



Philosophical Papers and Reviews

Volume 7 Number 2 February 2016

ISSN 2141-663X



*Academic
Journals*

ABOUT PPR

The **Philosophical Papers and Reviews (PPR)** will be published monthly (one volume per year) by Academic Journals.

Philosophical Papers and Reviews (PPR) is an open access journal that provides rapid publication (monthly) of articles in all areas of the subject such as Political Anthropology, Culture Change, Chinese Painting, Comparative Study of Race, Literary Criticism etc.

Contact Us

Editorial Office: ppr@academicjournals.org

Help Desk: helpdesk@academicjournals.org

Website: <http://www.academicjournals.org/journal/PPR>

Submit manuscript online <http://ms.academicjournals.me/>

Editors

Prof. Ahmed Awad Amin Mahmoud

*Faculty of Education and Higher Education
An-Najah National University,
Nablus.
Palestine.*

Dr. R. Joseph Ponniah

*Department of Humanities (English)
National Institute of Technology
Trichirappalli, Tamil Nadu
India.*

Dr. Kanwar Dinesh Singh

*# 3, Cecil Quarters,
Chaura Maidan, Shimla:171004 HP
India.*

Dr. S. D. Sindkhedkar

*Head, Department of English,
PSGVP Mandal's Arts, Science & Commerce College,
Shahada: 425409, (Dist. Nandurbar), (M.S.),
India.*

Dr. Marta Manrique Gómez

*Middlebury College
Department of Spanish and Portuguese
Warner Hall, H-15
Middlebury, VT 05753
USA.*

Dr. Yanjiang Teng

*801 Cherry Lane, APT201
East Lansing
Michigan State University
MI 48824
USA.*

Prof. Radhakrishnan Nair

*SCMS-COCHIN
Address Prathap Nagar, Muttom, Aluva-1
India.*

Prof. Lianrui Yang

*School of Foreign Languages, Ocean University of
China
Address 23 Hongkong East Road, Qingdao,
Shandong Province, 266071 P
China.*

Editorial Board

Dr. Angeliki Koukoutsaki-Monnier

*University of Haute Alsace
IUT de Mulhouse
dep. SRC
61 rue Albert Camus
F-68093 Mulhouse
France.*

Dr. Martha Christopoulou

*Greek Ministry of National
Education & Religious Affairs
Xanthoudidou 2-4
Athens,
Greece.*

Dr. Zeynep Orhan

*Fatih University Hadımköy 34500 Istanbul
Fatih University Computer Engineering Department
Turkey.*

Dr. Tahar Labassi

*University of Tunis
94 Avenue 9 Avril, Tunis 1007
Tunisia.*

Dr. Ahmad M. Atawneh

*Hebron University
P.O.Box 40, Hebron
Palestine.*

Benson Oduor Ojwang

*Maseno University
P.O.BOX 333, MASENO 40105
Kenya.*

Lydia Criss Mays

*Georgia State University
30 Pryor Street, Suite 550
USA.*

Dr. Daniel Huber

*Université de Rennes 2
63, rue des Vinaigriers, 75010 Paris
France.*

Naomi Nkealah

*University of the Witwatersrand, Johannesburg
English Academy of Southern Africa, P O Box 124, Wits
2050
South Africa.*

Yah Awg Nik

*Centre for Language Studies and Generic Development,
Universiti Malaysia Kelantan,
Locked Bag 36, Taman Bendahara,
Pengkalan Chepa, 16100 Kota Bharu, Kelantan
Malaysia.*

Philosophical Papers and Reviews

Table of Contents: Volume 7 Number 2 February 2016

ARTICLE

Philosophical paradigm of Islamic cosmology
Ali Mohammad Bhat

13

Review

Philosophical paradigm of Islamic cosmology

Ali Mohammad Bhat

Islamic Research Academy, India.

Received 5 October, 2015; Accepted 11 February, 2016

Humans have been examining the cosmic bodies for many millennia, but scientific discoveries and ideas about the origin of the universe have changed the religious discourse and rely completely on empiricism. Many theories were put forth by the physicists, philosophers and even religions at large but Islam has its prime source of information “Quran” upon which Muslim cosmologists build their theories and directed their ideas about the cosmology. According to Quran with the role of man or other creatures in the formation and regulation of heavenly bodies, it is God who holds everything and has power to create things which are observable or hidden in this universe. A large portion of the Holy Quran contains such information from first big bang to expansion of the universe, the concept of time, space, creation of heavens and earth, constellations and extinction of the total canvas of the universe. An attempt has been made to answer all the challenges put forth by modern sciences to religious knowledge particularly to Islamic cosmology. Different sources were utilized to highlight those challenges and response to them is provided through mutakallimun literature, and also directly from Qur’anic references.

Key words: Big-Bang, cosmology, cosmogony, expansion of universe, formation of sky and earth, Ratqan, red shift.

INTRODUCTION

“Cosmology is a subject which deals with the origin of the universe, its existence, development and extinction.” It is a study of universe as a whole, its history and origin. It is usually (but not always) based on astronomy, along with religious and social beliefs. George P. Murdock, an anthropologist, listed sixty-eight civilizations that have fashioned cosmologies. The root of *cosmos* refers to a word that encompasses everything (Dick, 2002) but divergence in arguments is prevailing about the origin and existence of the universe, and scholars got were divided into two main domains of the philosophy. One

called positivist who consider empiricism as the reality of the existence while the other group religious or traditionalists held argument about existence of the universe. However, religions hold different arguments about the origin of the universe and its existence (Chad, 2009). Most of the philosophers discussed cosmos in their respective theories and consider matter as primordial and eternal, such as Bertrand Russell who argued that the universe is eternal, and has no beginning and it will never end (David, 1998) he also consider the universe as infinite. But famous German mathematician

E-mail: E-mail: alimohd1265@yahoo.co.in.

Authors agree that this article remain permanently open access under the terms of the [Creative Commons Attribution License 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

David Hilbert held opposite view as:

“The infinite is nowhere to be found in reality. It neither exists in nature nor provides a legitimate basis for rational thought...the role that remains for the infinite to play is solely an idea.” (Hilbert, 1964).

