**Seminar on Islam and Globalization: Challenges and Opportunities**

# Islam and the Global Civilization

Islam is a religion based upon the surrender to God who is One. The very name of the religion, AL-ISLAM in Arabic, means at once submission and peace, for it is in submitting to God's Will that human beings gain peace in their lives in this world and in the hereafter.

The Quran is the central sacred reality of Islam. The sound of the Quran is the first and last sound that a Muslim hears in this life. As the direct Word of God and the embodiment of God's Will, the Quran is considered as the guide par excellence for the life of Muslims. It is the source of all Islamic doctrines and ethics. Both the intellectual aspects of Islam and Islamic Law have their source in the Quran. Perhaps there is no book revered by any human collectivity as much as the Quran is revered by Muslims.

Throughout all its chapters and verses, the Quran emphasizes the significance of knowledge and encourages Muslims to learn and to acquire knowledge not only of God's laws and religious injunctions, in a language rich in its varied terminology, to the importance of seeing, contemplating, and reasoning about the world of creation and its diverse phenomena. It places the gaining of knowledge as the highest religious activity, one that is most pleasing in God's eyes. That is why wherever the message of the Quran was accepted and understood, the quest for knowledge flourished.

Prior to the coming of Islam to Arabia, Arabs followed a form of idolatry. Each tribe keeping its own idols at the Ka'bah, the cubical structure built originally by Abraham to celebrate the glory of the One God. But the monotheistic message of Abraham had long become forgotten among the general population of the Arabian Peninsula. Prophet Muhammad was born in Makkah in 510 AD and started his Islamic mission in 610 AD when he started receiving revelation in the cave of Hira in its outskirts. He continued to preach in Makkah till Hijrat to Madinah in 622 AD till his death in 632 AD.

From the cities of Makkah and Madinah in the Arabian Desert, the message of Islam went forth with electrifying speed. Within half a century of the Prophet Muhammad's (peace be upon him) death, Islam had spread to three continents. How was this achieved? Certain Westerners profess that Islam was spread through the sword in these regions and further. This is a misconception, because Islam is not a religion of the sword nor did it spread primarily by means of war.

Islam was propagated through peaceful missionary work. The few ghazwahs that did take place were actually defensive in nature or cases of avoidance of war. Aggressive situations were created by the warring Quraysh tribe which the Prophet of Islam and his companions had to defend on four occasions – Badr, Uhud, Hunayn and to an extent in Khaybar. The remaining, so called 80 plus ghazwahs, were actually cases of avoidance of wars such as Ghazwah-e-Khandaq during which time a trench was dug outside Madinah to ensure that actual battle did not take place.

Even in Arabia, where a crude form of idolatry was rampant, there was no coercion to accept Islam. The message was spread peacefully through missionary work. Even the Christians and Jews were not forced to convert. Outside of Arabia where Islam spread in response to the aggression of the aggression of the Byzantine and Sassanid Empire through which vast lands came under Islam, this was not by force of the sword but by the ideological ascendency (*izharuddin*) of the new religion that appealed to the majority. It was faith in One God and emphasis upon His Mercy that brought vast numbers of people into the fold of Islam. The new religion did not compel people to convert. Many continued to remain Jews and Christians. This is fact borne out by history as many of the translations institutions that were established in Muslim lands took the assistance of Jews and Christians. To this day important communities of the followers of these faiths are found in Muslim lands.

Moreover, the spread of Islam was not limited to its miraculous early expansion outside of Arabia. During later centuries the Turks embraced Islam peacefully as did a large number of the people of the Indian subcontinent and the Malay-speaking world. In Africa also, Islam has spread during the past two centuries even under the mighty

power of European colonial rulers. Today Islam continues to grow not only in Africa but also in Europe and America where Muslims now comprise a notable minority.

## Islam and the Global Civilization

Islam was destined to become a world religion and to create a civilization which stretched from one end of the globe to the other. Already during the early Muslim caliphates, first the Arabs, then the Persians and later the Turks set about to create classical Islamic civilization. Later, in the 13th century, both Africa and India became great centers of Islamic civilization and soon thereafter Muslim kingdoms were established in the Malay-Indonesian world while Chinese Muslims flourished throughout China.

