



Kanz Philosophia

A Journal for Islamic Philosophy and Mysticism

NŪRŪZ: Treading Time, Nature, Faith and Culture
Amir H. Zekrgoo

**A Study of the Effect of Human Soul on External Objects :
Between Copenhagen School and Mulla sadra**
Ali Arshad Riahi
Sayyed Mehran Tabatabaei
Mehdi Jafarzadeh

**Argumen Eksistensi Tuhan dalam
Metafisika Ibn Rusyd dan St. Thomas Aquinas**
Wardani

Maqāmāt dalam Mantiq al-Thayr al-Attār
Syamsun Ni'am

**The Complex Relationship Between Sufism and Shi'ism
as Reflected in the Concept of Walāyah**
Wahyuddin Halim

العلم الالهي بالجزئيات مقارنة ابن سينا و صدر المتألهين نموذجاً
السيد خالد سيساوي خميني

Published by Sekolah Tinggi Filsafat Islam Sadra

Jl. Lebak Bulus II, No 2,
Cilandak Barat, Jakarta Selatan
Tlp: 02129446460, Fax: 02129325221
Website: www.journalkanz.sadra.ac.id
Email: jurnalkanz@sadra.ac.id

KANZ PHILOSOPHIA

A Journal for Islamic Philosophy and Mysticism

Volume 5, Number 1, June 2015

Table of Contents

Short history of Kanz Philosophia	iv
List of Transliteration	v
Daftar Transliterasi	vi
Kata Pengantar	vii
<i>NŪRŪZ: Treading Time, Nature, Faith and Culture</i> <i>Amir H. Zekrgoo</i>	1-18
A Study of the Effect of Human Soul on External Objects : Between Copenhagen School and Mulla Ṣadra <i>Ali Arshad Riahi</i> <i>Sayyed Mehran Tabatabaei</i> <i>Mehdi Jafarzadeh</i>	19 - 29
Argumen Eksistensi Tuhan dalam Metafisika Ibn Rusyd dan St. Thomas Aquinas <i>Wardani</i>	31 - 58
<i>Maqāmāt dalam Manthiq al-Thayr al-Attār</i> <i>Syamsun Ni'am</i>	59 - 72
The Complex Relationship Between Sufism and Shi'ism as Reflected in the Concept of <i>Walāyah</i> <i>Wahyuddin Halim</i>	73 - 88
العلم الالهي بالجزئيات مقارنة ابن سينا وصدر المتألهين نموذجاً السيد خالد سيساوي خميني	89 - 97
Index	99 - 108

NORŪZ: TREADING TIME, NATURE, FAITH AND CULTURE

Amir H. Zekrgoo

International Institute of Islamic Thought & Civilization (ISTAC)

International Islamic University Malaysia

Email: ahzekrgoo@gmail.com

ABSTRAK

Norūz merupakan salah satu perayaan tertua sepanjang sejarah yang masih hidup dan dirayakan oleh beragam kalangan yang memiliki ikatan sejarah dengan kebudayaan Persia. Penelitian ini menyuguhkan pendekatan dari berbagai sisi: historis, religious, simbolis, dan ilmiah, yang ditujukan untuk menelusuri *Norūz* dalam perjalanan sejarah, menelaah signifikansinya dalam menentukan sebuah penanggalan matahari yang akurat, perkembangannya dalam beragam tradisi keagamaan dan, akhirnya, proses Islamisasi atasnya. Kajian ini juga menyuguhkan telaah analitis atas “Jamuan *Haft-Sin*”—tujuh hal tertentu yang disajikan terkait perayaan *Norūz*—beserta muatan makna simbolis di baliknya.

Kata-kata Kunci: *Norūz, Haft-Sin, Perayaan, Purim, Paskah, Warisan kultural tak kasat mata*

ABSTRACT

Norūz, is among the oldest celebrations in history that is still alive and observed by various peoples that historically share Persian culture. This research presents a multifaceted approach to the subject: historical, religious, symbolic and scientific., and is aimed at tracing *Norūz* in the history, its significance in the setting of an accurate solar calendar, its evolvement in various religious traditions and, eventually, the process of its Islamization. It also provides an analytical account of the “*Haft-sin Spread*” – a setting of seven items that are closely associated with the celebration of *Norūz* – and their symbolic significance.

Keywords: *Norūz, Haft-Sin, Festival, Purim, Easter, Intangible Cultural heritage.*

Introduction

Norūz, astronomical vernal spring equinox, is the 1st day in the Persian Islamic solar calendar. To this day Norūz is observed in Iran, Afghanistan, parts of Central Asia, Caucasus, South Asia (Indian subcontinent), Northwestern China, the Crimea and some parts in Balkans. Moreover, the festival of Norūz is tightly connected to the cycle of nature and is scientifically regarded as the most accurate mark of the spring equinox, hence the beginning point of a very precise calendar system. Closely associated with the pulse of natural creation and the tempo of time, Norūz gradually transcended the geographical barriers and became a cultural event that celebrated the rebirth of nature and a thanksgiving to the Creator. The celebration of Norūz can therefore be traced in the festivities held by followers of pre-Islamic Abrahamic faiths. After the advent of Islam for a while Norūz became a subject of debate; some writers criticized its pre-Islamic origin while others responded to it favorably as its celebration did not oppose the tenets of Islam. There are records of the celebration of Norūz in the Islamic history as early as the Abbasid Caliphate. The renown Muslim scholar, *Abū Rayhān Bīrūnī* (973-1048 AD), provides a description of the calendars of various nations and refers to Norūz and refers to a hadith describing the Prophet blessing the day as the occasion of renovation of life. Norūz survived the turbulences of time and remained as an Islamized cultural celebration among many Muslims that historically share Persian culture.

Norūz and Its Origins

The word Norūz (Persian: نوروز also spelled as *nourūz*) means 'New Day' or 'New Light'. It marks the first day of the New Year in Iranian calendar and the corresponding

traditional celebrations (Meri and Bacharach 2006, 605).¹ This compound word consists of 'now', meaning 'new', 'novus', 'nava', and 'neu',² and 'rūz' meaning 'day' in Middle and Modern Persian, and the related languages, such as Kurdish, but the original meaning is 'light' in relation to Sanskrit 'ruci', and Latin 'lux'.

Norūz signifies the 1st day of spring. It is usually celebrated on the 21st of March, on the day of the astronomical vernal equinox. It has been a significant holiday among the Zoroastrian ancestors of modern Iranians; it is traditionally believed to have been invented by Zoroaster himself, although there is no clear date of origin (*Encyclopaedia Iranica*, 1999). Since the Achaemenid era the official year has begun with the New Day when the Sun leaves the zodiac of Pisces and enters the zodiacal sign of Aries, signifying the Spring Equinox. Due to its ancient origins traces of Norūz are found in customs of various cultures and faiths.