All religions in general but Islam in particular have modern day thought on the origin of the universe. Large number of verses of the Quran are verbalizes, and this motivates the people to study these verses (signs) of the Quran through nature and history, in order to understand the concept of cosmology directly or indirectly. Imam Razi mentioned at least thirty verse of the Quran related to thinking and to the study of the universe (Kamali, 2006).

Islam has its true representative character of the universe and depicts cosmology in its original nature. However, according to Hattstein and Numazawa, the basic line is common in all cosmic theories and among Mesopotamian cultures and other cultures around the world ((Hattstein, 2008; Numazawa, n.d.). Different theories were put forth by the scientists about the origin of the universe and its occurrence in the modern period. They are of the view, that a huge blast was supervened at time zero and that the material came into existence which consequently became cause of different creations. They considered its natural occurrence and deny role of any hidden force behind it. The Islamic version is somewhat different because of its tauhidic nature and according to Qur’anic perspective, huge blast occurred due to which a dense layer of smoke and total darkness prevailed. This blast gave rise to the formation of skies and earth not by them-selves or by chance but was separated by the divine command when they were joined as a united wholeⁱ

“Then He turned to the sky as it had been smoke: He said to it and to the earth come both of you willingly or unwillingly. They said ‘we come (Together) in willing obedience.’” So He completed them as seven firmaments in two days and assigned to each heaven its duty and command. And we adorned the lower heaven with lights and (provided it) with guard. Such is the Decree of (Him) The exalted in might, full of knowledge”.ⁱⁱ

The Qur’anic scheme of explosion or evolutionary process depend on divine command which manifest in all matter which are concentrated towards the center, and end to singularity by inhalation process and the matter towards the nucleus formed a primordial fireball, which produced enormous amount of heat and resulted into a heavy explosion called Big Bang at zero cosmic time (Amedeo, 2007).

The Qur’anic phenomenon of the universe manifests that heavens and earth were separated from a single nucleus by cloving *asunder* same as the *Big Bang*

mentioned in many modern theories, and decoupling occurred after time t_3 of the radiation energy. On comparison bases, the decoupling idea and the Qur’anic *asunder* of sky and earth, the formation of stars and galaxies in the universe are all the same (Manzoor, 1999).

The Qur’anic epistemology encompasses all cosmic realities and which encourages them to achieve knowledge and to perform research in order to understand the divine realism. Islamic cosmology and cosmogony serves as background source for knowledge development in the contemporary era. The scientific discoveries are facilitated to comprehend the Qur’anic perspective to cultivate belief about the creator without disturbing the natural harmony between man and his surroundings (Afzalur, 1981).

Quran upholds the thought of cosmological indices and talks about the creation of heavens and earth along with tracks in between them. These tracks are paths between planets to direct human mind to understand the cause and way of creation of all this with definite thought.ⁱⁱⁱ The Qur’an demonstrates creation of heavens as a sign of his power, and uses an Arabic word *as-Sama* derived from the root word *SWM* which means upper part or roof. It is mentioned 120 times in singular form and 190 times in plural form in the Quran.^{iv}

In reality, the cosmic issues revealed upon Prophet Muhammad 1400 years before are worth conventional as divine revelation because during that period, Muslim world was not aware about the sophisticated technology and universe was completely obscure and unclear from experimental point of view. All issues were mentioned in a metaphysical way and later scholars discussed them in the same mode till the application of Hubble telescope. Allah created all life and according to Holy Quran He is the creator, originator, guardian and disposer of all things and his mode creation depends upon a command “be and it becomes”^v Allah categorically explicates His creational theory and attracted mankind to travel through earth and observe His mode of creation.

“What! Do they not consider how Allah originates the creation, then reproduces it? Surely that is easy to Allah. Say travel in the earth and see how He makes the first creation, then Allah creates the latter creation; Surely Allah has power over all things”^{vi}

Certainly big bang or from Qur’anic terminological point of view Rataqna (Asunder) gave rise to the universe and innumerable creatures. According to Maurizio Gasperini (Maurizio, 1998), big bang is certainly a big explosion precisely vibrant and fast production of radiations and matter particles illustrated by enormously high density and temperature. The cooling by expansion changed matter into lumps and produced large scale structures (Maurizio, 2008). Despite the fact that such results are

comparatively new, the model of the expanding universe has by now turned out to be part of trendy culture. Certainly lexis's like "explosive universe"

"Big Bang" and initial singularity are now recurrently used by all. There is wide spread consciousness about the expansion and explosion of the universe (Maurizio, 2008).

In this verse, the word "*ratqan*" (closed-up mass) and "*fataqna*" (we clove them asunder), carry the basic message of the creation of the universe. Authentic Arabic lexicons presented two meanings of *ratqan*. One meaning is, the coming together of something and then subsequent infusion into a single entity and the second meaning is total darkness'. Both meanings are significantly applicable. Taken together, offers a pertinent description of the singularity of a *black hole* which resulted into blast (Lane, 1984). After the blast, all the material beings came into existence by divine order as per Macmillan Encyclopedia, "Universe consists of all well known objects, like *earth, sun*, other solar systems, stars and innumerable galaxies along with countless millions and millions of other galaxies which hold countless stars including rocks, gases, metals, animals that is, every creature (Ross, 1995).

According to *Mutakallimun* the world is not eternal but was created some finite time in the past. Space and time had no meaning and never existed before the creation of the world (William, 1979). Despite the fact that some of the *Mutakallimun* believed that creation took place out of a pre-existing form of matter, the dominant view of *Mutakallimun* in this respect is that creation took place *ex-nihilo* that is, out of nothing (Wolfson, 1976; Al-Alousi, 1980). They also believe that the world is created by a supernatural force. Nevertheless, various Muslim philosophers uphold the thought that creation came into existence from pre existing stuff, the foremost thought of *Mutakallimun* is that existence of life took place from *ex-nihilo* (Wolfson, 1976; Al-Alousi, 1980). They were also of the thought that space and time is meaningless and never subsists prior to the formation of the world^{vii}.