Islam is a religion for all people from whatever race or background they might be. That is why Islamic civilization is based on a unity which stands completely against any racial or ethnic discrimination. Such major racial and ethnic groups as the Arabs, Persians, Turks, Africans, Indians, Chinese and Malays in addition to numerous smaller units embraced Islam and contributed to the building of Islamic civilization. Moreover, Islam was not opposed to learning from the earlier civilizations and incorporating their science, learning, and culture into its own world view, as long as they did not oppose the principles of Islam. Each ethnic and racial group which embraced Islam made its contribution to the one Islamic civilization to which everyone belonged. The sense of brotherhood and sisterhood was emphasized to such an extent that it overcame all local attachments to a particular tribe, race, or language-all of which became subservient to the universal brotherhood and sisterhood of Islam.

The global civilization thus created by Islam permitted people of diverse ethnic backgrounds to work together in cultivation various arts and sciences. Although the civilization was profoundly Islamic, even non-Muslim "People of the Book" participated in the intellectual activity whose fruits belonged to everyone. The scientific climate was reminiscent of the present situation in America where scientists and men and

women of learning from all over the world are active in the advancement of knowledge which belongs to everyone.

The global civilization created by Islam also succeeded in activating the mind and thought of the people who entered its fold. P K Hitti in his book *History of the Arabs* has called the companions of the Prophet of Islam as 'A Nation of Heroes'. This is because through them the religion of Islam became a beacon of light for the rest of the world. The Arabs, thus, became the torch-bearers of science and learning to the rest of the world in the traditional age. The Persians who had created a great civilization before the rise of Islam nevertheless produced much more science and learning in the Islamic period than before. The same can be said of the Turks and other peoples who embraced Islam. The religion of Islam was itself responsible not only for the creation of a world civilization in which people of many different ethnic backgrounds participated, but it played a central role in developing intellectual and cultural life on a scale not seen before.

For some eight hundred years Arabic remained the major intellectual and scientific language of the world. During the centuries following the rise of Islam, Muslim dynasties ruling in various parts of the Islamic world bore witness to the flowering of Islamic culture and thought. In fact this tradition of intellectual activity was eclipsed only at the beginning of modern times as a result of the weakening of faith among Muslims combined with external domination. This was primarily due to the fact that Muslims had stopped intellectual activity and was not imbibing the spirit of the new age brought about by the scientific revolution. If they realize that it was Islam that lay the foundation for this they would speedily accept the knowledge of the new age. In the twentieth century along with gaining political independence the Muslims have also started treading towards the scientific knowledge and are now have started treading the path of intellectual development in the secular fields.

When the rule of the "rightly guided" caliphs, who hold a special place of respect in the hearts of the Muslims came to an end, the Umayyad caliphate established in 661 AD was to last for about a century. During this time Damascus became the Capital of an

Islamic world which stretched from the western borders of China to southern France. Not only did the spreading of Islam continue during this period through North Africa to Spain and France in the West and to Sind, Central Asia and Transoxiana in the East, but the basic social and legal institutions of the newly founded Islamic world were established.

The Abbasids, who succeeded the Umayyads in 750 AD, shifted the capital to Baghdad which soon developed into an incomparable center of learning and culture as well as the administrative and political hear of a vast world. They ruled for over 500 years but gradually their power waned and they remained only symbolic rulers bestowing legitimacy upon various sultans and princes who wielded actual military power. The Abbasid caliphate was finally abolished when Hulagu, the Mongol ruler, captured Baghdad in 1258, destroying much of the city including its incomparable libraries.

While the Abbasids ruled in Baghdad, a number of powerful dynasties such as the Fatimids, Ayyubids and Mamluks held power in Egypt, Syria and Palestine. The most important event in this area as far as the relation between Islam and the Western world was concerned was the series of Crusades declared by the Pope and espoused by various European kings. The purpose, although political, was outwardly to recapture the Holy Land and especially Jerusalem for Christianity. Although there was at the beginning some success and local European rule was set up in parts of Syria and Palestine, Muslims finally prevailed and in 1187 Saladin, the great Muslim leader, recaptured Jerusalem and defeated the Crusaders.

When the Abbasids captured Damascus, one of the Umayyad princes escaped and made the long journey from there to Spain to found Umayyad rule there, thus beginning the golden age of Islam in Spain. Cordoba was established as the capital and soon became Europe's greatest city not only in population but from the point of view of its cultural and intellectual life. The Umayyads ruled over two centuries until they weakened and were replaced by local rulers.

