunar calendar for religious purposes, for religion is based on traditions and not facts, while for civil and administrative purposes the solar calendar was in use. With the advent of Islam the superior solar calendar was discarded and the Egyptians adopted the Islamic lunar calendar instead.

#### **SUMERIAN & BABYLONIAN CALENDARS**

Five thousand years ago the Sumerians are known to have had a calendar with 30-day months. Their days were divided into 12 periods (2hours each) and each period was divided into 30 parts (4 minutes each).

The ancient Babylonians used a calendar with alternating 29 and 30-day months, which kept them roughly in step with the lunar year. To keep them in tune with the solar year for purposes of agriculture and the resulting taxation they added a month every third year. But this system still did not accurately make up for the accumulated differences between the solar year and the lunar year. So whenever the king felt that the calendar had slipped too far out of step with the seasons, he ordered another extra month.

The Babylonian months were named Nisanu, Ayaru, Simanu, Du'uzu, Abu, Ululu, Tashritu, Arakhsamna, Kislimu, Tebetu, Shabatu, Adaru. The month Adaru II was intercalated six times within the 19-year cycle but never in the year that was 17th of the cycle, when Ululu II was inserted. The Babylonian month remained lunar each month beginning with the sighting of the new moon in the evening. Their day began at sunset. They kept hours with the help of the sundials.

#### **CHINESE CALENDAR**

The Chinese maintained a lunar calendar and they still go by the lunar calendar. They group their years into cycles of twelve years and each year is named after an animal. According to Chinese legend, the twelve animals had a quarrel over who was to head the cycle of years. The gods had to intervene, and to solve the problem they arranged a contest. The animals were to race across the river and according to the rank they obtained at the finishing line, they would have the years named after them.

All the twelve animals gathered at the riverbank and on the word go, jumped into the river. Very soon the Ox was leading the race but at the finishing line the rat who had, unknown to the Ox climbed upon his back, jumped ashore ahead of the Ox and won the race thereby having the honour to lead the cycle, the Ox came in second followed by the tiger, rabbit, dragon, snake, horse, sheep, monkey, rooster, dog and pig.

Socially among the Chinese these signs serve to recognize their seniority in a group, and also to find a person age. By asking the animal sign under which a person is born rather than the age, which would be considered impolite, and with a little imagination the twelve-year cycle would reveal the age of the person.

# ANCIENT PERSIAN CALENDAR

#### INTODUCTION

The ancient Iranian calendar was the most advanced calendar that has ever existed, unfortunately for mankind this calendar along with the other advances in science achieved by the Persian civilization was destroyed; first by the Greeks and Romans led by Alexander and finally the Islamic conquers who basically destroyed everything and left very little unbiased information for reconstruction. The Zarathushtis who endured the atrocities and tried to preserve their ancient culture and religion were literally wiped out from the face of the earth by the forces of Islam and reduced to a mere 7711 individuals in Iran, who were considered infidels and untouchables. A group of less than 120,000 Persians took refuge in India and have survived famously as Parses.

# As we do witness in modern days those that take refuge run for their life with the clothes on their back, the Persians who fled to India could not have been different. Those 7711 that survived in Iran were under the sword of Islam struggling every moment of their life and if they had any manuscripts they were collected by the Jaziyeh collector in lieu of the tax and destroyed. Libraries were burnt or converted into mosques leaving no trace of the ancient knowledge.

Over the years scholars who have tried to study and reconstruct the ancient Persian calendar have depended on each other research and most of them have based their understanding on the practices of the modern day followers of the ancient religion and culture. Here we shall not confuse ourselves by studying those researches or arguing our case based on those studies.

# THE ANCIENT MAZDA YASNI CALENDAR

The ancient Iranians according to the Avesta followed the solar year. 'Haptan Yasht' (Ha-3), says about: "the coming of the season at the proper time of the solar year."<sup>i</sup> So also in Yasna Ha1.9, Ha 3.11, Ha 4.14 it says, "I learn about and work with the solar year, the righteous period". Their year always stated with the Vernal Equinox and the Avesta and Shahnameh date it back to the end of the last ice age when the legendary Shah Jamshid celebrated the first spring after the ice melted. The ancient Iranians had one of the most accurate calendars because their year always started with the vernal equinox and so it automatically took care of the leap year. The fact that they followed the solar year, very accurately, is further strengthened by the main festivals that are celebrated to this day. Namely, Now Rooz, Tirgan, Mehregan, Yalda (Chelah) and Sadeh; today these festivals are given mythical prominence rather than their obvious scientific significance. So let's look at the scientific significance of these festivals and reconstruct the ancient Iranian Calendar.

