the Romans. The Khatib who gives the Friday sermon, who believes that Muslims will become great again once they start using their miswaks more often, is missing the whole story. Islam does not spread through prayer and piety—people go to the Jannah through prayer and piety. Islam provides a system that allows individuals to reach their fullest potentials in this life, and to encourage worship that allows individuals to reach their fullest potentials in the next.

Studying the lives of the Muslim scholars also provides modernday Muslims with a portrayal of the prototypical modern scientist. He is one who devotes his efforts to discovering Allah's signs in this world and who tries to direct his or her discoveries those that produce social benefit.

For the Westerner, it is important to change these historical inaccuracies to help improve the relations between the West and the Muslim world by finally acknowledging the enormous debt owed to the Muslims. However, as the celeritous progress of Western science pushes on, it is more likely that the increasing arrogance and faith in Western science with its purely Western (Greek) origins will keep this overdue apology from occurring. While a historian may mention "Avicenna" or "Averroes" fleetingly in one of his or her books, the problem is that what is left out is far greater than what is told. The eminent historian George Sarton criticized those who "will glibly say 'The Arabs simply translated Greek writings, they were industrious imitators...' This is not absolutely untrue, but is such a small part of the truth, that when it is allowed to stand alone, it is worse than a lie."

## **Works Cited**

The Holy Quran.

Armstrong, Karen. "Holy War: The Crusades and their Impact on Today's World". Doubleday: New York, 1991.

Davies, Paul. "Superforce: The Search for a Grand Unified Theory of Nature". Penguin: London, 1995.

Eaton, Gai. "Islam and the Destiny of Man". The Islamic Texts Society: Cambridge, 1994.

Mahmoud, Yusuf. "Al-Injazat Al-Ilmiyya fil Hadara Al-Islamiyya". Dar Al-Bashir: Amman. 1996.

Reichmann, Felix "The Sources of Western Literacy: The Middle Eastern Civilizations". Greenwood Press: Westport, Connecticut, 1980. Said, Edward. "Orientalism". Routledge & Kegan Paul: London, 1978. Shustery, A. M. A. "Outlines of Islamic Culture". Sh. Muhammad Ashraf: Lahore, 1976.

اللہ اوا: عقد کے دفت جوزیادتی مال کو مال کے بدلنے سے بلاعوض حاصل ہو ایک

campaigns in history, with the exception of the savage massacres of Muslim civilians by the Christian armies. However, the crusades, initially being a crushing defeat for the Christians, would introduce them to the enormity of the gap between them and the Muslims.

At the same time, Europeans scholars were learning at the hands of the Muslims in Spain. The translated Greek works would introduce the Europeans to an indigenous intellectual tradition they never knew existed. This helped spark a new selfconfidence among the scholars of Europe. Unfortunately, the scholars of Europe were torn between their intellectual loyalty and the strong hatred of their teachers present in their culture. Karen Armstrong explains:

The Arabs in particular were a light to the Christian West and yet this debt has rarely been fully acknowledged. As soon as the great translation work had been completed, scholars in Europe began to shrug off this complicating and schizophrenic relationship with Islam and became very vague indeed about who the Arabs really were... There is an unhealthy repression and doublethink about people who are at one and the same time guides, heroes, and deadly enemies. This is very clear in the scholarship about Islam. (64-65, 225-226)

This hatred, however, was, for the most part of Islamic history, one-sided. The Muslims had little reason to hate, or even to be concerned about Europe. To them it was a land of barbarism and backwardness, of a foreign landscape and weather. The battle of Poiters, for example, is considered by the Europeans as one of the major turning points in history, where the French armies repelled a Muslim raid into southern France. However, rarely is the battle mentioned by Muslim historians, and when it is mentioned it is described as but a trivial raid. (Armstrong 42)

Another factor that plays alongside the long-standing hatred of Islam in Europe is the phenomenon known as orientalism. This concept was first articulated by Edward Said in his landmark book Orientalism, which is now considered required reading for anyone studying Middle Eastern culture or history. Orientalism is the result of the elaboration of the imaginary distinction between geographically, culturally, morally, West. intellectually. The result of orientalism are claims that as along the lines of " 'We' are like this, but 'they', for unexplainable reasons, are fundamentally different, and in due course, inferior." 