Meanwhile in North Africa, various local dynasties held sway until two powerful Berber dynasties succeeded in uniting much of North Africa and also Spain in the 12th and 13th centuries. After them this area was ruled once again by local dynasties such as the Sharifids of Morocco who still rule in that country. As for Spain itself, Muslim dynasty was defeated in Granada in 1492 thus bringing nearly eight hundred years of Muslim rule in Spain to an end.

## The Attitude of the Quran and the Prophet Towards Knowledge:

*"He has taught you that which (heretofore) you knew not" (Al-Quran Chapter II: 239)*

Islam is a religion based upon knowledge for it is ultimately knowledge of the Oneness of God combined with faith and total commitment to Him that saves man. The text of the Quran is replete with verses inviting man to use his intellect, to ponder, to think and to know, for the goal of human life is to discover the Truth which is none other than worshipping God in His Oneness. The Hadith literature is also full of references to the importance of knowledge. Such sayings of the Prophet as "Seek knowledge even in China", "Seek knowledge from the cradle to the grave", and Verily the men of knowledge are the inheritors of the prophets", have echoed throughout the history of Islam and incited Muslims to seek knowledge wherever it might be found. During most of its history, Islamic civilization has been witness to a veritable celebration of knowledge. That is why every traditional Islamic city possessed public and private libraries and some cities like Cordoba and Baghdad boasted of libraries with over 400,000 books. Such cities also had bookstores, some of which sold a large number of titles. That is also why the scholar has always been held in the highest esteem in Islamic society.

As Islam spread northward into Syria, Egypt, and the Persian Empire, it came face to face with the sciences of antiquity whose heritage had been preserved in centers which now became a part of the Islamic world. Alexandria had been a major center of sciences and learning for centuries. The Greek learning cultivated in Alexandria was

opposed by the Byzantines who had burned its library long before the advent of Islam. The tradition of Alexandrian learning did not die, however. It was transferred to Antioch and from there farther east to such cities as Edessa by eastern Christians who stood in sharp opposition to Byzantium and wished to have their own independent centers of learning. Moreover, the Persian king, Shapur I, had established Jundishapur in Persia as a second great center of learning matching Antioch. He even invited Indian physicians and mathematicians to teach in this major seat of learning, in addition to the Christian scholars who taught in Syriac as well as the Persians whose medium of instruction was Pahlavi.

Once Muslims established the new Islamic order during the Umayyad period, they turned their attention to these centers of learning which had been preserved and sought to acquaint themselves with the knowledge taught and cultivated in them. They therefore set about with a concerted effort of translate the philosophical and scientific works which were available to them from not only Greek and Syriac (which was the language of eastern Christian scholars) but also from Pahlavi, the scholarly language of pro-Islamic Persia, and even from Sanskrit. Many of the accomplished translators were Christian Arabs such as Hunayn ibn Ishaq, who was also an outstanding physician, and others Persians such as Ibn Muqaffa', who played a major role in the creation of the new Arabic prose style conductive to the expression of philosophical and scientific writing. The great movement of translation lasted from the beginning of the 8th to the end of the 9th century, reaching its peak with the establishment of the House of Wisdom (Bayt al-hikmah) by the caliph al-Ma'mun at the beginning of the 9th century.

The result of this extensive effort of the Islamic community to confront the challenge of the presence of the various philosophies and sciences of antiquity and to understand and digest them in its own terms and according to its own world view was the translation of a vast corpus of writings into Arabic.

The Muslims did not translate the scientific and philosophical works of other civilizations out of fear of political or economic domination but because the structure

of Islam itself is based upon the primacy of knowledge. Nor did they consider these forms of knowing as "un-Islamic" as long as they confirmed the doctrine of God's Oneness which Islam considers to have been at the heart of every authentic revelation from God. Once these sciences and philosophies confirmed the principle of Oneness, the Muslims considered them as their own. They made them part of their world view and began to cultivate the Islamic sciences based on what they had translated, analyzed, criticized, and assimilated, rejecting what was not in conformity with the Islamic perspective.