These festivals coincide with, the unique positions of the earth while revolving around the sun and the start of the seasons. So it is these events in nature that are in fact celebrated as festivals.

- 1- Vernal Equinox the beginning of Spring as New Year Now Rooz
- 2- Summer Solstice the beginning of Summer as Tirgan
- 3- Autumnal Equinox the beginning of Fall as Mehregan
- 4- Winter Solstice the beginning of winter as Yalda (Chelah)

These four positions and the four seasons although they may seem to be of equal length, in reality they are not equal. The path of the earth around the sun is such that it does not divide the time taken to travel, from one position to another, into four equal parts as one would ordinarily believe. In fact none of the four parts are equal. To be aware of this fact requires elaborate study and understanding of the solar system and apparently the Iranians had an excellent understanding and had done a perfect study. (We shall see even more proof of that a little later when we discuss Now Rooz and Nim Rooz.) This also means that their numbering of the days had to be without flaw for otherwise they would not have been able to celebrate the festivals at its proper time.

The path that the Earth takes is such that the time taken to travel between the Vernal Equinox and the Autumnal Equinox is longer than the time between the Autumnal Equinox and the Vernal Equinox. In seasonal terms summer is the longest season followed by spring and autumn while winter is the shortest. Therefore the calendar had to reflect all this facts to be able to time the proper start of the seasons and also observe the festivals at the actual time of the occurrences of the phenomena in nature. To this day the Persian New Year starts at the exact moment when the Vernal Equinox takes place whereby it is celebrated at the same moment in time all over the world, although every year it happens at a different hour of the day.

The number of days between the four positions is illustrated by help of figure 1 below:



**Figure 1:** The sun's apparent orbit around the earth, G, showing the vernal equinox (VE), summer solstice (SS), autumnal equinox (AE), and winter solstice (WS). Here,  $\lambda$ ,  $\Pi$ , A, and C are the ecliptic longitude, perigee, apogee, and geometric center of the orbit, respectively. The lengths of the seasons (in days) are indicated.<sup>ii</sup>

Figure 1- illustrates the relationship between the equinox and solstice points, and the lengths of the seasons. The earth is displaced from the geometric center of the sun's apparent orbit in the direction of the solar perigee, which presently lies between the winter solstice and the vernal equinox. This displacement (which is greatly exaggerated in the figure) has two effects. Firstly, it causes the arc of the sun's apparent orbit between the summer solstice and autumnal equinox to be longer than that between the winter solstice and the vernal equinox. Secondly, it causes the sun to appear to move faster in winter than in summer, in accordance with Kepler's second law, since the sun is closer to the earth in the former season. Both of these effects tend to lengthen summer, and shorten winter. Hence, summer is presently the longest season, and winter the shortest.<sup>iii</sup>

We observe from the travel time of the Earth that, spring with 92.8 days and summer with 93.6 days individually or jointly divided into month's average to 31 day month each. So the year starts with the Vernal Equinox and with 3 months of 31 days the Summer Solstice falls on the first of the fourth month which is also the first day of summer. Again summer with 3 months of 31 days each ends with the Autumnal Equinox (AE) which falls on the first of the seventh month and is also the beginning of autumn. Now between the Autumnal Equinox and Winter Solstice the Earth takes only 89.9 days, which equally divided will give 3 months of 30 days and thereby the Winter Solstice will fall on the first of the 9<sup>th</sup> month. From here with a travel time of 88.9 days the Earth will be back to where it started - the Vernal Equinox, making winter the shortest season, which can be divided into two months of 30 days and the balance of 29 /30 days will constitute the last month of the year.