The first written appearance of the term Norūz is found in the Persian records belonging to 2nd Century AD. However, we have sufficient references indicating that it had been an important day as far back as 6th Century BC. We know, for instance, that in the reign of Achaemenids (c. 548-330 BC), on the day of Norūz the kings from different nations under the Persian Empire used to bring gifts to the Persian Emperor—also called King of kings (*Shāhanshāh*). The importance of Norūz in the Achaemenid Empire was such that the great Persian King Cambyses II's appointment as the King of Babylon became legitimate only after his participation

¹ Buyid rulers such as Azud al-Dawla resuscitated a number of pre-Islamic Iranian practices, including the celebration of the Persian New Year.

² In classical Old Persian, it is 'nava'.

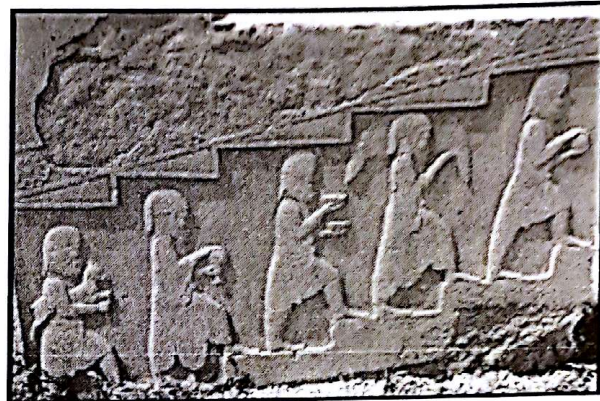
³ In English, Latin, Sanskrit, and German respectively

in the New Year festival (*Norūz*) (Trotter 2001, 108).

Some scholars have suggested the possibility of *Norūz* being an extension or reaction to the ancient Babylonian seasonal festivals:

It is possible that the splendor of the Babylonian festivities at this season led the Persians to develop their own spring festival into an established New Year feast, with the name *Navasarda* 'New Year' (a name which, though first attested through Middle Persian derivatives, is attributed to the Achaemenian period). Since the communal observations of the ancient Iranians appear in general to have been a seasonal ones, it is probable, however, that they traditionally held festivals in both autumn and spring, to mark the major turning points of the natural year (Boyce and Grenet 1982, 3-4).

So, as it is, the celebration is older than the prescribed date and was performed by the people and royalty during the Achaemenid times (555-330 BC). It is a highly propitious time for the ancient Iranian peoples celebrating *Norūz* at the famous Persepolis complex and the palace of *Āpādānā* and the Hundred Columns Hall which were specifically built for the purpose. There is an account by Xenophon of *Norūz* celebration taking place in Persepolis and the continuity of this festival in the Achaemenid tradition (Tuplin and Azoulay 2004, 148).



(Image 1): In this picture of Persepolis the representatives of various nations are each depicted in their local ceremonial dress. Each envoy carries with him a gift for presentation to the Persian *Shāhanshāh* (Emperor) on the auspicious occasion of *Norūz*.

Norūz remained a major festival of the Arsacid/Parthian dynastic Empires (248 BC-224 AD) who ruled Iran after the Achaemenid. There are references to the celebration of *Norūz* in the reign of Vologases I (51-78 AD). Parthians celebrated *Norūz* in Autumn and 1st of Farvardin – which usually marks the first month of the Persian New Year at the time of the Spring Equinox – began at the Autumn Equinox (Hinnells 1975, 307). Sassanians established their power in West Asia around 300 AD. There exist fascinating records on the celebration of *Norūz* following the accession of Ardashir I of Persia, the founder of the Sassanid dynasty (224-651 AD): *Norūz* was celebrated as the most important day of the year during his regime; the royal traditions of *Norūz* included royal audiences with the public, cash gifts, and the pardoning of prisoners during the festival – a practice that remains till date.

Today, the festival of *Norūz* is celebrated in many countries that were territories of and or influenced by the Persian Empire, i.e. Iran, Afghanistan, parts of the Middle East, as well as in the Central Asian republics of Tajikistan, Uzbekistan, Azerbaijan, Turkmenistan, Ka-

zakhstan, and Kyrgyzstan. It is also celebrated by the Zoroastrians as well by certain Iranic inhabitants in Pakistan's Chitral region and Northern Areas. It is also celebrated by the Iranian immigrants from Shiraz in Zanzibar. It is called *Nevrūz* in Turkic. Uyghurs who live in Northwestern China call it '*Norūz*', and it is called *Sultan Nevrūz* in Albanian. In Kurdish communities located in parts of western Iran, the holiday is referred to as *Newroz*.

Tracing *Norūz* Festival in Zoroastrianism

Among the Zoroastrians, the most important festivals are the six *Gāhanbārs* (*Encyclopaedia Iranica*, 1999)⁴ and *Norūz*. Linking *Norūz* directly to the Zoroaster, Mary Boyce believes that "It seems a reasonable surmise that *Norūz*, the holiest of them all, with deep doctrinal significance, was founded by Zoroaster himself" (*Encyclopedia of Iranica*, 1999). The *Shāhnameh*⁵ dates *Norūz* to the reign of Jamshid who saved mankind from a killer winter that was to eradicate every living creature (Moazami 2002, 55-74). The mythical Persian King Jamshid perhaps

symbolizes the transition of the Indo-Iranians from animal hunting to animal husbandry and a more settled life in human history. The pre-Islamic Persian mythology credits Jamshid for laying down the foundation of *Norūz*. According to the *Shāhnameh*, Jamshid constructed a throne studded with gems. He had demons raise him above the earth into the heavens; there he sat on his throne like the sun shining in the sky. The world's creatures gathered in wonder about him and scattered jewels around him, and called this day the New Day or the *Norūz*. This was the 1st day of the month of Farvardin, the 1st month of the Persian calendar (Davis and Adult 2006, 7).

The Persian Muslim scholar Abū Rayḥān Bīrūnī of the 10th Century, in *Al-Taḥḥīm li Aḥwāl Ṣanā'at al-Tanjīm* provides a description of the calendars of various nations. Besides the Persian calendar, various festivals of Arabs, Jews, Sabians, Greeks and other nations are mentioned in this book. In the section on the Persian calendar (*Taqwīm-i Pārsian*), he mentions *Norūz*, *Sadeh*, *Tīregān*, *Mehregān*, the six *Gāhanbār*, *Parvardegān*, *Bahmanja*, *Isfandārmazh* and several other festivals. According to al-Bīrūnī, "It is the belief of the Persians that *Norūz* marks the first day when the universe started its motion." The Persian historian Abū Sa'īd Gardīzī in his work titled *Zayn al-Akḥbār* under the section of the Zoroastrians festivals makes mention of *Norūz* and specifically points out that Zoroaster highly emphasized the celebration of *Norūz* and *Mehregān* (Gardīzī 1363 SH/1984 [1985], 520).

Norūz and the Jewish Purim

Among the most notable festivals related to *Norūz* is the Jewish festival of Purim. Jews celebrate Purim as winter ends and spring begins. It is a joyous and fun festival that has both seasonal and religious significance.

⁴ *Gāhanbārs* (proper seasons), the only festivals mentioned in the *Avesta*, are six seasonal festivals (high feasts) when Zoroastrians assemble to eat and share food communally. These are joyous occasions at which rich and poor met together, new friendships are formed and old disputes resolved. Each *Gāhanbār* lasts for five days. Some authors, such as Mary Boyce, feel it is reasonable to conclude that the *Gāhanbārs* were instituted by Zoroaster himself. They are a demonstration of beliefs, principle and values in action and are an expression of piety in thought, word and deed.