In Holy Qur'an, time is mentioned as celestial day, because the word "*AYYAM*"^{viii} is the plural of "*Yaum*" which means million is of years. In order to understand this word, it is necessary to understand the philosophy of time and duration of time mentioned in the different chapters of the Qur'an which ranges from one day to thousands of years and to millions of years.^{ix}

The word "*Yaum*" does not mean only the 'day' between the rising and the setting of the sun. Understandably it means a period that could be several thousand years long and estimate of the time is equivalent to scientific time (6 billion years) which is in close proximity with time period of creation of the universe mentioned in Holy Qur'an (Anwar, 1987). The night which is endowed with

darkness is followed by its splendor light or day in constant demeanor but envisages an expansion of the earth as a precursor of expansion of universe.^x Such a constant follow-up gives the idea of time frame which is calculated as 24 hours day and night duration. Muslim philosophers and theologians propounded the thought that Universe has definite past with a beginning. Early Muslim philosophers such as Al-Kindi and the Muslim theologian Al-Ghazali, put forth a two way logical model against infinite past by clarifying the impossibility of existence of an actual infinite while stating;

"An actual infinite cannot exist. An infinite temporal regress of events is an actual infinite. An infinite temporal lapse of events cannot exist."^{xi} "An actual infinite cannot be completed by successive addition. The temporal series of past events has been completed by successive addition. The temporal series of past events cannot be an actual infinite (Seyyed, 1993)."

Among Muslim philosophers Ibn Sina (Avicenna) tried to prove the world's eternal reliance upon divinity, however he considered the concept of timelessness must be subjected to self-sufficiency of the universe. His idea of creation is governed by the thought of contingent being and necessary being. This causative reference is only contradiction within Muslim philosophical thought (Goodman, 1985). Al-Ghazali the most influential traditional philosopher claims that the world could not be defend on philosophical grounds. It is perhaps ironic that Stephen Hawking and Carl Sagan would agree with al-Ghazali in claiming that a universe that has an absolute temporal beginning.

They, of course, think that by denying such a singularity they have left nothing for a creator to do^{xii}.

Cosmology is the subject of phenomenal concern not only to philosophers but Sufi's too. Majority of Sufi scholars and philosophers had melted down mental abilities to produce their compendiums on the subject. They belong to almost all the regions of the globe and among them one Persian scholar, Abd al-Rahman Ibn 'Umar al-Sufi, commonly known as al-Sufi wrote a unique work in 964AD, entitled "*Book of Constellation of Fixed Stars*" and described them as "nebulous spot" also known as Andromeda constellation, a first definitive and unique reference known as the Andromeda Galaxy and now considered the nearest spiral galaxy to our galaxy (Henbest and Couper, 1994).

During 1100 B.C. Mesopotamian astronomers revealed constellations or formations of stars perceived to form shapes (David, 2000). Greek philosopher Aristotle projected a cosmological view in about 350 B.C. and theorized that the Sun, the Moon, and the planets all revolved around Earth on a set of celestial spheres (Andrew, 2003). These celestial spheres were made of static and transparent elements having fixed positions

and called them “fixed stars” in order to differentiate them between stars and planets (Salim, 2004). The spheres internally held the planets, which they called the “wandering stars (Shariff, 1966)” However, the Sun and Moon occupied the two innermost spheres but the four elements such as earth, air, fire, and water, made everything below the moon which exists in the outer sphere (Shariff, 1966).

In the view of Ibn al-Arabi, cosmos is relative and does not exist in and by itself but exist in reference to God. The Cosmos as a whole is dependent on God's existence, and it has its cause in Him. Unlike spiritualists and idealistic immaterialists such as, Berkley, Ibn al-Arabi believes that the Cosmos has its material existence but he does not accept its real and absolute form. Therefore, according to him, the Cosmos is relative and its existence is expressed as illusion and shadow. Ibn al-Arabi states:

"Beware you, everything besides The Mighty God is fancy pure."^{xiii} He further says: "All (relative) existence is an imagination within imagination, the only Reality being God, Self and the Essence, is not in respect of His Names but in His true nature."^{xiv}

He sums up his doctrine on the cosmological relativity as;

"Thus, the dependence of the Cosmos on the reality for its existence is an essential factor ..."^{xv}

According to him, “like the Cosmos itself, all the cosmic spiritual and physical phenomena such as, time, space, movement, and so on, are relative. They have not substantial existence in the Cosmos.”^{xvi} Their existence is only to exist supposed according to their interrelations in the Cosmos. On these grounds, Islamic world view divides the entire cosmos into two major domains the *Aalam-ul-Ghaib* technically called unseen Universe, an invisible one which is beyond the perception of general human beings. This includes the concept of God, and Angles, Paradise, Hell and Heavens, while as the *Alam-ul-Shahood* or Observable Universe which is possible through mental perception by observing it through naked eyes as well as through sophisticated technology.^{xvii}

He is Allah, then whom there is no other Allah, the knower of the visible and the invisible. He is the beneficent, merciful. (Surah Hasher: 22)^{xviii}

Moreover Ghazali, in his famous book: “*The incoherence of the philosophers*” denounced the thought that, universe is bigger than the existing one, although a vacuum exists in the region of the current volume of the universe and will endow with possibility for expansion (Taneli, 2000). Al-Ghazali, contemplate over God as only cause of total existence and is direct cause of every creation. Hence, when at certain times God interrupts this uniformity by creating a miracle on behalf of a Prophet or

holy man, no contradiction ensues. In his works of *kalam*, al-Ghazali passionately defended this atomist-occasionist doctrine on rational and epistemological grounds in relation to the existence of universe (Muhammad, 2000). Averroes or Ibn Rushd retorted cynically to universe existence but gave no appropriate analysis apart from their dependence on what Aristotle had projected in this revere (Bernard, 1972).