Such a calendar meets the criteria set in the Avesta when it says *"the coming of the season at the proper time of the solar year."* A calendar based on science and not on beliefs. A calendar which divides equally the days from the Vernal equinox to the Autumnal equinox which results in 6 months of 31 days and again equally divides the days between the Autumnal Equinox and the Vernal Equinox which results in 5 months of 30 days and the last month of the balance of days left till the Vernal equinox which could be 29 or 30 in a leap year.

Now there is further proof that the ancient Iranians had proper understanding of the solar system even when they lived in the Arctic region. The proof of that is in the festival of Sadeh. As the name denotes (Sad=100), it is the celebration of 100<sup>th</sup> day of Arctic winter. It is celebrated on the 316<sup>th</sup> day of the year which means that Arctic winter started on the 217th day which also means that even back then the 8<sup>th</sup> month started on the 217<sup>th</sup> day.(Please see Table 1 below).

Now for further proof that ancient Zarathushtis had excellent scientific knowledge of the solar system lets study the concept of Now Rooz (New Day) and Nim Rooz (Mid-Day). These two words are believed to have been coined by Zarathushtra to describe two solar phenomena's.

### Now Rooz

New-Day, the Persian New Year is celebrated every year at the exact moment of the Vernal Equinox, whereby it is celebrated all over the world at the same moment in time. The Vernal Equinox happens at a different hour each year; this also means that each year the sun rises at a different location at the time of the equinox.

Zarathushtra had calculated that, in the year 1725 BCE at the time of the vernal equinox the sun would rise in the kingdom of Balkh where he lived. He informed King Vistasp and that particular New Year was proclaimed as "Now Rooz" – "New Day, **because that New Year started at sun rise.** This is once in a life time event at any location for it takes about 72 years for the event to repeat in the same vicinity.

Once again in 487 BCE this phenomenon is immortalized by Daryush the Great at Persepolis –Takht e Jamshid - and the bas reliefs speak of the grand celebration. Greek Historians have recorded that at the very moment of the announcement of the Vernal Equinox the first rays of the rising sun lighted the square stone monument erected for the purpose. Persian astronomers had calculated this event far in advance and Persepolis was built to commemorate it and the stone monument called Kabe Zarathushtra was where the first rays of the rising sun lighted its interior.<sup>IV</sup>

# Nim Rooz

Mid-Day, is the other phenomenon and this is a daily occurrence. Zarathushtra had calculated that when the sun is over head in the mid-day position at 63 degrees longitude, close to where he lived; there is sun shine over the entire hemisphere. (From Japan and Australia to Europe and Africa.) The Avesta, Mehr Yasht (kardeh 103-104), records that from this location, "the arms of Mithra (sun) stretch out over the boundaries of the earth". To this day there is a province in Afghanistan on 63 degrees longitude on the border with Iran which has preserved its ancient name of Nim Ruz.

Nim Rooz is a natural meridian and should be adopted by the United Nations and appropriately be named the "**Meridian of Zarathushtra**".<sup>v</sup>





The people and the civilization with such knowledge would have nothing short of an accurate system of recording time.

The **GAHANBARS** (seasonal festivals) are additional proof of them having followed the seasons correctly right from the time when the ancestors of the Zarathushtis lived in the Arctic region. This is evident from the **names** given to the Gahanbars.

When they lived in the **Arctic** region two Gahanbars were celebrated

- 1- Maidhyo Shema Mid Summer. The Arctic region has two seasons the first is called summer and is 7 months long, starting from the Vernal Equinox. So summer would have a total of 216 days and Mid-Summer would be on the 108<sup>th</sup> day. That is the 6<sup>th</sup> of July.
- 2- Ayeh Shrem Coming of Winter. The Arctic winter started on the first of the eight month (Aban) the 217<sup>th</sup> day of the year so this would be celebrated before the advent of winter on the 216<sup>th</sup> day which corresponds to 22 October.