⁵ Composed by Abū al-Qāsem Firdawsī between c.977 and 1010 AD., *Shāhnameh* is of central importance in Persian culture; it is regarded as a definitive source of ethno-national cultural identity of Iran. It traces the historical links between the beginnings of the religion with the death of the last Zoroastrian ruler of Persia during the Muslim conquest.

Purim's origin is tightly connected to Persia – in both historically and religious sense. The Jews of Iran trace their history back 2,600 years, when members of their tribes were taken into captivity and exiled by the Assyrian king. Purim commemorates a time when they were saved from extermination by King Cyrus of Persia (d. 369 BC). According to Jewish scripture "LORD stirred up the spirit of Cyrus king of Persia, that he made a proclamation throughout all his kingdom, and put it also in writing" (*Ezra* 1:1). King Cyrus decreed that they should return to Judah to rebuild the Temple of Solomon that was demolished by Babylonians under Nebuchadnezzar in 586 BCE.⁶

The story of Purim is also told in the Biblical *Book of Eshtar*. According to this book, Haman (minister to King Ahasuerus) planned to kill the Jews, but his plans were foiled by Mordecai and Queen Eshtar. The day of deliverance became a day of feasting and rejoicing. Therefore, Iranian Jews visit the tombs of Esther and Mordecai in Hamadan on the day of Purim.

According to the Code of Jewish Law, Purim is celebrated annually according to the Hebrew calendar on the 14th day of the month of Adar, and in Adar II in leap years (*Shulchan Aruch Orach Chayyim* 685:1). Adar is the 6th month of the civil year and the 12th month of the ecclesiastical year on the Hebrew calendar. Adar I and II occur during February–March, while *Norūz* is celebrated in the month of March on the Gregorian calendar. The slight difference of timing is due to the difference of calendar systems. Purim is calculated according to lunar calendar while *Norūz* is a solar calendar festival.

⁶ The Second Temple that was rebuilt by the decree of King Cyrus in 520 BC was destroyed by the Romans under Titus in 70 CE.

***Norūz* and Christian Easter**

At the first stage of this section we shall establish the influence of certain aspects of ancient Persian religious culture (Mithraism to be more specific) on Christian festivals – especially Christmas. The next stage will briefly touch upon the Christian calendar system in comparison with that of the Persian and will establish links between *Norūz* and Easter.

Mithraism is the first link that can display the ancient influence of Persian culture on the formation of certain aspects of Christian festivals. Historical evidences confirm the wide and deep penetration of Mithraism in the belief texture of the Roman Empire from about the 1st to 4th centuries AD., when they called the religion "Mysteries of Mithras" or "Mysteries of the Persians" (*Encyclopedia Iranica*, 2002). The Mithraists regarded themselves as cultic Persians.⁷ The ancient Roman Mithraists themselves were convinced that their cult was founded by none other than Zoroaster, who "dedicated to Mithras, the creator and father of all, a cave in the mountains bordering Persia", an idyllic setting "abounding in flowers and springs of water" (*Encyclopedia Iranica*, 2002).⁸

The connection between Mithraism and Christianity can also be traced to a certain

⁷ The term *Mithra* is from the Avestan (ancient Persian religious scripture) language. In Middle Iranian languages, *Mithra* became *Mehr*, *Myhr* etc., from which New Persian and Armenian *Mihr* ultimately derive. Mithra is a prominent Zoroastrian divinity regarded as an all-seeing protector of Truth, manifestation of covenant and oath, as well as the guardian of cattle, the harvest and of the waters.

⁸ In this regard David Ulansey (1991, 3-4) says, "The study of Mithraism is also of great important for our understanding of what Arnold Toynbee has called the 'Crucible of Christianity', the cultural matrix in which the Christian religion came to birth out of the civilization of the ancient Mediterranean. For Mithraism was one of Christianity's major competitors in the Roman Empire."

date that is known to be both the birth date of Mithra and that of Jesus Christ. Historical evidences before the reign of the Roman Emperor Constantine (306 to 337), however, do not provide any link between the birth of Christ (Christmas) and the date that it is being celebrated i.e. 25 December (Finegan 1964, 601). This date has in fact being celebrated for long as the birth date of Mithra, and the overlapping of the two dates of birth is not a mere coincidence (Lake 1874, 15). The ancient Persians celebrated Mithra's birthday on the eve of the first day of the winter (December 21-22) in the Iranian calendar. The festival was known as "*Zāyesh-i Mehr*", literally "Birth of Mehr/Mithra".⁹

The discordance between the names of the months and their position in the Christian calendar invites the curious mind for further investigation. The names of the months are of Latin origin and some are indicative of a number (e.g. December, from *decem* = 10, November from *novem* = 9, October from *octo* = 8; September from *septm* = 7); however, they reflect two numbers lower than their position in the calendar. Now if we add the two months to the proposed birth date of Mithra/Christ (December 21-22) we will have the day of *Norūz* or the vernal spring equinox – March 21st. This brings us to Easter, the holiest of all Christian festivals celebrating the resurrection of Jesus Christ.

The differences of opinions with regard to the exact date of Easter go back to

early Christian era. The dispute led to the formation of a special Christian council in 325 AD. This important Council was held at Nicaea in Turkey to solve the disagreement between followers of the Gregorian and Julian calendars for the celebration of Easter. Easter festival at the beginning was connected to and even identified with the Hebrew festival of Passover that was calculated mainly according to Jewish lunar calendar (Weiser 1958, 214). The Council established only two rules: worldwide uniformity and independence from Jewish calendar (Duncan 1998, 4-6). In 729 AD Saint Bede (1990, 148) confirmed the connection of Easter and the spring equinox: "The Sunday following the full Moon which falls on or after the [vernal] equinox will give the lawful Easter." Though the official church definition for the equinox is March 21, the official day of *Norūz*, but since the Eastern Orthodox Churches use the older Julian calendar, while the Western Churches use the Gregorian calendar, the actual date for Easter differs.