The Muslim mind has always been attracted to the mathematical sciences in accordance with the "abstract" character of the doctrine of Oneness which lies at the heart of Islam. The mathematical sciences have traditionally included astronomy, mathematics itself and much of what is called physics today. In astronomy the Muslims integrated the astronomical traditions of the Indians, Persians, the ancient Near East and especially the Greeks into a synthesis which began to chart a new chapter in the history of astronomy from the 8th century onward. The Almagest of Ptolemy, whose very name in English reveals the Arabic origin of its Latin translation, was thoroughly studied and its planetary theory criticized by several astronomers of both the eastern and western lands of Islam leading to the major critique of the theory by Nasir al-Din al-Tusi and his students, especially Qutb al-Din al-Shirazi, in the 13th century.

The Muslims also observed the heavens carefully and discovered many new stars. The book on stars of 'Abd al-Rahman al-Sufi was in fact translated into Spanish by Alfonso X el Sabio and had a deep influence upon stellar toponymy in European languages. Many star names in English such as Aldabran still recall their Arabic origin. The Muslims carried out many fresh observations which were contained in astronomical tables called Zij. One of the acutest of these observers was al-Battani whose work was followed by numerous others. The Zij of al-Ma'mun observed in Baghdad, the Hakimite Zij of Cairo, the Toledan Tables of al-Zarqali and his associated, the II-Khanid Zij of Nasir al-Din al-Tusi observed in Maraghah, and the Zij of Ulugh-Beg from Samarqand are among the most famous Islamic astronomical tables. They wielded a great deal of

influence upon Western astronomy up to the time of Tycho Brahe. The Muslims were in fact the first to create an astronomical observatory as a scientific institution, this being the observatory of Maraghah in Persia established by al-Tusi. This was indirectly the model for the later European observatories. Many astronomical instruments were developed by Muslims to carry out observation, the most famous being the astrolabe. There existed even mechanical astrolabes perfected by Ibn Samh which must be considered as the ancestor of the mechanical clock.

Astronomical observations also had practical applications including not only finding the direction of Makkah for prayers, but also devising almanacs (the word itself being of Arabic origin). The Muslims also applied their astronomical knowledge to questions of time-keeping and the calendar. The most exact solar calendar existing to this day is the Jalali calendar devised under the direction of 'Umar Khayyam in the 12th century and still in use in Persia and Afghanistan.

As for mathematics proper, like astronomy, it received its direct impetus from the Quran not only because of the mathematical structure related to the text of the Sacred Book, but also because the laws of inheritance delineated in the Quran require rather complicated mathematical solutions. Here again Muslims began by integrating Greek and Indian mathematics. The first great Muslim mathematician, al-Khwarazmi, who lived in the 9th century, wrote a treatise on arithmetic whose Latin translation brought what is known as Arabic numerals to the West. To this day guarismo, derived from his name, means figure or digit in Spanish while algorithm is still used in English. Al-Khwarzmi is also the author of the first book on algebra. This science was developed by Muslims on the basis of earlier Greek and Indian works of a rudimentary nature. The very name algebra comes from the first part of the name of the book of al-Khwarazmi, entitled Kitab al-jabr wa'l-muqabalah. Abu Kamil al-Shuja' discussed algebraic equations with five unknowns. The science was further developed by such figures as al-Karaji until it reached its peak with Khayyam who classified by kind and class algebraic equations up to the third degree.

The Muslims also excelled in geometry as reflected in their art. The brothers Banu Musa who lived in the 9th century may be said to be the first outstanding Muslim geometers while their contemporary Thabit ibn Qurrah used the method of exhaustion, giving a glimpse of what was to become integral calculus. Many Muslim mathematicians such as Khayyam and al-Tusi also dealt with the fifth postulate of Euclid and the problems which follow if one tries to prove this postulate within the confines of Eucledian geometry.

Another branch of mathematics developed by Muslims is trigonometry which was established as a distinct branch of mathematics by al-Biruni. The Muslim mathematicians, especially al-Battani, Abu'l-Wafa', Ibn Yunus and Ibn al-Haytham, also developed spherical astronomy and applied it to the solution of astronomy and applied it to the solution of astronomical problems.

The love for the study of magic squares and amicable numbers led Muslims to develop the theory of numbers. Al-Khujandi discovered a particular case of Fermat's theorem that "the sum of two cubes cannot be another cube", while al-Karaji analyzed arithmetic and geometric progressions such as: 13+23+33+...+n3=(1+2+3+...+n)2. Al-Biruni also dealt with progressions while Ghiyath al-Din Jamshid al-Kashani brought the study of number theory among Muslims to its peak.