GAHANBARS of the **Temperate** Region

- 1- Maidhyo Zarem Mid Spring. Spring has 92.8 days so mid-spring would be the 46.5<sup>th</sup> day, which corresponds to May 5<sup>th</sup>
- 2- Paiti Shahem End of Summer. Summers ends on the 186<sup>th</sup> day (92.8+93.6) which corresponds to 22 September.
- 3- Maidhyo Yarem Mid Winter. It works out to 320.75<sup>th</sup> day (92.8+93.6+89.9+44.45) which corresponds to February 3<sup>rd</sup> /4<sup>th</sup>.
- 4- Hamas Path Maedem Equality of Heat & Cold which happens to be just before the Vernal equinox. March 18 to 19.

The names of the Gahanbars specify the season and the exact day in the season so to be able to celebrate them at the right time the Calendar had to be seasonally accurate. It was a one-day event based on its name but later became a five-day event to bridge the gap between two inaccurate calendars which had a difference of 5 days between them..

TABLE 1								
МТН	#OF DAYS	CUM TOTAL	POSITION OF EARTH	FESTIVAL				
1	31	31	Vernal Equinox	1 <sup>st</sup> day Now Rooz	20/21 March			
2	31	62		46.4 <sup>th°</sup> day Maidhyo Zarem	5 May/15 Ardi			
3	31	93			-			
			Summer Solstice	94 <sup>th</sup> day Tirgan	22 June/1Tir			
4	31	124		108 <sup>th</sup> Maidhyo Shema(Arctic)	6 July/15Tir			
5	31	155						
6	31	186		186 <sup>th</sup> day Paiti Shahem	22 Sept/31Shari			
			Autumnal Equinox	187 <sup>th</sup> day Mehregan	23 Sept/1 Mehr			
7	30	216		216 <sup>th</sup> AyehShrem (Arctic)	22 Oct/ 30Mehr			
8	30	246		Arctic Winter 217thday	23 Oct/1Aban			
9	30	276						
10	30	306	Winter Solstice	277 <sup>th</sup> day Deygan/Yalda	22 Dec/1Dey			
11 12	30 29/30	336 365/6	10 Bahman/14Bahman	316 <sup>th</sup> day Sadeh/320 MYarem	30 Jan / 3 Feb			
14	25/50	505/0			1 Siviai/29LSpallu			

A civilization with such accurate information would have had an accurate system of computation of the year. That leads us to a calendar with each positions of the sun being equally divided. That gives us the six months between Vernal Equinox and Autumnal Equinox divided into 31 days each, the 3 months between Autumnal Equinox and Winter Solstice of 30 days each and the last segment into 2 months of 30 days and the last month would comprise of the balance of days till the vernal equinox which could either be 29 or in case of a leap year 30 days.

Calendar in every civilization has always taken a religious twist and the Priestly class is usually very orthodox. The Persians were too liberal to impose their way of life on the conquered nations. We see that the various cultures under their rule kept following their own form of calendar for religious purposes. Today those calendars are widely available among archeologist, for temples were and are the strongest structures and usually survive. These archeologically finds have in turn influenced scholars in the construction of their theories.

Where the common man was concerned the Persians introduced change but they usually did it peacefully through education and by imparting knowledge. As documented on the Human Rights cylinder, Cyrus the Great bows and pays homage to the Babylonian god Mardukh but a generation latter Herodotus records that in Babylonia people did not go to temples and statues of gods were frowned upon. This shows that the children of the Babylonians who were educated under Persian rule had adopted the Persian way of life. Two centuries later in 330 BCE when Alexander conquered the Persian Empire, according to Roman historians, he refurbished the depleted temples of Babylonia and revitalized them. In the Eastern part of the empire he reintroduced ancient Mithraism and for the next 5 centuries the Mazdiyasni way of life introduced by Zarathushtra was being lost. The accuracy of the calendar was of little concern and the science behind it was replaced by myth.

# SASSANIAN ZARATHUSHTI CALENDAR

In 224 CE when the Sasanians reconquered the empire they had to collect the ancient Avesta scattered all over the empire and a Magi by the name of Tansar was put in charge of this mission. The refurbished

religion had to survive the competition from the newly adopted religion of the Romans who had accepted the very person they had crucified as their prophet. The Sassanians called their religion "Zarathushti" and made it the religion of their Empire. During this period it seems the accuracy of the calendar was sacrificed for a uniform 30 day month calendar with 5 / 6 days added at the end of the year. This was good for taxation purposes like modern day pre computer era interest calculation which was based 12 equal instalments.