Norūz Celebration among Muslims

Norūz and its celebration survived among the Persianate societies even after the introduction of Islam in 650 AD. Al-Bīrūnī in his *Āthār* (1978, 470-479) refers to a *ḥadīth* describing an event where the Prophet accepts a bowl of sweets as the *Norūz* gift; he blesses the day as the occasion of renovation of life with its special custom of sprinkling water as the symbol of divine rainfall. There are records of the Abbasid Caliphs presiding over *Norūz* celebrations, and it was adopted as the main royal holiday during the Abbasid period (Mas'ūdi 1989, 14). In his work titled the *Nūrūznāmih*, 'Umar Khayyām, provides a vivid description of the celebration in the courts of the Kings of Persia saying: "From the era of Kai Khusraw till the days of Yazdegard,

⁹ The same celebration survived during the Islamic period and continued to this date. The name for it, however, underwent slight transformation. The more popular contemporary name for it "*Shab-i Yalda*" is a Persio-Arabic term meaning "the eve of the birth". The "eve" is a stress on the fact that "*Shab-i Yalda*" is the longest night of the year, and the "birth" refers to the beginning of a phase in time where light (sun or Mehr) will begin to dominate life. The removal of the name Mehr (Mithra) from the name of the festival must have had something to do with the embracement of Islam by the Persian.

last of the pre-Islamic kings of Persia, the royal custom was thus: on the first day of the New Year, *Norūz*, the King's first visitor was the High *Mubad* (High Priest)" (*Dehkhoda Encyclopedia*, 1967). This is indicative of the spiritual significance of the occasion in which the *Mubad* who, after glorification of God, praises the monarch in the following manner, as 'Umar Khayyām puts it in his *Nūrūznāmi*h:

O Majesty! On this feast of the Equinox, first day of the first month of the year ... thou hast freely chosen God and the Faith ... may the Angel-messenger, grant thee wisdom and insight and prudence in thy affairs. Live long in praise, be happy and fortunate upon thy golden throne, drink immortality from the Cup of Jamshid (*Jām-i Jam*); and keep in solemn trust the customs of our ancestors, their noble aspirations, fair gestures and the exercise of justice and righteousness. May thy soul flourish; may thy youth be as the new-grown grain; may thy horse be puissant, victorious; thy sword bright and deadly against foes; thy hawk swift against its prey; thy every act straight as the arrow's shaft. Go forth from thy rich throne ... Honor the craftsman and the sage in equal degree; disdain the acquisition of wealth. May thy house prosper and thy life be long! ('Umar Khayyām, quoted in Wikipedia s.v. "Nowruz", 2015).

In the early Islamic era the celebration of *Norūz* was not favored and was often criticized due to its association with Zoroastrianism. In al-Jahsiari's *Kitāb al-Wuzarā' wa al-Kuttāb* and Ṣulī's *Ādāb al-Kuttāb*, it is said: "The early Arab governors forcefully levied heavy *Norūz* and *Mehragān* taxes on the conquered people" (quoted in *Encyclopedia Iranica*, 2009). After the Caliphate era and the later re-surface of Persian dynasties *Norūz* regained its importance. Sassanian ancient traditions

that did not oppose Islamic teachings were revived and many smaller celebrations were abolished. According to the Syrian historian Yāqūt al-Hamawī (d. 1229), the Iranian Buyid ruler 'Azad al-Dawla (r. 949-83) customarily welcomed *Norūz* in a majestic hall, wherein servants had placed gold and silver plates and vases full of fruit and colorful flowers. The king would sit on the throne, and the court astronomer would come forward, kiss the ground, and congratulate him on the arrival of the New Year. The king would afterward call on the musicians and singers, with the presence of his subjects gathered in their assigned places, to enjoy the festivity (*Encyclopedia Iranica*, 2009).

While acceptance of *Norūz* by Muslims was gaining momentum the process of Islamization was also taking place steadily. Persians were amongst the first nations who converted to Islam, and the Islamic worldview's penetration into their culture transformed the mindset and the very texture of the society. The transformation was not limited to religious rituals, but their daily affairs and customs were Islamized as well. The Iranian Muslims adopted the Hijra (migration of Prophet Muḥammad) that marks the beginning of the Islamic Lunar Calendar (*Taqwīm Hijrī Qamarī*), but maintained the solar calendar system. As a result, a new Islamic calendar was developed: a Solar Hijri Calendar (*Taqwīm Hijrī Shamsī*). In practice, however, Persians engaged both solar and lunar calendars: As a predominantly agricultural society, the pattern of people's lives was dependent on the solar cycle, which marked the natural seasons. Moreover, the celebration of *Norūz* and *Mehregan*—on vernal and autumnal equinoxes respectively—was an important socio-cultural factor that was tightly related to the historical identity of the Persian peoples. On the other hand almost

all liturgical rituals such as fasting in the month of Ramadan, pilgrimage on the *Dhū al-Hijjah*, or the celebration of the Islamic festivities such as 'Īd al-Fitr and 'Īd al-Adḥa depended solely on lunar calendar. Dual calendar system was therefore adopted by Persians since long, and it continues up to the present day. The practice of using lunar and solar calendars side by side has been adopted by many Muslim nations with a distinct difference: while Muslim Persia Islamized its solar calendar the majority of Muslim nations adopted Western calendar system that has Christian point of departure.¹²

The process of Islamization even transformed *Norūz*. There is a special prayer for *Norūz* that is recited on the very moment of the commencement of the New Year – or the year transition (*taḥwīl-i sāl*) and broadcasted on virtually all national radio and TV stations. In the olden days canon shots or wind instruments and drums were used to mark the event. When the exact time arrives, there is a burst of rejoicing and cheering and greetings are exchanged. The prayer (quoted below) is in Arabic and is saturated with an Islamic sense of devotion and spirituality.

يا مقلب القلوب والأبصار، يا مدبر الليل والنهار،
يا محول الحول والأحوال، حوّل حالنا إلى أحسن الحال

*Oh God: You are the Reformer of Hearts and
Perceptions (Minds),*

*Oh God: You are the Director of
Days and Nights,*

*Oh God: You are the Transformer of
position and conditions,*

Transform our conditions to the best of

¹² The current Christian calendar also known as Western calendar was introduced by Pope Gregory XIII by a decree signed on 24 February 1582 after whom the calendar was named the Gregorian Calendar. The calendar was later adopted by other countries over the following centuries.

all conditions

The same prayer, adorns the opening page of printed diaries and calendars, and is sent out on New Year greeting cards. (See Image 2)



(Image 2): New Year Greeting Card with *Norūz* Prayer, Nasta'liq style of calligraphy adorned with floral motifs.

(Artists: Reza Petgar and Habibullah Panbehchi)

Rituals Associated with *Norūz*

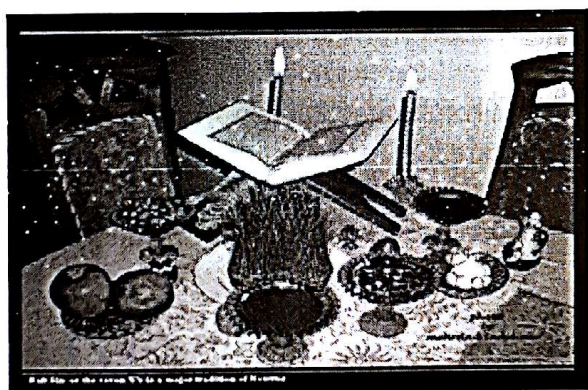
Norūz is the most prominent national holiday of contemporary Iran. It connects people of different ethnicities and faiths. Associated with spring season and the rebirth of nature, the activities linked with it also symbolize refreshing of life pattern. House cleaning (*khānih tikāni*) begins on in every household a few days before the commencement of the New Year. Exchanging presents, wearing new clothes, giving cash gifts to children ('*idi*) and reviving friendships and family ties through 'New year visits' ('*id-didani*') are popular activities of *Norūz* celebration. Visiting graves of the deceased and offering prayers for their souls are also practiced by many families during the New Year holidays.¹³

¹³ According to the Avestan texts, the pure souls of the deceased relatives visit their live family members during the ten days preceding *Norūz*. The house cleaning in the old Zoroastrian tradition and the new clothing is said to have been established to receive the soul of the ancestors in a proper manner

The most remarkable *Norūz* ritual, however, is the *Haft Sîn*, an ancient symbolic ceremony of civilizational magnitude. The *Haft Sîn* spread displays an amalgamation of the pre-Islamic customs and post-Islamic values. A detailed account follows under two main subheadings: a) The *Haft Sîn* Spread, and b) Origins of the *Haft Sîn*.