An early example of this can be seen in the work of the Islamic theologian Fakhr al-Din al-Razi (1149 to 1209), in dealing with his conception of physics and the physical world in his *Matalib*. He discussed Islamic cosmology, criticized the idea of the Earth's centrality and explores “the notion of the existence of a multiverse in the context of his commentary” on the Qur'anic verse, “All praises belongs to God, Lord of the Worlds. He also see the sun as source of light and rejects the Aristotelian view of a single universe in favour of the existence of multiple universes, a view that he believed to be supported by the Qur'an and by the Ash'ari theory of atomism (Hamid, 2013). In several suras, the creation of heavens is mentioned with significant reasons and plurality of the skies and their hugeness called multiverse. In volume 4 of his *Matalib al-Aliya*, Al-Razi states;

“It is well-known by prevailing signs that there exist outside this world a vacuum without a terminal limit (khala' la nihayata laha) (Adi, 2004).”

He at length gave deliberations on the emptiness, the empty space between stars and constellations in the universe (Adi, 2004). He is of the view that an infinite outer space exists beyond the known world (Muammer, 2002), and God has the power to fill the emptiness with an infinite number of universe (John, 1998).

Al Farghani wrote *Kitab al Jawani* (A compendium of the Science of Stars). This book deals primarily with summary of Ptolemaic Cosmography and Corrected his *Al-Megest* based on observation of earlier Iranian arthromeres views. He gave revised values of the obliquity of the ecliptic movement of the apogees of the sun, moon and the circumference of the earth (Dallal, 1999). Zakariya Ibn Muhammad Ibn Mahmud Abu Yahya al-Qazwini a cosmologists of repute born in Qazwin year 600 (AH (1203 AD) wrote *Ajaib al Makhluqat wa gharaib al-mawjudat* deals with the phenomenon of the creation and strange things existing. This book is of very high reputation in cosmology.^{xix}

Al-Hazen authorized a work titled “*On the Milky Way*” in which he resolved complications concerning the Milky Way, galaxy and parallax (Rashed, 2007). He pronounced two approaches to conclude the Milky Way's parallax: “either one recognizes the Milky Way on two diverse occurrences from the same spot of the earth; or when one guises at it concurrently from two distant places from the surface of the earth.” He finished the first attempt at observing and measuring the Milky Way's parallax, and

determined that since the Milky Way had no parallax, then it does not belong to the atmosphere (Mohamed, 2000). A unique claim by Muhammad Wali Ibn Muhammad Ja'far in 1858 in his work *Shigarf-nama* about the al-Hazen's work that he wrote a treatise *Maratib al-Sama* in which he perceived a planetary model akin to the Tychonic system and discussed in this work that planets orbit the sun and which in turn orbit the earth. Nevertheless the verification of this claim seems to be impossible because such work is not mentioned in bibliography of Al-Hazen (Arjomand, 1997).

Ibn Qayyim Al-Jawziyya in his *Miftah Dar al-Saadah*, used empirical arguments in astronomy to refute the astrological practices and renowned that the stars are bigger in size than planets. He also acknowledged the Milky Way, "a myriad of miniscule stars bunched together in the sphere as fixed stars" and put forth his argument that it is not possible to have certain knowledge of their influence.^{xx} He also argued that earth is not center of the universe and heavenly bodies are not revolving around it. Among Muslim astronomers, remarkably Abū Rayhān al-Bīrūnī, Abu Bakr Ibn Bajja and Nasīr al-Dīn al-Tūsī, discussed the movement of Earth and considered how this might be consistent with astronomical reckonings and physical systems (Ragep, 2001). But In the 12th century, Averroes barred the unusual deferent introduced by Ptolemy. Averroes' contemporary, Maimonides, even wrote the following on the planetary model proposed by Ibn Bajjah;

"I have heard that Abu Bakr Ibn Bajja discovered a system in which no epicycles occur, but eccentric spheres are not excluded by him" (Bernard, 1972).

Abu Bakr Ibn Bajjah also proposed the galaxy model of Milky Way to be made up of many Stars.^{xxi} In the 9th century Jafar Muhammad Ibn Musa made an eminent contribution to Islamic astrophysics and celestial mechanics. He first hypothesized that the heavenly bodies and celestial spheres are the subject to the same laws as earth who believed that the celestial sphere followed their own set of physical laws different from that of earth (George, 1994).

Ibn Tufail and Nur din al-Betrugi in the 12th century proposed first planetary theory without any epicycles. A major breakthrough when Samarkand and Istanbul observatories put the possible theory of earth's rotation. Among the later proponents and supporters of this theory were Nasir ud Din Tusi, Nizam ud din Nisapuri (1311), Syid al-Sharif al Jurjani (1339–1413), Ali Qushji (d. 1474) and Abd al-Ali al-Birjandi (d. 1525). Nasir al-Din al Tusi among later scholars was the first to present empirical and observational evidence of the Earth's rotation (Ragep, 2001b). Ibn Hazm says:

"Time is the duration through which an object stays at

rest or in motion, and if the object is to be deprived of this [rest or motion] then that object will cease to exist and time will cease to exist too. Since the object and the time both do exist, therefore they both co-exist (Altaie, 2005)."

By the last phase of 20th century, tremendous efforts were taken by Muslim commentators to produce tafsir literature relevant to scientific discoveries known as *Tafsir-i-Ilmi* (scientific exegesis). In this regard, "*Tafsir al-Manar*" by Muhammad Abduh (1849 to 1905) is considered one of such tafsir written through scientific methodology. Another significant *tafsir* in this field though in academic circles known as non-tafsir work is "Kashf al-Asrar al Nuraniyyah al Quraniyyah" by Muhammad Ibn Ahmad Iskandari. This tafsir have huge impact on the scientific discoveries and pay back much for the understanding the value of the Qur'anic revelations (Janson, 1980).

Before Qur'anic revelation, Greek philosophy dominates on all walks of life, and Greek philosophers considered heavens as transparent plastic material with luminous heavenly bodies known as stars. They held the view that there would be no existence of life elsewhere in the universe.^{xxii} Their dominant philosophy about heavenly bodies and more particularly about stars is that, they neither rotate around themselves nor revolve around any heavenly body. Disagreeing to it, Holy Qur'an acknowledges not only the motion of earth but also extra-terrestrial life existing between the skies and earth.^{xxiii} The genesis of nature flora and fauna appears as divine interaction for human gratefulness with humans as 'signs' of the divine Omnipotence in order to understand the God's Power and objet d'art (Angelica, 2001).