#### NAMES OF DAYS

The days of the month were named and the names that exist today are mostly from the time of the Sassanian dynasty that reigned over the Persian Empire between 224 to 651 CE. The days are divided into four groups, three of 7 days each and one of six days, with three days in between separating the groups, making a total of 30 days.

The first group bears the names of the Amesha spentas the "Eternal Law" with a major change, namely the name of God "Ourmazd" or Ahura Mazda which was at the top of the ladder and was to be reached going through the six steps was plucked and put first at the bottom of the ladder so that the month stated with the name of God. The second group consists of the names of elements namely - Fire, Water, Sun, Moon, Star and Life. The third group bears the names of qualities namely Friendship, Obedience, Justice, Progress, Victory, Joy; the fourth group is a mixture such as Conscious, Happiness, Truth, Sky, Earth, Good words, Everlasting Light. None of them represents any angel or petty gods or Ezad as claimed by some. Instead the names are positive and optimistic and cover everything from preserving the environment to boosting the moral.

1-	Ahura Mazda	Ourmazd	
2-	Good mind	Bahaman	
3-	Truth in Nature	Ardibehesht	
4-	Good Rules	Shahrivar 7	•
5-	Righteousness	Spandarmazd	
6-	Perfection	Khordad	
7-	Immortality	Amordad	
8-	Creation *	Dey be Azar	
9-	Fire	Azar	
10-	Water	Aban	
11-	Sun	Khor	
12-	Moon	Mah 6	i
13-	Star	Tir	
14-	Life	Gush	
15-	Creation *	Dey be Mehr	
16-	Friendship, love	Mehr	
17-	Obedience	Sroush	
18-	Justice	Rashn	
19-	Progress	Farvardin	
20-	Victory	Verahram 7	
21-	Joy	Ram	
22-	Wind	Bad	
23-	Creation *	Dey be Din	
24-	Conscious	Din	
25-	Happiness	Erd	
26-	Truth	Ashtad	
27-	Sky	Assman	
28-	Earth	Zamyad 7	•
29-	Pure Words	Mantraspand	
30-	Everlasting Light	Anaram	

At the end of the year five days are added and called PANJEH, (Panj meaning five) they bear the names of the Gathas namely:

1- Ahunavad 2- Oushtavad 3- Spentahmad 4- Vohu Khashatr 5- Vahista Isht

Every four years an extra day was added for a leap year and called - "Avardad" which is a Pahlavi word meaning 'Extra day'.

From among the names of the days twelve names also happen to be the names of the month and when the name of the day and the month match that day is a day of festivity. For the Persians any reason was good reason to enjoy life and they have many days in a year set aside for festivity. They had a positive outlook towards life and believed in happiness and enjoyment and making the best use of their life.

#### The names of the months are

Farvardin - Ordibehesht - Khordad - Tir - Amordad - Shahrivar - Mehr - Aban - Azar - Dey - Bahman - Esfand (or Spandarmazd)

# **MODERN IRANIAN NATIONAL CALENDAR**

After the Islamic conquest of Iran in the 7<sup>th</sup> century along with Islam the inferior lunar system of keeping days was forced upon the Iranians by the Arabs conquerors. In the 11<sup>th</sup> century the Iranians Muslims reverted back to the ancient solar calendar based on calculations by a group of Iranian astronomers, who had access to ancient scientific manuscripts,<sup>vi</sup> among them was the Persian poet astronomer Omar Khayam. The calendar was called the "Jalaali" calendar in honor of the then king Jalal al din Malek Shah and the present day national calendar of the Iranians is based on this Jalaali calendar.

The names of the months of the present day Iranian national calendar are the same as those of Zarathushti calendar except for a mistake in the fifth month, where Amordad (Immortality) has for some reason been misspelled as Mordad (Mortality). The days of the month do not bear any name. As for the format they have reverted back to the ancient form of calendar with the first six months having 31 days the next 5 months 30 days and the last month 29 or 30 in a leap year.