The *Haft Sîn* Spread

At the time of the 'year transition', weather during day or night, all family members, cleansed and dressed in their best garments, await the astronomical occurrence around a ceremonial setting (spread on the floor or on a table) known as *Haft Sîn*. *Haft Sîn* literally the "seven 'S'", includes, but not limited to, seven specific items starting with the letter 'S' or *Sîn* (س) in the Persian and Arabic alphabet. (See image 3)



(Image 3): *Haft-Sîn* Spread

The number seven is regarded as the most mysterious of all numbers, and is found in the mythologies of many nations and in established religions – including the Abrahamic faiths. In Zoroastrian theology

and in a refreshing environment. The custom continued in an Islamized manner: It is customary among Iranian Muslims to visit graveyards the eve of the Friday before the commencement of the New Year and offer their prayers.

number seven, symbolically corresponds to seven creations and the "holy immortals" called *Amesha Sepanta* that protect them. '*Amesha Sepanta*' or '*Amshaspand*' is a general name/title for the six archangels (Bahman, Ordibehesht, Shahrivar, Sepandārmaz, Khordād, Amordād) through whom the Supreme Lord, *Ahura-Mazdā* (literary, 'the light of wisdom') operates in the universe. Together they make a seven-fold group (*Yasht*, ii: 1-3; *Yasna*, lvii 12). This seven-fold group corresponds to the Zoroastrian version of creation. According to the scripture the world was created by *Ahura-Mazdā* in six phases; in each phase one element of life has been created. Air (sky) was the first element, followed by water, earth, plants, animals and, finally, human (*Bundahishn*: 25). Here ends the process of creation and begins the process of human perfection. Creation of man also marks the beginning of faith i.e. worshiping of the Supreme Lord. It is at this point where nature and faith unite and give expression in the form of a cosmic celebration (Niknam 1379 SH/1995, 49). Seven is the number of perfection and infinity, the seven heavens, and the seven elements of life: Fire, Earth, Water, Air, Plants, Animals, and metal (Rezaei 1348 SH/1969, 578-579). In the Middle Persian Pahlavi texts the number also pointed to the seven acts of piety, including:

1. Spiritual generosity (including speaking well of others)
2. Material generosity and alms giving
3. Selfless help without desire for recognition or reward
4. Inclusiveness in attitude
5. Honesty
6. Piety
7. Remembrance of the righteous departed souls (Eduljee, K. E. 2005-14).

Ancient Zoroastrian sources do not provide detailed accounts of the seven items that are included in the *Haft Sîn*. More recent sources unanimously list the name of seven traditional items that begin with letter 'sîn' ('S' sound) in Persian language. These include green sprouts, wheat-germ pudding, oleaster fruit, garlic, apple, sumac and vinegar; their local names, English equivalents and symbolic indications are presented in Table 1.

Table 1: Main <i>Haft Sîn</i> Items and their Symbolic Significance			
No.	Item's Name in Persian	Definition	Symbolic Meaning
1.	<i>Sabzi</i> [spelled as sabzeh] (سبزه)	Wheat, barley or lentil sprouts grown in a dish	Growth/rebirth
2.	<i>Samanū</i> (سمنو)	A sweet pudding made from wheat germ	Affluence
3.	<i>Sanjīd</i> [spelled as senjed] (سنجد)	Dried fruit of the oleaster tree	Love
4.	<i>Sīr</i> (سیر)	Garlic	Medicine & healing
5.	<i>Sīb</i> (سیب)	Apples	Beauty & health
6.	<i>Samāq</i> [spelled as Somāq] (سماق)	Sumac berries	Life and vitality (color of sunrise)
7.	<i>Sirki</i> [spelled as Serkeh] (سرکه)	Vinegar	Age and patience.

Lately two more items, "Hyacinth flowers" and "coins," got their way in the *Haft Sîn* spread. Most people substitute any of the two, or both, with some of the items listed in Table 1 (observing strictly to the tradition of seven items) while others feel comfortable adding them to the existing seven. (See Table 2)

Table 2: Optional/Additional Items of <i>Haft Sîn</i>			
No.	Item	Meaning	Symbolism
1.	<i>Sunbul</i> [spelled as <i>Sonbol</i>](سنبل)	Hyacinth (Flower)	Growth/rebirth
2.	<i>Sikkih</i> [spelled as <i>sekkeh</i>]/ <i>Sikka</i> (سکه)	Coins	Prosperity

The *Haft Sîn* spread is not considered complete without certain additional elements that add spiritual, religious and cultural value to the ritual. These include holy book,¹² lit candles, mirror, bowl of water with goldfish, rosewater and, sometimes, a floating fruit (orange, apple or pomegranate) in a water container. (See Table 3)

¹² As a predominantly Muslim populated country the presence of the Qur'an has become an almost permanent feature of the *Norūz* spread setting in Iran. However *Norūz* has a wider cultural significance and is celebrated by the people of other faiths who happen to be a minority. As such venerated books by the minorities – such as *Avesta*, *Torah*, *Bible* and *Kitab-i Aqdas* – appear on the New Year ceremonial spread by their followers.

Table 3: Culturally significant Items that Complement *Haft Sîn* Setting

No.	Name	Symbolic Meaning
1.	The Qur'an	Blessing the New Year with Divine Words
2.	Lit Candles	Fire symbolizes light and purification. Lit candles signify enlightenment and happiness
3.	Mirror	Symbolizes cleanness and honesty. It also represents the images and reflections of creation, hence echoing life.
4.	Eggs	Inclusion of decorated eggs in the ceremonial table (sometimes one for each member of the family) signifies birth and fertility
5.	Bowl of Water with Goldfish	Water symbolizes life, while water and fish in it represent "life within life". Gold fish is also the sign of Pisces – the twelfth astrological sign in the Zodiac. (<i>Under the tropical zodiac the Sun is in Pisces roughly from February 19 to March 20, ending on the moment of Vernal Equinox, i.e. Norūz</i>) The gold-fish's significance to <i>Norūz</i> celebration is 'very ancient and meaningful' and with Zoroastrian connection. (See, Shahbazi 2003)
6.	Rosewater	Clarity of mind and spiritual cleansing
7.	Orange, omegranate or apple floating in water	Representing the Earth floating in space

Origins of the *Haft Sîn*

Haft-Sîn has a rather complex history. A survey of *Haft Sîn* through the ages shows that the ritual had undergone several transformations since the ancient times. The ceremony was known by a few names, all of whom share the prefix "*haft*" (seven). These include *Haft-Shîn*, *Haft-Chîn* and *Haft Sînî*.