In the field of physics the Muslims made contributions in especially three domains. The first was the measurement of specific weights of objects and the study of the balance following upon the work of Archimedes. In this domain the writings of al-Biruni and al-Khazini stand out. Secondly they criticized the Aristotelian theory of projectile motion and tried to quantify this type of motion. The critique of Ibn Sina, Abu'l-Barakat al-Baghdadi, Ibn Bajjah and others led to the development of the idea of impetus and momentum and played an important role in the criticism of Aristotelian physics in the West up to the early writings of Galileo. Thirdly there is the field of optics in which the Islamic sciences produced in Ibn al-Haytham (the Latin Alhzen) who lived in the 11th century, the greatest student of optics between Ptolemy and Witelo. Ibn al-Haytham's main work on optics, the Kitab al-manazir, was also well known in the West as

Thesaurus opticus. Ibn al-Haytham solved many optical problems, one of which is named after him, studied the property of lenses, discovered the Camera Obscura, explained correctly the process of vision, studied the structure of the eye, and explained for the first time why the sun and the moon appear larger on the horizon. His interest in optics was carried out two centuries later by Qutb al-Din al-Shirazi and Kamal al-Din al-Farisi. It was Qutb al-Din who gave the first correct explanation of the formation of the rainbow.

It is important to recall that in physics as in many other fields of science the Muslims observed, measured and carried out experiments. They must be credited with having developed what came to be known later as the experimental method.

The greatest of all Muslim physicians, however, was Ibn Sina who was called "the prince of physicians" in the West. He synthesized Islamic medicine in his major masterpiece, al-Qanun fi'ltibb (The Canon of Medicine), which is the most famous of all medical books in history. It was the final authority in medical books in history. It was the final authority in medical matters in Europe for nearly six centuries and is still taught wherever Islamic medicine has survived to this day in such land as Pakistan and India. Ibn Sina discovered many drugs and identified and treated several ailments such as meningitis but his greatest contribution was in the philosophy of medicine. He created a system of medicine within which medical practice could be carried out and in which physical and psychological factors, drugs and diet are combined.

After Ibn Sina, Islamic medicine divided into several branches. In the Arab world Egypt remained a major center for the study of medicine, especially ophthalmology which reached its peak at the court of al-Hakim. Cairo possessed excellent hospitals which also drew physicians from other lands including Ibn Butlan, author of the famous Calendar of Health, and Ibn Nafis who discovered the lesser or pulmonary circulation of the blood long before Michael Servetus, who is usually credited with the discovery.

As for the western lands of Islam including Spain, this area was likewise witness to the appearance of outstanding physicians such as Sa'd al-Katib of Cordoba who composed

a treatise on gynecology, and the greatest Muslim figure in surgery, the 12th century Abu'l-Qasim al-Zahrawi (the Latin Albucasis) whose medical masterpiece Kitab al-tasrif was well known in the West as Concessio. One must also mention the Ibn Zuhr family which produced several outstanding physicians and Abu Marwan 'Abd al-Malik who was the Maghrib's most outstanding clinical physician. The well known Spanish philosophers, Ibn Tufayl and Ibn Rushd, were also outstanding physicians.

Islamic medicine continued in Persia and the other eastern lands of the Islamic world under the influence of Ibn Sina with the appearance of major Persian medical compendia such as the Treasury of Sharaf al-Din al-Jurjani and the commentaries upon the Canon by Fakhr al-Din al-Razi and Qutb al-Din al-Shirazi. Even after the Mongol invasion, medical studies continued as can be seen in the work of Rashid al-Din Fadlallah, and for the first time there appeared translations of Chinese medicine and interest in acupuncture among Muslims. The Islamic medical tradition was revived in Safavid period when several diseases such as the first time and much attention was paid to pharmacology. Many Persian doctors such as 'Ayn al-Mulk of Shiraz also traveled to India at this time to usher in golden age of Islamic medicine in the subcontinent and to plant the seed of the Islamic medical tradition which continues to flourish to this day in the soil of that land.