#### **MODERN ZARATHUSHTI CALENDAR**

Unfortunately the modern day Zarathushtis follow three different calendars, Kadimi, Shensahi and Fasli or seasonal, **none of which are accurate.** The first two have their New Year in July and August respectively and so are not aligned to the seasons as mentioned in the Avesta, The Fasli calendar although it starts the year with the Vernal Equinox it is not aligned with the other 3 position of the sun or the start of the seasons, because they have 12 months of 30 days. So their summer starts 3 days earlier than in nature, the autumn and winter starts 6 days earlier than in nature. The result is that the two Solstices and the Autumnal Equinox are not celebrated at the right time and to legitimize it mythological events are related to the celebration instead of the scientific ones. The other priestly flaw that has to be noted is with regards to the prayers. During winter months the daylight time being shorter the five time prayers are reduced to four, so the Rapitwan Gah is skipped. But according the Kadmi & Shenshai calendars these months fall in the summer when there day light hours are more.

Ironically the Islamic government of Iran is following the correct ancient Iranian calendar and in future Islam will lay claim on it, like it has laid claim on ancient Persian science and the Persian scientist who were forced to write in Arabic. Today even western scholars attribute Persian science and scientist to Islam because they have used the Arabic language. In fact the calendar is already claimed to be a Jalalli calendar because it was introduced during the reign of a Muslim king.

# ZARATHUSHTI CALENDAR for the 21st Century

The ancient Zarathushtis used the festivals and the calendar as a guide and a reminder to keep their activities in tune with nature and follow the laws of nature so as to achieve the purpose of life, which is a continuous process of progressing towards perfection while in harmony with nature and at the same time enjoying life and spreading happiness and creating heavenly bliss, which in turn would result in immortality by way of being remembered for generations for the good work.

It is time for the modern Zarathushti generation to realize the truth, imprison Zahaak,<sup>vii</sup> and introduce the correct scientific calendar while incorporating the traditions in the correct form. Zarathushtra in the Gathas speaks of the use of wisdom; he speaks of progressing towards perfection (Hurvatata). To be truly following Zarathushtra's teaching requires the use of wisdom and not blind faith.

Zarathushtra also talks of freedom of choice; each individual has the right to choose but not between good and bad as some have translated but between the various good paths that help progress towards "Hurvata" "Perfection". It is time for each one to use their wisdom and choose between the calendar that is scientifically correct, true to the meaning of the names of the festivals and Gahanbars and honors the wisdom of our ancestors who thousands of years before Galileo understood the solar system and made calculations that are true to this day. Or otherwise choose to continue with the ones that we know and understand that it has gone astray due to the hardship that our ancestors had to go through in Iran as infidels and as refugees in India in their quest to save themselves and have a better life.

# PROPOSALS

Here is a calendar that combines tradition and science and honors our ancestors.

- 1- The year to starts on the Vernal Equinox
- 2- The first six months between Vernal Equinox and Autumnal Equinox be equally divided whereby each month will be of 31 days and the seasons, the Summer Solstice and Autumnal Equinox will synchronize with the start of 4<sup>th</sup> and 7<sup>th</sup> months respectively.
- 3- The period between Autumnal Equinox and Winter solstice be divided equally which would be 3 months of 30 days each. Winter Solstice will be on the first of the 10<sup>th</sup> month.
- 4- The period between Winter Solstice and Vernal equinox be divided into 2 equal months of 30 days and the last month be made up of the balance of days left before the Vernal Equinox namely 29 or, 30 making it a leap year.
- 5- To synchronize with the rest of the world name the 7 days of the week. Starting with Monday as 1-Vohuman 2-AshaVahista 3-KhashAtraVariya 4-SpantaArmaity 5-Hurvatata 6-Ameretata 7-Ahura Mazda or its Pahlavi form Bahman, Ordibehest, Shahrivar, Espand, Khordad, Amordad and Ourmazd.
- 6- Name the 30 days as in the present traditional calendars and Avardad as the 31<sup>st</sup> day of each of the first 6 months.
- 7- For the last five days of the year, use the five names of the Gathas in addition to the regular names.
- 8- In addition to the existing festivals have a super special celebration when the name of the week, name of the day and name of the month are all the same.
- 9- Keep celebrating Muktad and Papeti just like we still celebrate the two Gahanbars of the Arctic region and Sadeh which starts its countdown from the Arctic winter.