From Qur'anic perspective, earth rotates and is a movable heavenly body of very high speed but Allah restricted its motion with firm restriction of the mountains otherwise it will shake all creatures existing on its surface.

He created the heavens without pillars as you see them and put mountains upon the earth lest it might convulse with you^{xxiv}

The sun and moon as luminous objects are moving in constant motion (acts as great source of formation of day and night) within their orbits like other heavenly bodies and are not surpassing and overlapping each other but are following divine command without any violation.

"...And He it is who created the night and the day, made the sun and moon all (orbs) travel along swiftly celestial spheres"^{xxv}

As for the question of light and its connection with heavenly bodies, there is not as much emphasis placed upon solar system by al-Biruni as by the Ikhwan safa and other Muslim authors, some of whom have called the Sun

"the heart of the Universe" (*qalb al-'iilam*). According to al-Biruni, the Sun does remain the central body^{xxvi} whose movement generates and brings order out of chaos but, curiously enough, in contradiction to the views of other Muslim writers, it is not the source of light for either the Universe or even for the planetary system. Many assert that light is exclusively the property of the Sun, that all the stars are destitute of it, and that since the movements of the planets are obviously dependent on those of the Sun, it may be assumed by analogy that their light is in the same position.^{xxvii}

In the universe as put forth by the Ikhwan as-Safa, the Sun plays a principal role. "God placed it in the centre of the universe. The Sun is thus "the heart of the Universe" and "the sign of God in the heavens and earth." It is also the source of light for the whole Universe, light which in the most direct way symbolizes the effusion of being. Just as the spirit (*ruh*) gives life to the heart (*qalb*) of man, so does the Intellect "with the permission of Allah" give life to the Sun and Moon and through them to the whole of the Universe of which they are the first and second, or symbolically the masculine and feminine, principles which, by their wedding, generate all things. Among the luminous stars, constellation is an imagined grouping of bright stars that appear on the celestial sphere. To direct human mind in the direction of causal theory, the nature of constellation is of great importance in order to understand origin and nature of heavenly bodies. In Quran, it is stated that constellations are formed due to divine decree with huge brightened star (sun) and a shining moon are placed on a fixed order.

"Blessed id He Who made the constellations in the heavens and made their in a lamp and a shining moon"^{xxviii}

The most radiating luminous body "sun" appears close to earth along with other stars which appears during the night.^{xxix} These stars and planets are created with a definite purpose. Taking the word "*Najm*"^{xxx} into consideration, it has two meanings as mentioned in the Qur'an. They not only act as source of light but also were used for navigation.

Moreover, the sun and moon are of great significance from astronomy point of view. According to Maurice Buceille, "whereas The Bible talks of the sun and the moon as two luminaries differing in size, the Qur'an distinguishes between them by the use of different descriptive words, light "*Noor*" for the moon and torch "*Siraj*" for the sun. The first one absorbs light and then reflects back, while as the second the celestial body having permanent combustion quality acts as source of light and heat. Maurice Buceille also explains further the Qur'anic word "*Kaukab*" as planets which are part of celestial bodies and reflects light absorbed from stars and has no production capacity like sun (Maurice, 1977).

The expansion of universe is leading towards next cosmic explosion because the heavenly bodies are drifting away from each other clearly observed through red shift technique. The itinerancy of heavenly matter due to its implosive force will annihilate completely and will result to a new cosmic explosion (Hawking, 1988). The expansion theory is based on the mathematical equations, known as the field equations, of the general theory of relativity set forth in 1915 by Albert Einstein. In 1922, Russian physicist Alexander Friedman provided a set of solutions to the field equations. These solutions have served as the framework for much of the current theoretical work on the big bang theory. American astronomer Edwin Hubble provided some of the greatest supporting evidence for the theory with his 1929 discovery that the light of distant galaxies was universally shifted toward the red end of the spectrum called Red-shift. This proved that the galaxies were moving away from each other. The size of universe is constantly increasing due to the drifting away process of galaxies from each other. Besides indicating that the universe is expanding faster than the past, a heavy but distant supernova is observed by Albert Einstein and may lead to pervasive darkness. According to Michael Turner, the Universe is really speeding up and might result in giant commutation (Mirza, 1988).

A key observational evidence in cosmology is that almost everything in the Universe appears to be moving away from each other with more rapid recession process. These velocities are measured via the red-shift, which is basically the Doppler Effect applied to light waves. This was first used to measure a galaxy's velocity by Vesto Slipher around 1912, and was applied systematically by one of the most famous cosmologists, Edwin Hubble (Andrew, 2003).

Deyson (1982) is also of the view that the universe will collapse due to contraction, because of the tussle between momentum and gravity:

"By 100 million years before the big crunch, the space between individual galaxies will merge together....by 100 million years before the destruction of universe a big explosion will occur, stars will collide with each other and result into collapse and formation of *black holes* and in the final act, all content will shrink and compress into *singularity* (Dyson, 1982).

Many references are given in the Qur'an regarding the appointed term of the universe and the fixed place for every heavenly body. The sun is continuously radiating and is consuming large portion of his helium core. Its evolution process has finished so its earlier bond will automatically set its pull loose. This process will lead heavenly bodies to lose its gravitational pull and in Qur'an it is stated, that the universe will come to an end and is expanding continuously

“And it is We Who have constructed the heavens with might and verily, it is We Who are steadily expanding it.”^{xxxv}

Gravitational pull is actually a natural pull, and will be set loose which will lead to zigzag motion of heavenly bodies and drift away from each other with very high speed which will result in collision. Due to this collision, enormous amount of heat will be produced and will result to be a violent end for the universe. According to Abdullah Ali, the world will come to a violent end. It will be like an earth-quake and destroy all the marks on the land and everything will be changed except Allah (Abdullah, 1977).