The Ottoman world was also an arena of great medical activity derived from the heritage of Ibn Sina. The Ottoman Turks were especially known for the creation of major hospitals and medical centers. These included not only units for the care of the physically ill, but also wards for patients with psychological ailments. The Ottomans were also the first to receive the influence of modern European medicine in both medicine and pharmacology.

In mentioning Islamic hospitals it is necessary to mention that all major Islamic cities had hospitals; some like those of Baghdad were teaching hospitals while some like the Nasiri hospital of Cairo had thousands of beds for patients with almost any type of illness. Hygiene in these hospitals was greatly emphasized and al-Razi had even written a treatise on hygiene in hospitals. Some hospitals also specialized in particular diseases

including psychological ones. Cairo even had a hospital which specialized in patients having insomnia.

Islamic medical authorities were also always concerned with the significance of pharmacology and many important works such as the Canon have whole books devoted to the subject. The Muslims became heir not only to the pharmacological knowledge of the Greeks as contained in the works of Dioscorides, but also the vast herbal pharmacopias of the Persians and Indians. They also studied the medical effects of many drugs, especially herbs, themselves. The greatest contributions in this field came from Maghribi scientists such as Ibn JulJul, Ibn al-Salt and the most original of Muslim pharmacologists, the 12th century scientist, al-Ghafiqi, whose Book of Simple Drugs provides the best descriptions of the medical properties of plants known to Muslims. Islamic medicine combined the use of drugs for medical purposes with dietary considerations and a whole lifestyle derived from the teachings of Islam to create a synthesis which has not died out to this day despite the introduction of modern medicine into most of the Islamic world.

Muslims also imported certain kinds of technology from the Far East such as paper which they brought from China and whose technology they later transmitted to the West. They also developed many forms of technology on the basis of earlier existing knowledge such as the metallurgical art making the famous Damascene swords, and art which goes back to the making of steel several thousand years before on the Iranian Plateau. Likewise Muslims developed new architectural techniques of vaulting, methods of ventilation, preparations of dyes, techniques of weaving, technologies related to irrigation and numerous other forms of technology, some of which survive to this day.

In general Islamic civilization emphasized the harmony between man and nature as seen in traditional design of Islamic cities. Maximum use was made of natural elements and forces, and men built in harmony with, not in opposition to nature. Some of the Muslim technological feats such as dams which have survived for over a millennium, domes which can withstand earthquakes, and steel which reveals

incredible metallurgical know-how, attest to the exceptional attainment of Muslims in many fields of technology. In fact it was a vastly superior technology that first impressed the Crusaders in their unsuccessful attempt to capture the Holly Land and much of this technology was brought back by the Crusaders to the rest of Europe.

One of the major achievements of Islamic civilization is architecture which combines technology and art. The great masterpieces of Islamic architecture from the Cordoba Mosque and the Dome of Rock in Jerusalem to the Taj Mahal in India display this perfect wedding between the artistic principles of Islam and remarkable technological know-how. Much of the outstanding medieval architecture of the West is in fact indebted to the techniques of Islamic architecture. When one views the Notre Dame in Paris or some other Gothic cathedral, one is reminded of the building techniques which traveled from Muslim Cordoba northward. Gothic arches as well as interior courtyards' of so many medieval and Renaissance European structures remind the viewer of the Islamic architectural examples from which they originally drew. In fact the great medieval European architecture can also be directly experienced in the Moorish style found not only in Spain and Latin America, but in the southwestern United States as well.

## The Influence of Islamic Science and Learning upon the West

The oldest university in the world which is still functioning is the eleven hundred-year-old Islamic University of Fez, Morocco, known as the Qarawiyyin. This old tradition of Islamic learning influenced the West greatly through Spain. In this land where Muslims, Christians and Jews lived for the most part peacefully for many centuries, translations began to be made in the 11th century mostly in Toledo of Islamic works into Latin often through the intermediary of Jewish scholars most of whom knew Arabic and often wrote in Arabic. As a result of these translations, Islamic thought and through it much of Greek thought became known to the West and Western schools of learning began to flourish. Even the Islamic educational system was emulated in Europe and to this day the term chair in a university reflects the Arabic Kursi (literally seat) upon

which a teacher would sit to teach his students in the Madrasah (school of higher learning). As European civilization grew and reached the high Middle Ages, there was hardly a field of learning or a form of art, whether it was literature or architecture, where there was not some influence of Islam present.