It is said that the roots of *Haft-Sîn* is to be traced as far back as the Kayanids Dynasty era,¹³ during which it was called *Haft-Shîn* (seven items beginning with letter "*Shîn*" ('sh' sound), which included milk, syrup, wine, sword, boxwood, candle and hemp seeds. (See Table 4)

Table 4: The Pre-Islamic *Haft Shîn* and their Symbolic Significance

No.	Item's Name in Persian	Definition	Symbolic Meaning
1.	<i>Shîr</i> (شیر)	Milk	Nourishment
2.	<i>Sharbat</i> (شربت)	Syrup	Enjoyment/sweetness of life
3.	<i>Sharāb</i> (شراب)	Wine	Celebration
4.	<i>Shamshîr</i> (شمشیر)	Sword	Security
5.	<i>Shimshād</i> (شمشاد)	Box-tree	Wealth and perfect stature
6.	<i>Sham</i> (شمع)	Candle	Illumination

¹³ The Kayanids (or the Kayanian kings) is the name of an ancient Persian dynasty mentioned in *The Avesta*.

Table 3: Culturally significant Items that Complement *Haft Sîn* Setting

No.	Name	Symbolic Meaning
1.	The Qur'an	Blessing the New Year with Divine Words
2.	Lit Candles	Fire symbolizes light and purification. Lit candles signify enlightenment and happiness
3.	Mirror	Symbolizes cleanness and honesty. It also represents the images and reflections of creation, hence echoing life.
4.	Eggs	Inclusion of decorated eggs in the ceremonial table (sometimes one for each member of the family) signifies birth and fertility
5.	Bowl of Water with Goldfish	Water symbolizes life, while water and fish in it represent "life within life". Gold fish is also the sign of Pisces – the twelfth astrological sign in the Zodiac. (<i>Under the tropical zodiac the Sun is in Pisces roughly from February 19 to March 20, ending on the moment of Vernal Equinox, i.e. Norūz</i>) The gold-fish's significance to <i>Norūz</i> celebration is 'very ancient and meaningful' and with Zoroastrian connection. (See, Shahbazi 2003)
6.	Rosewater	Clarity of mind and spiritual cleansing
7.	Orange, omegranate or apple floating in water	Representing the Earth floating in space

Origins of the *Haft Sîn*

Haft-Sîn has a rather complex history. A survey of *Haft Sîn* through the ages shows that the ritual had undergone several transformations since the ancient times. The ceremony was known by a few names, all of whom share the prefix "*haft*" (seven). These include *Haft-Shîn*, *Haft-Chîn* and *Haft Sîni*.

It is said that the roots of *Haft-Sîn* is to be traced as far back as the Kayanids Dynasty era,¹³ during which it was called *Haft-Shîn* (seven items beginning with letter "*Shîn*" ('sh' sound), which included milk, syrup, wine, sword, boxwood, candle and hemp seeds. (See Table 4)

Table 4: The Pre-Islamic *Haft Shîn* and their Symbolic Significance

No.	Item's Name in Persian	Definition	Symbolic Meaning
1.	<i>Shîr</i> (شیر)	Milk	Nourishment
2.	<i>Sharbat</i> (شربت)	Syrup	Enjoyment/sweetness of life
3.	<i>Sharāb</i> (شراب)	Wine	Celebration
4.	<i>Shamshîr</i> (شمشیر)	Sword	Security
5.	<i>Shimshād</i> (شمشاد)	Box-tree	Wealth and perfect stature
6.	<i>Sham</i> (شمع)	Candle	Illumination

¹³ The Kayanids (or the Kayanian kings) is the name of an ancient Persian dynasty mentioned in *The Avesta*.

7.	<i>Shāhdanah</i> [spelled as <i>Shāhdanīh</i>] (شاهدانه)	Hemp-seeds	Enlightenment
----	---	------------	---------------

It is believed that the Islamization of Persians led to the altering of the ritual from *Haft Shīn* to *Haft-Sīn*; this is specifically with reference to the prohibition of drinking wine by the Qur'an – an item included in the *Haft-Shīn* list. There are, however, evidences that the *Haft-Shīn* setting continued to be popular among the non-Muslims in the Islamic period (Nabarz 2005).

The Kayanid *Haft-Shīn* is said to have then evolved into *Haft-Chīn* of the Achaemenid dynasty. The Persian word “*chīn*”, from *Chidan*, means ‘to pluck’; *Haft-Chīn* therefore comprised seven freshly plucked vegetations: including edible vegies and flowers. The term *chīn* (and *chidan*) also means ‘to arrange’. In this sense *Haft-Chīn* would mean “arrangement of the seven”, which does not indicate specific items. The change of the names may have linguistic reasons as well, for within the Indo-European languages, the change of the phonetic sounds i.e. *Sh*, to *Ch*, and *Ch* to *S* is common.

Another proposed root name for *Haft-Sīn* is *Haft-Sīnī* (literary ‘Seven Trays’). Again, it emphasizes on the number and the mode of presentation rather than the items included.

The *Haft-Sīn* ritual continued as an inseparable component of *Norūz* celebration throughout the post-Islamic period. There are many accounts where detailed descriptions of the customs, specifically in the royal courts, have been recorded. The passage that follows provides a glimpse of the ceremony in the Court of *Nadir Shah Afshar* (r. 1736–47):

The table of *Haft-Sīn* was prepared in front of the Peacock Throne in the Museum Hall (*tālār-i muzih*), and dignitaries gathered around it: military officials headed by the crown prince on the one side, civil officials headed by the chief finance minister (*mustawfi-al-mamālik*) on the other side; the leading clergy, Qajar princes carrying royal arms and insignia, and cabinet ministers headed by the prime minister (*ṣadr-i a'ẓam*) flanked the throne. The master of ceremonies announced the arrival of the Shah, who appeared bedecked in jewelry and proceeded, among the bowing of the silent audience, to the throne and took his seat. The court orator (*khāṭib-al-mamālek*) would read a sermon in praise of the Prophet and the first Imam until the court astronomer announced the turning of the year. The Shah offered his felicitations first to the ‘*ulamā* and then to the officials, recited some verses of the Qur'an, drank a sip of water, and presented gifts (coins inside small red-silk bags) to the clergymen, who took their leave forthwith. Then the music band played cheerful tunes, and the Shah distributed gifts to the audience and left for the inner quarter of the palace (*andarun*). (*Encyclopedia Iranica*, 2009)

Most of the rituals associated with *Norūz* and the *Haft-Sīn* spread that were popular during the Qajar period continued, with minor change and modification, to the present day.

The Science of Time and the True New Year

According to an account received from Khwaja Nasir al-Din al Tusī (d. 1274), “the first day of the official new year (*Norūz*) was always the day on which the sun entered Aries before noon” (*Encyclopedia Iranica*,

1990). This day, according to the description, falls on the March equinox, the exact first day of spring. At this time, the sun is directly over the equator and the north and south poles of the Earth lie along the solar terminator; the sunlight is evenly divided between the north and south hemispheres. (See image 4).