Academic orientalism gave rise to arrogant, seemingly humanistic ideals which drove imperialism, whose effects are felt very painfully in the Muslim, as well as most of the third, world. As Said explains it:

It [orientalism] is... a distribution of geopolitical awareness into aesthetic, scholarly, economic, sociological, historical, and philological texts; it is an elaboration not only of a basic geographical distinction (the world is made up of two unequal halves, Orient and Occident) but also of a whole series of "interests" which, by such means as scholarly discovery, philological reconstruction, psychological analysis, landscape and sociological description, it not only creates but also maintains; it is rather than expresses, a certain will or intention to understand, in some cases to control, manipulate, even to incorporate, what is a manifestly different (or alternative and novel) world; it is, above all, a discourse that is by no means in direct, corresponding relationship with political power in the raw, but rather is produced and exists in an uneven exchange with various kinds of power, shaped to a degree by the exchange with power political (as with a colonial or imperial establishment). power intellectual (as with reigning sciences like comparative linguistics or anatomy, or any of the modern policy sciences). power cultural ( as with orthodoxies and canons of taste, texts, values), power moral (as with ideas about what "we" do and what "they" cannot do or understand as "we" do). Indeed, my real argument is that Orientalism is-and does not represent—a considerable dimension of modern politicalintellectual culture, and as such has less to do with the Orient than it does with "our" [Western] world. (12)

[Italics in original text]

One may ask after looking at the reasons why Muslim scholars are vastly undervalued in Western books is "Why should we care now?" The scholars are dead. The ink in the history books has dried. What good will it bring Muslims, besides a headache, to raise this issue now? It is done to restore confidence to the Muslim Ummah, to remind believers what is needed to be great again. The Muslims ruled from France to India, not only because of being blessed with the true message, but also of being superior to the conquered people in all other "worldly" ways. The Muslims would have never conquered the Persians without superior military planning and tactics. The people of the Roman Empire in greater Syria and North Africa would have never converted to Islam if the Muslims were not materially superior to

that was to occur later in Europe. The dependence of the latter on the former, however, is immense. It would not be controversial to say that the scientific revolution that took place in 17<sup>th</sup> Europe could not have occurred without the help of the Muslims.

The maelstrom brought upon Europe by the intellectual tradition taken from the Muslim world had far-reaching consequences on European life. Slowly as education spread throughout Europe, with Universities arising in the major cities, the authority of science grew exponentially. Even the powerful Church of Rome would soon go down as it foolishly tried to challenge rationality and scientific proofs with superstitions and the fading doctrine of papal authority. The West would take this tradition and run amok with it, venturing in directions never before taken by humanity. Soon Europe, which was during Islam's golden age dismissed by Ibn Khaldun as "those parts", had superseded the Muslim World in every way imaginable: scientifically, militarily, economically, and administratively. (Eaton 32-33)

However, a perplexing relationship existed between the Muslim world and Europe. It was not one of mutual reverence and respect, nor was it one of a father-culture, daughter-culture nature. There was an overpowering sentiment of hate embedded in European culture that outweighed any benefit or advancement the Muslims would give to them.

For hundreds of years the Muslims would take a permanent place in the forefront of the European mind. Wave after wave of Muslim armies crashed into Europe, coming with superior military training, unseen technology, and a culture alien to all what the European knew. Gai Eaton explains:

The "menace of Islam" had remained the one constant factor amidst change and transformation and it had been branded on the European consciousness. The mark of that branding is still visible... "The fact remains", says the Tunisian writer Hichem Djaït, "that medieval prejudices insinuated themselves into the collective unconsciousness of the West at so profound a level that one may ask, in terror, whether they can ever be extirpated from it." (30-31)

This fear would turn into hate and aggression as Europe regained its strength. The Muslims also would serve as a means for Europe to do so. These "pagans" as Europeans saw them, would be the perfect enemy for Europeans to rally together. They did so, quite pathetically, in the crusades. The crusades, in terms of human losses, were one of the most lopsided military

﴿ نَعْ سُوم عَلَى سُوم وغيره: دوسر عَض كَ بَعَادُ ير بَعَادُكُ نا\_(بينا جائز م) ♦

language of science. Newton would have had quite a difficult time quantitatively describing his laws of motion without using

the algebra first implemented by the Muslims.

The Muslims made monumental strides in the practice and study of medicine. Ibn Sina's text the Canon of Medicine, was used as a text in Europe for centuries later, and its popularity dwarfed the books of Galen and Hippocrates. Physicians like Abul Qasim al-Zahrawi, Ibn Sina, and Ali Abbas, wrote texts on surgery that would form the foundations of Western Surgery (Shustery 152-153). A story by the Muslim physician Usamah bin al-Mangaz serves as a good example of the superiority of Muslims doctors over their European contemporaries:

Among the marvels of the medical affairs on incident is this that Sahib Munitrah wrote to his uncle that there was need of a doctor to treat his companions. My uncle sent a Christian doctor. Thabit, to them, but he came back within ten days. We asked him, "Have you been able to treat the patients in such a short period?" He said, "They had brought to me a soldier who had a boil on one of his feet. When a bandage dipped in the juice of Linjah (a plant) was applied, the abscess got burst. There was another patient, a woman whose dry and chapped skin had developed itch and was giving her trouble. I kept her on a restricted diet as a preventive and tried to make her dry skin. moist. But suddenly an English doctor appeared on the scene and told the people there about me, "What does he know of medical science and treatment of patients?" Then he asked the soldier with the abscess on his foot whether he would like to live with on leg or die with both. The soldier said he would prefer to live with one leg only. So the soldier and a sharp axe were brought and I was witness to this scene. The English doctor straightened his leg on a wooden board and asked the soldier (executioner, Tr.) to chop off his leg with a single stroke of his axe. He made a stroke with the axe, and I was a witness to that, and found that it failed to sever the leg. So he made a second attempt. The bone marrow was thrown out and the patient died immediately.

