Islamic Golden Age

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The primary author is the individual who drafted the first version of this section; a section that could have been modified since it was originally published.

Islam is one of the major religions in the world; emerging in the seventh century with the Prophet Muhammad and his followers. In the middle of the eighth century, the Golden Age of Islam began and made its way through much of the middle east, north Africa, and Spain.

Islam came together so successfully because, when the Islamic Empire conquered other nations, they left the administration and culture intact. Other empires at the time were not doing this. As Muhammad said, "the ink of scholars is more precious than the blood of martyrs." Muslims valued the intellect of the people they conquered.

During the time of the Islamic Golden Age, Chinese paper-making technology was being invented. Around the same time Arabic Numerals, that were imported from India, were starting to replace Roman numerals. Consequently, the concept of zero was seen for the first time in history. At the time, algebra was primarily viewed as a simple problem solving technique and not the huge branch of mathematics it is today. There were three methods of calculation during this time period in the Islamic world: finger reckoning, Hindu arithmetic, and the base 60 system. Finger Reckoning was the most common, as it was the preferred method for merchants. The Indian numerals—now known as Arabic numerals—used the numbers 1, 2, 3, etc. as we know today.

Islamic medicine was some of the most important in history because Muslim doctors were the pioneers of a lot of the medical practices still in use today. About 75 years after the death of Muhammad, the very first free hospital was opened in Damascus. Free hospitals were maintained throughout the empire to care for the ill; both physical and mental. Early in the tenth century, physician Abu Bakr al-Razi was the first to use antiseptics for cleaning wounds. He also made the connection between bacteria and infections. Ibn al-Nafis also made another well known medical advancement in the Islamic Empire. He accurately described the circulatory system in human beings.

Islamic math refined algebra and developed trigonometry to pursue an accurate way to measure objects at a distance. Muslims had also corrected previous astronomical data and built the world's first observatory. It was very obvious that progress was being made in every single area of the medical field during the Islamic Golden Age.
Al-Zahrawi, who is also known as the father of surgery, introduced the use of cotton and catgut during surgery. He also described breast cancer for the first time as well as the sex-linked inheritance of hemophilia. Ibn Sina was an individual who started stressing the importance of hygiene and healthy eating habits. He also introduced urethral drug installation. Building on the Roman techniques from lenses, Al-Hasan made breakthroughs in the world of optics which is the science of vision which helped disproved the theory that vision was rays emanating from the eye.

Barack Obama said during his Cairo Speech in 2009:

It was Islam that carried the light of learning through so many centuries, paving the way for Europe's Renaissance and Enlightenment. It was innovation in Muslim communities that developed the order of algebra; our magnetic compass and tools of navigation; our mastery of pens and printing; our understanding of how disease spreads and how it can be healed.

The Golden Age had started coming to an end in the twelfth century. By this time, Europe had more scientific scholars that made any impact on the world of science. After the fourteenth century, the Arab world saw very few scientific innovations. Although there is no simple explanation to its demise, a significant factor can be traced back to the civilization's geopolitical decline.

Suggestions for Further Reading


Image: Page from Al-Zahrawi's Kitab al-tasrif li-man 'ajaza 'an al-ta'ilif