NAMES OF THE DAYS OF THE WEEK

Use the Amasha Spenta the Eternal Laws as names of the week to remind us of the steps towards progress and oneness with Ahura Mazda which has to be achieved. The steps according to the Gathas are enumerated below.

1-VOHU MANA – Good Mind – Use your Good Mind to inquire and learn

2- ASHA VAHISTA - The Ultimate Truth- the Laws of Nature- Use them to make

3- KASH ATRA VAIRYA – Good Rules – Good Laws- Good Guidance- Which will lead to

4- SEPANTA ARMAITY - Lawful Desire - Righteousness - which will pave the way towards

5- HURVATATA - Perfection - Mental, Physical and Spiritual - which will lead to

6- AMERETATA – Immortality –a) Losing the fear of Death (b) being remembered for your good work for generations–resulting in oneness with

7- AHURA MAZDA – The Creator of Wisdom – through Self Realization- KHOD = Self AH = to come.

#### Zarathushtra – Gatha – Yasna 28.3 (FR)

Truly, the Asha (Truth in Nature) derived (ASHA-VAHISTA – ARDIBEHEST) By the good mind (VOHUMANA – BAHMAN) Never before known Among the wise and all creation With it, make good rules never waning (KASH-ATRA-VAIRYA-SHARIVAR) Increasing righteousness (SPANTA-ARMAITY- ESPAND) Leading us towards Perfection (HURVATATA – KHORDAD)

Zarathushtra – Gatha – Yasna 28.10 (FR) THE REWARD AMERETATA - AMORDAD

And those who are righteous are so because of Good deeds and use of the 'wisdom of the mind' In righteous way in harmony with 'Wisdom in Existence' Their aim achieved as designed And those assuredly are pleased (whose) result Are known to be righteous, faithful & **praise worthy.** 

#### MAY WISDOM PREVAIL

For calendar click

http://ahura.homestead.com/files/ARTICLES/CALENDAR3753\_ze.pdf

http://zarathushticalendar.com/

<sup>vii</sup> Zahaak was the mythological king who feed the brain of the youth to the snake on his shoulders. It is symbolic of brain washing the youth with evil represented by the snake. Finally Fareydoon conquers

<sup>&</sup>lt;sup>i</sup> Yasna – translated by Tehmurasp Rustamji Sethna

<sup>&</sup>lt;sup>ii</sup> http://farside.ph.utexas.edu/Books/Syntaxis/Almagest/node36.html#lf6a

<sup>&</sup>quot;http://farside.ph.utexas.edu/Books/Syntaxis/Almagest/node36.html#lf6a

<sup>&</sup>lt;sup>iv</sup> For further detail visit www.ancientiran.com

<sup>&</sup>lt;sup>v</sup> For further detail visit www.ancientiran.com

<sup>&</sup>lt;sup>vi</sup> Their ancestors living in Khorasan were conquered much latter and as they had heard of the atrocities committed by the Islamic conquerors they converted to Islam with less resistance in order to avoid the punishment and as a result were able to preserve most of their books, the Arabs were less harsh on them, although they were called Mawali and were considered an inferior grade of Muslims. Latter we see all the men of science & literature rise from Khorasan.

Zahaak and imprisons him in Damavand Mountains for it cannot be killed because it is symbolic of human weakness which can only be overcome.

Science in our present civilization is very young. 400 year ago in 1616 Galileo was punished and imprisoned for saying that the earth was not the center of the universe and that the earth went around the sun. It is only lately that science is progressing in leaps and bounds. When scholars and archeologist study ancient civilizations they cannot believe that those ancient civilizations could have been scientifically more advanced than us in many aspects. When the Magi's plated metal with gold they were called magicians and discounted as a trick or deception. Archeologists have found ancient batteries in northeastern Iran which proves that they knew how to plate metal and there was no deception involved.

Similarly while studying ancient calendars they cannot believe that the ancient Persian civilizations had superior knowledge and had a calendar that was more advanced than modern days. In fact since the era of modern organized religion science has progressed at a very slow rate.

\*\*\*\*\*\*