The author then reveals how the English doctor poured water on the woman with dry skin, and she too died a sudden, painful death. (http://www.erols.com/gmgm/sibai10.htm)

While historians have written many books on the high level of sophistication and learning of the Muslims compared to the Europeans during the dark ages, few have thought to make the connection between Muslim science and the scientific explosion

الله تع منابذه يدب كه: بالع مي كوشترى كى طرف ميك دے الله

The book of Allah and the example of the Prophet Muhammad (peace and blessings upon him) set the basis for an intellectual tradition in the Islamic world which relied on reason and honesty. The purpose of knowing the natural world in Islam is to reveal the signs that Allah set in his creation. "We shall show them Our portents on the horizon and within themselves until it will be manifest unto them that it is the Truth" (The Holy Quran, 41:53). While Greek philosophy was based on the relativity of truth and change, in Islam, as Seyyed Hossein Nasr comments:

The arts and sciences came to possess instead a stability and a 'crystallization' based on the immutability of the principles from which they had issued forth; it is this stability that is too often mistaken in the West today for stagnation and sterility. (http://www.fordham.edu/halsall/med/nasr.h.ml)

The Muslims made numerous advances in many fields, one the most important being physics. They received the physics texts of the Greeks, then translated, corrected, and expanded on them greatly. The basis of the study of optics can be attributed directly to the Muslims. Al-Hassen bin Al-Haythem is considered the founder of this field. He and Al-Beirouni also logically came to the conclusion, in disagreement with Aristotle, that the speed of light is constant and that light is composed of extremely small particles moving at extremely high speeds, which is the basis of the quantum nature of light, an endlessly celebrated tribute to 20th century science (Mahmoud 112-113; Davies 29).

Muslim scholars also laid the foundations of mathematics. Muslims were the first to recognize the importance of and use the zero effectively, borrowed from the Indians, bringing to Europe what is now called "Arabic numerals". Otherwise, the scientists and mathematicians of Europe would probably still be counting on their fingers or fumbling with clumsy roman numerals when analyzing data. Muhammad bin Mousa Al-Khawarizmi is considered the founder of modern algebra, and the mathematicians that followed made ever more impressive contributions. Ghiath Edden Al-Kashi, approximated pi to 16 places past the decimal point. The system know as Pascal's triangle, which assists in factoring equations in the form of (a + b)n, was developed by Al-Karkhi, and not Louis Pascal, Later Muslim mathematicians were able to factor equations as complex as fourth degree equations; fifth degree equations are impossible to factor. (Mahimoud 137-147) The contribution of Muslim mathematicians to algebra is integral to the development of all sciences as mathematics is frequently referred to as the

﴿ وَ مَقَالِيفِه بِ إِلَهُ : سَامَان كَ بِدِ كِسَامَان كَي عَلَى مِنْ مُوكِ

## Why Have Muslim Scholars Been Undervalued Throughout Western History?

By Bakir Tarabishy

The history books that fill our bookshelves are indispensable recollections of past civilizations' glories and failures, achievements and abominations. Unfortunately, history can never be completely objective, since it is written by men, and men have a tendency to restrict their thoughts to a single point of view. While history has created in our minds many heroes from murderers, and criminals from saints, one of its greatest crimes is the almost complete omission of the debt the West owes to Islam and the Muslims. W. Montgomery Watt describes the problem:

Because Europe was reacting against Islam it belittled the influence of Saracens and exaggerated its dependence on its Greek and Roman heritage. So today an important task for us is to correct this false emphasis and to acknowledge fully our debt to the Arab and Islamic world. (Ghazanfar, Islamic World and the

Western Renaissance)

Students in Western Universities might have heard that Muslims were once leaders in science, but their accomplishments are often belittled, and their scientists are reduced to but borrowers who translated Greek and Persian works then assumedly hid them on a bookshelf so the West can later expand and build on them once it awakes from its sleep during the dark age. Donald Cardwell, in the Fontana History of Technology, claims that technologies imported into Europe during the Dark Ages "originated in China and India and were merely passed on by the Arabs." While cultural bigotry plays a major role in this distortion of the facts, the achievements of the Muslims have been left out of Western historical records as a result of the hatred of Islam embedded in the Judeo-Christian world, which shall be traced to thany factors.

Before thoughtlessly calling out "conspiracy" as many Muslims today so often do, one must show that the Muslims actually did have an integral role in scientific development. Due to the wearth

of achievements, however, this is not very hard to find

﴿ وَاللَّهِ اللَّهِ الللَّهِ اللَّهِي اللللَّهِ اللَّهِ اللَّهِ الللَّهِ اللَّهِ اللَّهِ اللَّهِ اللّ