Here the word *ratqan* was used to show that the total darkness will prevail. The other meaning of the word is infusion into a single entity. Taking together the word meanings it aptly offers^{xxxvi} a definition of the *singularity* or *black hole*. It is a gravitationally collapsed mass of colossal size. It begins with the collapse of massive stars which weigh 15 or more times than the size of the sun while as inward gravitational pull will cause stars to collapse in smaller size. The gravitational pull concentrates towards center and further breakdown of mass will result into a *supernova*. So the moment created at this stage is called *event horizon* and the net result will be total darkness determined by the concentration of mass into *black hole*.

“And when the trumpet is blown with a single blast. And the earth and the mountains are borne away and crushed with a single crushing.”^{xxxvii}

Due to an efficient cause and reality, a second blast will give rise to new universe as predicated in the Holy Qur'an. There a new heaven and earth will be observed. This truth was predicted by Prophet Mohammad (pbuh) as:

“verily Allah will create seven heavens and earths the like of them. The distance between the two consecutive heavens will be equal to the distance of lowest heaven and the earth. And He made their thickness like that. He also made the distance between every two earths like between the lowest heaven and earth (Heinen, 1982).”

As narrated by Ibn Mas'ood, Allah's messenger said:

The internal gap between heaven and the earth is the distance of 500 years. The diameter of every heaven is also as much as 500 years. And the internal gap between this heaven and that comes after it, is also as big as 500 years. Thus, up to the seventh heaven it is similar. And the distance between the seventh heaven and throne corresponds to all that.^{xxxviii}

The existence of the delicate cosmic laws in the evolution of the universe has forced the scientists to perceive the

evidence of divine purpose in creation as choice of law.^{xxxv} Scientific theories lead the belief that universe came into existence of its own that is, it is eternal. A good number of scientists decline this thought and conform the fact after thorough experiments and observations in different fields they vehemently opposed the theory of eternity of universe (Beignet, 1991).

British researcher Michal Beignet, Richard Leigh and Henry Lincoln hold different views than Darwinian followers. They are of the thought that, before Darwin probably one and half century ago science was not divorced from religion but was an essential part of it to prove its authenticity and the rivalry of religion, science compelled people to choose between the two (Vries, 1958). In this regard, the prominent physicist Max Planck from Germany said, that everyone regardless of his field, should study science seriously. Regarding the phrases on the door of temple of science “have faith” according to him, faith is an essential attribute of a scientist.^{xxxvi}

The prolific scholar and founder of physical astronomy, Johannes Kepler stated his strong belief on God and declared that we as poor and inadequate servants of God, have to see the greatness of God's wisdom and might and also submit ourselves to Him.^{xxxvii}

Robert Malthus asks how such a perfect and complex organism can emerge from single and tiny cell, and how a glorious human is created from a cell even smaller than the dot on the letter (Robert, 1995). The cosmological realities put forth in the Qur'an have unique academic character and has strong magnetism on research grounds. Information related to the creation of universe is scattered in the whole Qur'an, in a variety of ways. He encourages everyone for the quest of knowledge and prompts humans for the application of their intellect consecutively to comprehend^{xxxviii} the cause of cosmic creation. Detailed signs are forwarded for humans in holy Qur'an to receive admonition.^{xxxix} Qur'an is a complete code of guidance in every sphere of life without having any boundaries of time, place or nation. Men of belief are those who have positive mind-set and lead towards building up of human civilization without any distinction of region and superiority.^{xl}

O, Assembly of Jinn and men! If you have power to penetrate beyond the (all) zones of the heavens and the earth, then penetrate (them)! You will never penetrate them except with strength or authority (from Allah). (Al-Qur'an; 55:33).

Conclusion

The sciences nurtured by the Muslims like medieval cosmological sciences, are vernaculars of the unity of nature, reliance upon the Divine Source. This analysis is done to offer a broad sampling from each of the

philosophers incorporated here and to cover most of the major areas of philosophical study and Qur'anic scientism.

An ideological reading of twentieth century cosmology might count big bang cosmology as providing new support for theism, and alternatives such as steady-state cosmology as atheistic backlashes. The structure of the cosmology put forth by preceding survey of the cosmology in Islamic philosophy/scientific and Gnostic/ mystical texts suggests that mainstream religious literature is on the full-fledged subject of cosmological teachings; however this is certainly an effective generalization. But Quran put forth every aspect of cosmology in a scientific manner. From origin of heavenly bodies to their rotation, their nature and the commutation of the universe are discussed in the Quran. At contemporary times, a good number of scientists consider God's due role in the nature of universe in all its aspects.

Furthermore, researches with free mind will help to reach the physical and meta-physical philosophy of Qur'an. Qur'anic concept of universe unequivocally refers to cosmic laws which are true and need to be put forth in the coming scientific investigation. Qur'an is a challenging prejudiced philosophical thoughts that reject the divine role in the creation of different creations. Besides all knowledge with respect to God, Islamic cosmology represents the logical coherence of natural events though accepted now as the passive reflection of the absolute freedom of the Divine Act. But the purpose for this validity of the assimilation of cosmological sciences constructed upon Islamic world-view is that they share in mutual the condition by which the legitimacy of all sciences in Islam is judged, like interrelatedness and unity of the whole of creation and the absolute dependence, and one might say nothingness, of all beings before the Divine Unity.

A science in conformity with the spirit of Islam must have for its final goal the integration of all particulars in the universe. Modern Scientific investigation may need to invent more sophisticated equipment's to understand the divine purpose.

Conflict of interests

The author has not declared any conflict of interests.