(Image 4): Illumination of the Earth by the Sun on the day of equinox

The equinox falls in an exact time –with the precision of hour, minute and second– on March 20 or March 21. This is because the specific moment of the vernal equinox varies each year based on astronomical calculations. The precise moment of equinox marks the exact moment of the New Year – the real ‘New Day’, *Norūz*. An equinox is a point in time (not a days or nights, which consist of countless points in time) and *Norūz* is celebrated on that very moment. However, to mark the “New Year Day”, the equilux is taken into account. An “equilux”, by convention, is a day where sunrise and sunset are closest to being exactly 12 hours apart. In the day of *Norūz* equilux the light and darkness arrive at a universal balance, with light beginning to prevail. This concept finds beautiful artistic expression in the ancient monument of Persepolis. (See Image 5)



(Image 5): Lion Attacking Bull; Stone bas-relief, Persepolis, Iran.

In the above image, the celebration of the vernal equinox (*Norūz*) is represented symbolically: Lion personifies the Sun, a symbol of light; bull is the personification of Moon, symbolizing the night; the combat of the two represents the constant battle between the forces of light and darkness. In this composition, while both animals are depicted in complete health the lion’s attack over the bull is indicative of the victory of light over darkness. This points to the fact that from the moment of the vernal equinox the days’ lengths (light) begin increasing and the nights’ lengths begin to decrease; the elongation of day continues until the autumn equinox.

The idea of preference of Vernal Equinox over Autumnal Equinox is reflected in the bulk of literature related to *Norūz*. Nāsir Khusraw Qubādiānī (d. 1088), for example, stresses upon this preference while comparing *Norūz* with *Mehregān* – another important ancient celebration that falls on the Autumnal Equinox:

نوروز به از مهرگان اگر چه هر دو روزانند
اعتدالی

Norūz is better than *Mehregān*,
Even though both are days of Equinox.
(Nāsir Khusraw 2007, Qasidah 239)

از پس خویشت بدوانند همی که سوی
نوروز و گهی زی خزان

They rush you forward at all times;
At one time towards the *Norūz*
and at other towards autumn
(Nāsir Khusraw 2007, Qasidah 176)

Table 4 displays the calculated dates for Vernal Equinox for a period of almost a millennium, while Table 5 provides calculations for time delays between two successive vernal equinoxes (See Heydari-Malayeri, 2006).

Table 4: Dates for Vernal Equinox during A.D. 1583-2500		
March date	Event frequency	Percentage (%)
18	0	0
19	33	3.6
20	584	63.6
21	301	32.8
22	0	0

Table 5: Average time delay between two successive vernal equinoxes		
Epoch interval	Shift (hour) (h, m, s)	Average year (solar days)
-4000 to +2500	5.81458 5h 48m 52.5s	365.242274
0 to +2500	5.81603 5h 48m 57.7s	365.242335
+1000 to +2500	5.81662 5h 48m 59.8s	365.242359
+1500 to +2500	5.81669 5h 49m 0.1s	365.242362

+1800 to +2200	5.81537 5h 48m 55.3s	365.242307
+800 to +1200	5.81609 5h 48m 57.9s	365.242337
+1995 to +2005	5.83087 5h 49m 51.1s	365.242953

The classical name for the Persian Islamic solar calendar is solar Jalālī calendar. It was adopted on 15 March 1079 by the Jalāl al-Dīn Mālik Shah I (from the Seljuk Dynasty, after whom it was named), based on the recommendations of a committee of astronomers, including the famous scientist and mathematician Umar Khayyām, at the imperial observatory in his capital city of Isfahan. The length of the year in the Jalālī calendar is 365.2424 days (a logical consequence of the intercalation system: $365 + 8 / 33 = 365.2424$ (Youschkevitch and Rosenfeld 1981, 323). This is in good agreement both with the length of the year at his time (365.2423 days) and with the present-day estimation of the true length of a year (365.2424 days). "Compared to the Gregorian year of $365 + 1 / 4 - 1 / 100 + 1 / 400 = 365 + 97 / 400 = 365.2425$ days, Khayyām's value was based on a more accurate knowledge of the solar annual motion" (Heydari-Malayeri 2006). We may therefore conclude that the Persian Solar calendar is more accurate than the Gregorian calendar as far as predicting the date of the vernal equinox is concerned; this is because in the calculation of Persian year astronomical facts are taken into account rather than mathematical rules. Table 6 provides a comparison between the Gregorian and Persian year-lengths.

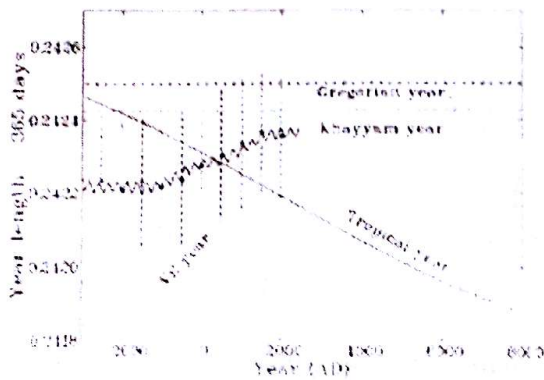


Table 6: The lengths of the tropical and vernal-equinox years varying over the ages, shown in full and dotted curves respectively, both in units of uniform (ephemeris) days. The duration of the real vernal-equinox year, in solar days, or the Iranian year, obtained by the IMCCE ephemeris, is displayed in two manners. The discrete points represent mean values over 500-year intervals with their corresponding standard deviations shown by the vertical bars. Similarly, the wavy curve displays a smoothed version of the ephemeris data in which fluctuations with periods smaller than 100 years are withdrawn. The horizontal lines show the lengths of the Khayyām and Gregorian calendar years. They are meant for comparison with the vernal-equinox year lengths in solar days represented by the IMCCE data. (Heydari-Malayeri 2006)

Ahmad Birashk (1984) in his *Gāhnamih Tatbiqi* (Comparative Calendar) proposed a complex mathematical pattern that can be used to make the calendar a purely mathematical one without the need for astronomical observation. This proposed calendar has a great grand cycle of 2820 years in which 2137 years are normal years of 365 days and 683 years are leaps of 366 days, averaging a day-length of 365.24219852, over the 2820 years of the great grand cycle. This

average is just 0.00000026 day shorter than the actual solar year of 365.24219878 days, making an accumulated error of just one day over 3.8 million years or approximately 0.022 of a second annually (The method also available in Walker, 2009).

For all the reasons explained above the interest in *Norūz* and awareness about its historic, scientific and cultural prominence became widespread and gained global recognition. In 2009 the United Nation's Inter-governmental Committee for the Safeguarding of the Intangible Heritage, officially registered *Norūz* on the UNESCO List of the Intangible Cultural Heritage of Humanity. The next year (2010), The United Nation General Assembly recognized the International Day of *Norūz*, describing it as "A spring festival of Persian origin which has been celebrated for over 3,000 years."