Islamic civilization, championed the cause of science and religious education, law and literature as worthy endeavors. It even cultivated new and challenging branches of foreign language, such as philosophy, physics, chemistry, mathematics, trigonometry, algebra, botany and medicine and made significant contributions to these branches of human sciences.

As a result Islamic learning became in this way part and parcel of Western civilization. Unfortunately with the advent of the Renaissance and scientific, industrial revolution came the endeavor of the West for political domination to find raw material for their factories and customers of their finished goods. As a result the Muslim world and the West came into confrontation and they turned against one another and forgot their long relation, one based on intellectual respect despite religious opposition.

*"Most surely man is in loss, except those who believe and do good, and enjoin on each other truth, and enjoin of each other patience" (Qurna, Surah CIII:2-3).*

In seeking to live successfully in the modern world, in independence and according to Islamic principles, Muslim countries have been emphasizing a great deal the significance of the role of education and the importance of mastering Western science and technology. Already in the 19th century, certain Muslim countries such as Egypt, Ottoman Turkey and Persia established institutions of higher learning where the modern sciences and especially medicine were taught. During this century educational institutions at all levels have proliferated throughout the Islamic world. Nearly every science ranging from mathematics to biology as well as various fields of modern technology are taught in these institutions and some notable scientists have been produced by the Islamic world, men and women who have often combined education in these institutions with training in the West.

In various part of the Islamic world there is, however, a sense that educational institutions must be expanded and also have their standards improved to the level of the best institutions in the world in various fields of learning especially science and technology. At the same time there is an awareness that the educational system must be based totally on Islamic principles and the influence of alien cultural and ethical values and norms, to the extent that they are negative, be diminished. To remedy this problem a number of international Islamic educational conferences have been held, the first one in Makkah in 19th, and the foremost thinkers of the Islamic world have been brought together to study and ponder over the question of the relation between Islam and modern science. This is an ongoing process which is at the center of attention in many part of the Islamic world and which indicates the significance of educational questions in the Islamic world today.

## Conclusion and Recommendations

From this we can see how the Muslim civilization captured all the knowledge of antiquity – Greek, Persian, India, etc. – and translated their works and carried it further through the independent study of thousands of Muslim scholars, supported by all their respective rulers, throughout the medieval period. When Islam was going through its Golden period, the European world is said to have been in the Dark Ages. When this source material was made available to the West – primarily in Italy and Spain – was the Western world further develops it to usher in the scientific age. This occurred through two processes. First the religion of Islam, based as it is on Monotheism, unseated nature from its place of worship so that it could be investigated and secondly in the traditional age by the Muslim civilization consolidated and developed on the source material and passed them on to the Western world so that they could usher in the scientific age. From this we can see how Islam actually laid the foundation for the modern world.

If we need the globalized world with no discrimination and aggression, for such view of globalization requires all citizens of the world to have mutual understanding of their

similarity with other humans and their need for safety. As humans of different races, religions and civilizations, it is important that we continue to learn from one another our glorious past as well as our pain. In the process of this mutual dialogue, all religious leaders and policy makers should attempt to carry on responsibility for the creation of a peaceful world.

## Bibliography:


- Ali Allawi, *The Crisis of Islamic Civilization*, Yale University Press, 2009.
- Dr.M.A.J Beg, The Image of Islamic Civilization, 2007
- Hill, Donald R. *Islamic Science and Engineering*. Edinburgh University Press, 1993
- Howard R. Turner, *Science in Medieval Islam*, p. 270 (book cover, last page), University of Texas Press, 1997
- Jonathan Lyons*, The House of Wisdom: How the Arabs Transformed Western Civilization,* London: Bloomsbury Publishing, February 2009.
- John Stothoff Badeau and John Richard Hayes, *The Genius of Arab civilization: source of Renaissance*. Taylor & Francis. 1983.
- Josef W. Meri , *Medieval Islamic Civilization: An Encyclopedia*, Volume 1,Routledge, 2005.
- Nasr, Seyyed Hossein, *Islamic art and spirituality*, Suny Press, 1987
- Nasr, Seyyed Hossein (1968). "The Principles of Islam". *Science and Civilization in Islam*. Harvard University Press, 1968.
- Various internet sources: www.MuslimHeritage.com,www.ebooke.org, www.muslimbase.com, google.com, etc