REFERENCES

- Abdullah YA (1977). *The Glorious Qur'an*, New York, American Trust Publication, 1680.
- Adi S (2004). "Fakhr Al-Din Al-Razi on Physics and the Nature of the Physical World: A Preliminary Survey", *Islam & Science* 2, retrieved 2010-03-02.
- Afzalur R (1981). *Qur'anic Sciences*, London. The Muslim Schools Trust, 437 p.
- Al-Alousi HM (1980). *A Dialogue between philosophers and Mutakallimun*, Beirut: Arab Foundation for Studies, 2nd ed., P 59.
- Altaie MB (2005). *Time in Islamic Kalam*, A paper submitted to the conference on Einstein, God and time at Oxford University. 5 p.
- Amedeo B (2007). *The Music of the Big Bang, The Cosmic Microwave Background and the New Cosmology*, Italia, Springer-Verlag, IX.
- Andrew L (2003). *An Introduction to Modern Cosmology*, Chichester, John Wiley & Sons Ltd, 18 p.
- Andrew L (2003). *An Introduction to modern cosmology*, London, University of Sussex. 26p.
- Angelica N (2001), *Cosmology*, Encyclopedia of Qur'an, Boston Kohn, Jane Demean, 1/441.
- Anwar A (1987). *Qur'an the fundamental law of Human beings*, Karachi, Hamdard Foundation press, 1/168.
- Arjomand K (1997). "The emergence of scientific modernity in Iran: controversies surrounding astrology and modern astronomy in the mid-nineteenth century", *Iranian Stud.* 30(1):5-24.
- Beignet M (1991). *Richard Leigh, Henry Lincoln: The Messianic legacy*, London, Gorge, Books pp. 177-178.
- Bernard RG (1972). "Theory and Observation in Medieval Astronomy", *Isis* 63(1):39-47; 40-41.
- Chad M (2009). *Introducing Philosophy of Religion*, New York, Taylor & Francis, pp. 73-77.
- Dallal A (1999). "Science, Medicine and Technology", in Esposito, John, *The Oxford History of Islam*, New York, Oxford University Press, 164 p.
- David H (1998). *Dialogues Concerning Natural Religion*, ed., Richard H. Hopkin, 2nd ed. Cambridge: Hackett Publishing, Part IX, 56 p.
- David L (2000). *The Dying God, the Hidden History of Western Civilization*, Lincoln NE, Writers Club Press. pp. 15-35.
- Dick T (2002). *Lost Discoveries, The Ancient Roots of Modern Science—from the Babylonians to the Maya*, New York, Simon & Schuster, 158 p.
- Dyson F (1982). *Restless Universe*, Hen-best, pp. 20-24.
- George S (1994). "Early Arabic Critique of Ptolemaic Cosmology: A Ninth-Century Text on the Motion of the Celestial Spheres", *J. Hist. Astron.* 25:116.
- Goodman LE (1985). *An Introduction to Medieval Islamic Philosophy*, London, Cambridge University Press, pp.20-21.
- Hamid WA (2013). *A Concise History of Afghanistan in 25 Volumes: Trafford Publishing*, 1:139.
- Hattstein M (2008). *Ancient Near Eastern Mythology in Von Laffert, J. (ed.) Essential Visual History of world Mythology*, Washington, National Geographical Society.
- Hawking S (1988). *A brief History of time from the Big Bang to Black Holes*, New York, Bantam Books. 124 p.
- Heinen AM (1982). *Islamic cosmology: A study of As Sayutis, Beriut, al Haya as Sumiya*, 138 p.
- Henbest N, Couper H (1994). *The guide to the galaxy*, New York, Cambridge University Press, 31p.
- Hilbert D (1964). *On the Infinite in Philosophy of Mathematics*, (ed. and Intro. by P. Benacerraf), Prentice Hall, 151 p.
- Janson JG (1980). *The Interpretation of Quran in Modern Egypt*, Leiden E. J. Brill, 55 p.
- John C (1998). "al-Razi, Fakhr al-Din (1149-1209)", *Routledge Encyclopedia of Philosophy*. pp. 27-39.
- Kamali MH (2006). *Reading the signs: A Qur'anic Perspective on Thinking, Islam and Science* 4(2):141-164.
- Lane EW (1984). *Arabic-English Lexicon*, Islamic Text Society, Cambridge 56 p.
- Manzoor A (1999). *Scientific Significances in selected Qur'anic verses*, Riyadh, Department of Culture and Publication. pp. 21-22.
- Maurice B (1977). *The Qur'an, The Bible and Science*, Paris, Seghas pp. 159-161.
- Maurizio G (1998). *Birth of the Universe in string Cosmology*, Fourth Paris Cosmology Colloquium, eds. H.J. De Vega and N. Sanchez, Singapore, World Scientific, 85 p.
- Maurizio G (2008). *The Universe Before The Big Bang*, Berlin, Springer-Versely, 3 p.
- Mirza TA (1998). *Revelation, Rationality, Knowledge and Truth*, Islam International Publications Ltd., 213p.
- Mohamed M (2000). *Great Muslim Mathematicians*, Penerbit UTM, pp. 49-50.