Conclusion

Among the impressive traits of Islam that has urged people to embrace it since its historical birth some fourteen centuries ago is the "inclusive attitude". This attitude found manifestation in various levels: At the level of religiosity we find that the Qur'an addresses the Prophets who are, historically speaking, pre-Islamic (namely Noah, Ibrahim, Joseph, Moses, Jesus and many others) as the Prophets of Islam. At the civilizational level the receptiveness towards other civilizations and borrowing openly from their advanced features contributed significantly to the flourishing of Islamic art, architecture, city planning etc. In the process, however, the borrowed features were gradually transformed within the faith and the culture of its followers, and the process of Islamization took place (See Zekrgoo 2009, 277-306; for an elaboration of the subject). The same approach is observed in the treatment of

customs, celebrations and ceremonies of other nations and tribes in which the process of acceptance and transformation gave way to the emergence of Islamized versions of certain rituals that added to the colorful diversity of Islamic civilization. *Nörüz*, with its tight connection to nature, strong astronomical backbone and positive spirit was among the ceremonies that outlived over millennia, had its phases among a few Abrahamic faiths and, eventually, an Islamized version of it became a permanent feature of many Muslim cultures. This inclusiveness is echoed in this enlightening Prophetic *ḥadīth*: "Surely, the practice: culture, tradition, and ways of life, of a nation which does not go against [my] Sunnah is Sunnah". Studies of this sort can contribute to a deeper appreciation of the civilizational aspects of Islam and could pave way for fruitful dialogues at inter-civilizational as well as intra-civilizational dialogues.

REFERENCES

- Bede, Saint. *Bede, The Reckoning of Time*. Translation and Commentary by Faith Wills. Liverpool: Liverpool University Press.
- Birashk, Aḥmad. 1984. *A Three Thousand Year Comparative Chronological Tables of Iranian, Muslim Lunar and Christian Calendars*. Tehran: Scientific and Cultural Publications Company.
- Al-Birūnī, Abū al-Rayhān Muḥammad ibn Aḥmad. 1978. *Al-Āthār al-Bāqīa (The Chronology of Ancient Nations)*. Edited and Persian translation by M. Moḥaqeq. Tehran: Thomas Bois, "Kurdish Society," EI²IV.
- Boyce, Mary, and Frantz Grenet. 1982. *A History of Zoroastrianism: Under the Achaemenians*. Leiden: BRILL.
- Davis, Dick. 2006. *Shāhnameh: A New Translation*. New York: Viking Adult.
- Dehkhoda *Encyclopedia* (Persian). 1346SH/1967 ed. Tehran: Faculty of Literature and Human Sciences of Tehran University. s.v. "Nörüz."
- Duncan, David Ewing. 1998. *The Calendar: The 5000-year Struggle to Align the Clock and the Heavens – and What Happened to the Missing Ten Days*. London: Fourth Estate.
- Eduljee, K. E. 2005-14. "Gahanbar: Building & Celebrating Community". *Zoroastrian Heritage*. Accessed 5 March 2015. <http://www.heritageinstitute.com/zoroastrianism/gahambar/>.
- Encyclopedia Iranica*. 1990 ed. London-New York. s.v. "Calendars ii Islamic Period."
- 2003 ed. London-New York. s.v. "Haft Sin."
- s.v. "Festivals i. Zoroastrian". Article published December 15 1999. Accessed April 17 2014. <http://www.iranicaonline.org/articles/festivals-i>.
- s.v. "Mithraism". Article published July 20, 2002. Accessed April 17 2014. <http://www.iranicaonline.org/articles/mithraism>.
- s.v. "Nowruz ii. In the Islamic Period". Article published November 15, 2009. Accessed April 17 2014. <http://www.iranicaonline.org/articles/nowruz-ii>.
- Finegan, Jack. 1964. *Handbook of Biblical Chronology*. Princeton, N.J.: Princeton University Press.
- Gardizī, Abū Sa'id 'Abd al-Ḥayy ibn Zahāk ibn Mah)mūd. 1363 SH/1984 [1985]. *Tārikh-i Gardizī*. Edited, critical revision and commentary by Abd al-Ḥayy Ḥabībī. Tehran: Donyā-yi Kitāb.
- Heydari-Malayeri, M. 2006. "A Concise

- Review of the Iranian Calendar". Last modified October 11. <http://aramis.obspm.fr/~heydari/divers/ir-cal-eng.html>.
- Hinnells, John R. 1975. *Mithraic Studies: Proceedings*. Illustrated edition. Manchester: Manchester University Press.
- Khusraw, Nāsir. 2007. *Diwan-i Nāsir Khuraw*. Tehran: Negah Publishers.
- Lake, J. W. 1874. *Plato, Philo and Paul*. Edinburgh: n.p.
- Mas'ūdi. 1989. *Murūj al-Dhahab wa Ma'ādin al-Jawhar (The Meadow of Gold and Mines of Gems)*. Translated by Paul Lunde and Caroline Stone. London and New York: Kegan Paul.
- Meri, Josef W., and Jere L. Bacharach. 2006. *Medieval Islamic Civilization: L-Z, index*. Vol. II of *Medieval Islamic Civilization: An Encyclopedia*. 2006. New York: Routledge-Taylor & Francis Group.
- Moazami, M. 2002. "The Legend of the Flood in Zoroastrian Tradition." *Persica* 18: 55-74.
- Nabarz, Payam. 2005. *The Mysteries of Mithras: The Pagan Belief That Shaped the Christian World*. Rochester: Inner Traditions International Ltd.
- Niknam, Kurosh. 1379 SH/1995. "Jashn-i Norūz wa Zartashtian-i Iran". *Kitāb-i Mah-i Hunar*, Winter Issues 29 & 30: 48-53.
- Rezaei, Jamal. 1348 SH/1969. "Amshaspandan dar Aaein-i Zartoshty (Amesha Sepanta in the Zoroastrian Tradition)". *Journal of the School of Literature and Human Sciences*, Summer Issues 69 & 70: 576-593.
- Trotter, James M. 2001. *Reading Hosea in Achaemenid Yehud*. London: Continuum International Publishing Group.
- Tuplin, Christopher, and Vincent Azoulay. 2004. *Xenophon and His World: Papers from a Conference Held in Liverpool in July 1999*. Wiesbaden: Franz Steiner Verlag.
- Ulansey, David. 1991. *Origins of the Mithraic Mysteries*. New York: Oxford University Press.
- Walker, John. 2009. "Calendar Converter." John Walker's Formilab. Last modified November. <http://www.fourmilab.ch/documents/calendar/>.
- Weiser, Francis X. 1958. *Handbook of Christian Feasts and Customs*. New York: Harcourt, Brace and World, Inc.
- Youschkevitch, A.P., and B.A. Rosenfeld. 1981. "al-Khayyami." in *Dictionary of Scientific Biography VIII*. Charles Coulston Gillispie (ed.). New York: Scribner.
- Zekrgoo, Amir H. 2009. "Trans-Cultural Nature of Islamic Art." In *Islam Hadhari: Bridging Tradition and Modernity*, edited by Mohamed Ajmal ibn Abdu Razak al-Aidrus, 277-306. Kuala Lumpur: International Institute of Islamic Thought and Civilization (ISTAC), International Islamic University Malaysia.