

■ **DIVANIYA**

1001 ways the 'Dark Ages' shaped our world

By Hira Azhar

Was multi-faith innovation within Muslim civilization in the Middle Ages the catalyst for the European Renaissance?



A large chunk of the Middle Ages, from the 7th century to the Renaissance in the 16th century – popularly called the Dark Ages – has long been regarded as a miserable period of despondency, backwardness and general disillusionment. Perceived as a period of cultural and economic decline in Western Europe resulting in widespread ignorance and superstition after the decline of the Roman Empire, the period is still regarded as the main reason why there was a renaissance in that part of the world.

This oft-repeated version of History, however, completely neglects the progress made elsewhere in the world during the same period, where the Dark Ages never even seem to have existed. Numerous inventions and ideas took birth during this period within Muslim Civilization, and the origins of our modern world – everything from the bicycle to musical scales – is the focus of "1001 Inventions", a book celebrating the "forgotten" history of 1,000 years of Muslim heritage.

Sponsored by the Abdullatif Jameel Foundation and organized by the 1001 Inventions organization, "1001 Inventions: Discover the Muslim Heritage in Our World" is now a major exhibition at London's Science Museum and following its much-hyped inauguration in January, has already gotten rave reviews from across the world. Tracing a millennium of science from the Muslim world, the ongoing exhibition offers visitors the chance to explore discoveries made by scholars, engineers and scientists living in Muslim civilization from all over the world as well as from a variety of faiths.

Featuring a diverse range of exhibits, interactive displays and dramatization spanning fields like engineering, medicine and architecture, the exhibition traces much of the Renaissance's roots back to innovation within Muslim civilization.

1001 Inventions is a global educational initiative. Launched in the United Kingdom in March 2006, it was created by the Foundation for Science, Technology and Civilization (FSTC), a British based non-profit, non-religious and academic organization, and works with leading academics from around the world. In a February interview with CNN, the Chairman of FSTC and editor of the book, Professor Salim Al-Hassani, said: "There's a hole in our knowledge, we leap frog from the Renaissance to the Greeks." Much of the initiative's focus has therefore been on emphasizing the importance of bringing these discoveries to light.

"Many people are unaware of the achievements in science, technology and the arts that occurred outside of Europe during the thousand year period from the 7th century onwards. It is a period in history that deserves more credit than it receives," remarked Al-Hassani in a press preview speech in January. "This exhibition introduces the public to a world that is often misunderstood and under-appreciated."

Though much has been written about why this exhibition is important, there hasn't been much focus on what this new version of history is telling us. If the all-important cup of coffee originated in Yemen, why do we associate it with Italy? And how many people knew that modern hospitals and universities originated in North Africa as early as the ninth century?

'Library of Secrets'

The exhibition's tour starts off with an imaginative short film "1001 Inventions and the Library of Secrets" featuring 12th century engineer Al-Jazari – played by Oscar-winning actor Sir Ben Kingsley – who goes about showing visitors how the key inventions of today have their roots in the so-called Dark Ages. In the movie a group of young school children take a field trip to a dusty old library after their teacher challenges them to research the era known as the "Dark Ages" and find its relevance to present day civilization, a chore they resent until they meet a mysterious librarian (Kingsley) who takes them on a journey to the past revealing a thousand years of scientific and cultural excellence that took place in the Muslim world between the 7th and 17th century. The film was also released on the Internet where it has proved a huge hit receiving over one million downloads in the first month of being aired.

The film won four major industry awards at the 29th International Visual Communications Association (IVCA) award ceremony in London, at the end of March with judges commending the short film saying it was "in a league of its own" awarding it with four prestigious awards: Gold Award for Best Education Film; Gold Award for Best Photography; Silver Award for Best Drama and the Silver Award for Best Original Music.

1001 Inventions

Split into seven zones - Homes, Market, School, Hospital, Town, World and Universe – the exhibition features some extraordinary and fantastical inventions. Amongst these are an Elephant Clock designed by Al-Jazari in the 13th century, the model of an energy-efficient and environmentally friendly Baghdad house showing natural air conditioning, the famous world map by 12th-century scholar Al-Idrisi - made centuries before Columbus and Marco Polo explored the world, a chance to meet Abbas ibn Firnas, the first person said to have flown with wings, and to hear of Lagari Hasan Celebi who flew using a rocket engine 360 years ago. Also included is a model of Zheng He's Chinese junk ship – originally a 14th-century wooden superstructure over 100 meters long, astrolabes, quadrants and sextants, the model of a 9th-century dark room, later called Camera Obscura, which Ibn al-Haytham used to change our understanding of vision and optics and an introduction to 'Merriam' Al-Ijlilya, a 10th-century woman skilled in making the sophisticated time-keeping and calculating devices called astrolabes.

The centerpiece of the exhibition is the spectacular Elephant Clock which Professor Al-Hassani calls a "machine which gives physical form to the concept of multi-culturalism" and "embodies the cultural and scientific convergence of civilizations." Amongst its features is an Indian Elephant, Chinese Dragons, a Greek water mechanism, an Egyptian Phoenix, and wooden robots in traditional Arabian attire.

The best part about the whole initiative really, is the breadth of its multiculturalism. Southern Europe, the Middle East, China, Africa and Asia have all contributed to the thousand years of innovation, creativity, scientific and technological advances that made the Western Renaissance possible. Who knew that Turkey was responsible for giving the world immunization, rocket powered flight and the oldest surviving map of the Americas? Similarly, the foundations of social science and the birth of medical encyclopedias are all thanks to efforts in North Africa. Stressing the need for unity, Fadi Mohamed Jameel, the patron of the Abdullatif Jameel Foundation, a registered British charity, says that the initiative "hopes to foster increased understanding of the shared common heritage shared by all cultures, faiths and civilisations."

Overwhelming success

The most striking aspect of this entire initiative has been the success it has attracted from a number of quarters. A hit with academics and schoolchildren alike, the exhibition and book have also managed to get excellent reviews from major media outlets.

The Guardian writes in its exhibition review: "For a millennium they chronicled the work of the ancient Greeks, Indians and Chinese while developing their own expertise in surgery, water and wind power, optics, agriculture and other subjects. While Europe shivered in the dark ages, the Arab world kept scholarship alive." With an appreciative nod to the "goodies" that curators have been able to showcase at the exhibition, the review fawns over the exhibition's astronomy display. BBC News, The Wall Street Journal, CNN and the Telegraph have also focused on - and lauded - the novelty of this initiative.

The exhibition is expected to stay in London until the end of June 2010 before starting a five year journey across the world. This global tour will visit the world's most respected museums and centers of learning over the next four years. – SG