- Muammer I (2002). *Fakhr al-Dīn al-Rāzī and Thomas Aquinas on the question of the eternity of the world*, Brill Publishers, 79 p.
- Muhammad G (2000). *Tahafut al-Falāsifah*.ed. Trans. Michael E. Marmura, the incoherence of the philosophers, Provo, Utah, Brigham Young University Press. pp. 15-16.
- Numazawa K (n.d). *The Zcultural-Historical Background of Myths on the Separation of sky and Earth in Dundas, A. (ed.) Sacred Narratives: Reading in the theory of Myths*, Los Angles: University of California Press.
- Ragep FJ (2001a). "Freeing Astronomy from Philosophy: An Aspect of Islamic Influence on Science", *Osiris*, 2nd Series 16, Science in Theistic Contexts: Cognitive Dimensions. pp. 49-64; 66-71.
- Ragep FJ (2001b). "Tusi and Copernicus: The Earth's Motion in Context", *Science in Context*, Cambridge University Press. 14(1-2):145-163.
- Rashed R (2007). "The Celestial Kinematics of Ibn al-Haytham", *Arabic Sciences and Philosophy*, Cambridge University Press 17:7-55.
- Robert M (1995). *Unravelling the Miracle of God*, London Bridge, 8 p.
- Ross H (1995). *The Creator and the Cosmos*. Nav Press, Colorado Springs, CO, chapters 14 and 15.
- Salim A (2004). *Constellations, Fixed Stars, and the Zodiac in The Islamic Astronomy*, Manchester, Foundation for science Technology and Civilization. pp. 15-25.
- Seyyed H (1993). *An introduction to Islamic cosmological doctrines*. Albany, State University of New York Press, 68, Sabih Ahmad Kamali (1963), *(The Incoherence of Philosophers, Lahore: Pakistan Philosophical Congress. pp. 90-91.*
- Sharif MM (1966). *A History of Muslim Philosophy*, Otto Harrassowitz, Wiesbaden. 11:804.
- Taneli K (2000). "Possible Worlds in the Tahafut al-Falāsifa: Al-Ghazali on Creation and Contingency", *J. Hist. Philos.* 38(4):479-502.
- Vries JD (1958). *Essentials of physical science*, Grand, W.M.B. Eerdmans pub. Co., 15p.
- William C (1979). "The Kalam Cosmological argument", London, The Macmillan Press Ltd., 63 p.
- Wolfson H (1976). *The Philosophy of the Kalam*, (Harvard University Press, pp. 359-372.
-
- ⁱ Al-Quran; 21:30
- ⁱⁱ Al-Quran, 41:11-12
- ⁱⁱⁱ al Qur'an; 65:12, al Qur'an; 71:15, al Qur'an; 23:17
- ^{iv} Encyclopedia of Holy Qur'an (2001), Heavens and sky, Leiden, Mc Auliffe, Brill V. I (A-D/410)
- ^v Al-Baqarah:117, Az-Zumar:62
- ^{vi} Al-'Ankabūt; 29: 19-20
- ^{vii} William Craig re-devised this doctrine in a more modern context; "The Kalām Cosmological argument", 63.
- ^{viii} al Qur'an; 7:54
- ^{ix} al Qur'an; 70:4, al Qur'an; 22:47
- ^x Al-Qur'an; 79:27-30
- ^{xi} W.L. CRAIG 2002, (ed.), *Philosophy of Religion: a Reader and Guide*, Rutgers, University Press, New Brunswick, N.J., 7,69, W.L. CRAIG 2000, *The Kalam Cosmological Argument*, Wipf and Stock Publishers, Eugene, Oregon, ix.
- ^{xii} L.E. Goodman, Op. Cit., 21
- ^{xiii} Ibn al-'Arabi, *Futūḥ al-Makkiyyn*, Vol., Cairo, 1329, 378
- ^{xiv} Ibid., p. 125
- ^{xv} Ibid., p. 57
- ^{xvi} al-Kindi, *Kitab al-Falāsifa 'ül.ūla*, ed. Abū Ridha, Vo!., I, Cairo, 119, 143;
- ^{xvii} Qur'an:59:22
- ^{xviii} Muhammad Marmaduke Pickthal 2002, *The Glorious Quran*, Translation of Surah Hasher: Qur'anic verse: 22
- ^{xix} Zakariya Ibn Muhammad Abu Yahya al-Qazwini, (n.d.), *Ajaib al Makhluqat wa gharaib al-mawjudat*, USA, National Library of Medicine, 45-47
- ^{xx} Livingston, John W. (1971). "Ibn Qayyim al-Jawziyyah: A Fourteenth Century Defense against Astrological Divination and Alchemical Transmutation". *Journal of the American Oriental Society* 91 (1): 96-103
- ^{xxi} Josep Puig Montada (2007), "Ibn Bajja" *Encyclopedia of Philosophy*. Stanford, 201
- ^{xxii} Anwar Ali op. cit., I/169-70
- ^{xxiii} al Qur'an; 42:30, al Qur'an; 65:13
- ^{xxiv} Luqman:10
- ^{xxv} Surah Al-Rad:02, al-Fatir-13, Az-Zumur-05, al-Yasin: 38-40, Luqman:29
- ^{xxvi} G. Wiet, et.al. (1975), *History of Mankind*, The Great Medieval Civilization, vol.2, 649
- ^{xxvii} Abu ar-Rayhn al-Biruni, Alberuni's (1888), *India: an Account of the Religion, Philosophy, Literature, Geography, Chronology, Astronomy, Customs, Laws and Astrology of India (an English Edition)*, trans. and ed. by Edward C. Sachau, (London: Triibner & Co., 2 Vols., Vol. I, 225
- ^{xxviii} Al-Qur'an; 25:61
- ^{xxix} Al-furqan-61, Nuh-15-16, an Nahl-12, an Najm-01, at-Tariq-1-3, an-Naba - 12-13
- ^{xxx} Al-Quran Surah, At-Tariq- 3
- ^{xxxi} Al-Qur'an; 51:47,13:2,19, (35:13),(55:7), (21:104), (39:67), (73:14) (56:9), (84:3) (75:8-9) (79:6), (52:9-10), (77:8,10), (78:20, 81:1-3), (82:2, 3) (22:1), (46:3)
- ^{xxxii} Lane, E.W. *Arabic English Lexicon*, OP. Cit. 205
- ^{xxxiii} Al-Qur'an; 39:68-69, 69:13-16
- ^{xxxiv} Hawking Stephen; op. cit., 184
- ^{xxxv} Muhammad Ibn Ishaq Ibn Khuzaymah, *Kitab al Tawhid wa Ithbat Sifat Rabb*, Dar al Rushd, Shahwan, 1988, 105.
- ^{xxxvi} Unit Simsek, Kantian, Dogusu, (n.p.) *Big Bang, The Birth of Universe*, 155.
- ^{xxxvii} Timothy R. Stout, *Tim Stout's Creation Science*, 26-29
- ^{xxxviii} Al-Qur'an; 3:190,30: 24-28
- ^{xxxix} Al-Qur'an; 6:126
- ^{xl} Al-Qur'an; 27:44



Philosophical Papers and Reviews

Related Journals Published by Academic Journals

- African Journal of History and Culture
- Journal of Media and Communication Studies
- International Journal of English and Literature
- Educational Research and Reviews
- Journal of African Studies and Development
- Journal of Physical Education and Sport Management

academicJournals