

Obama and Islamic History

President Obama ticked off some accomplishments of the Islamic world during his [speech in Cairo](#) on June 4. Namely, he said:

Obama: 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.

Was he right? Well, he was more careful in his language than when he [claimed](#) this winter that the U.S. "invented" the automobile. This time he said that Muslim communities "developed" these technological advances. Taking them one by one, here's a brief look at the Muslim role in their development:

- **Algebra.** Other civilizations played a role in the [development](#) of algebra, such as Babylonia. But the word algebra itself is derived from the Arabic word "al-jabr," which is used in Mohammed ibn Musa al-Khwarizmi's [book](#) on Algebra, "The Comprehensive Book of Calculation by Balance and Opposition," [written around](#) 820. Other Muslims, such as Abu Bakr al-Karaji are [credited](#) with the development of reciprocals of polynomials.
- **Magnetic compass and tools of navigation.** Historical accounts agree that the Chinese first used a compass, but Arabs are thought to have improved upon it for use in sea navigation. The United Kingdom's Foundation for Science, Technology and Civilisation [says](#) that "[t]he compass is described in a Chinese book of 1044 on military techniques." It goes on to say: "We don't know how scientists invented the compass. No-one is sure, either, how the compass got to the Islamic world. But Muslim scientists were quick to use it and improve it." The earliest mention of a magnetic compass in Muslim literature is in Muhammad al-Awfi's "Collection of Stories" in 1233. It describes the use of a compass during a voyage in the Red Sea or Persian Gulf. Other accounts [say](#) that Muslim use of the compass for navigation may have spread to Europe during the Crusades.
- **Our mastery of pens and printing.** Again, there is widespread agreement that printing first began in Asia. Robin D. S. Yates, professor of history and East Asian studies at Montreal's McGill University, [told](#) PBS' "NOVA" program that Buddhists first invented printing and that the Chinese invented movable type during the Song Dynasty in the 11th century. There is evidence that Muslims were using mass printing methods hundreds of years before Gutenberg's invention of the printing press as well. Dr. Geoffrey Roper, an expert in the history of printing in Muslim civilizations, [writes](#) that sometime in the late 900s, Muslims had "embraced the Chinese craft of paper making, developed it and adopted it widely in the Muslim lands." Roper says there was mass distribution of printings of a collection of prayers on paper strips. "Several have been found by archaeologists in the course of excavations at Fustat (old Cairo), and the archaeological context has made it possible to date them to the 10th century," he writes. Also, in the book "Paper Before Print: The History and Impact of Paper in the Islamic World," Islamic and Asian art professor Jonathan M. Bloom [describes](#) how paper-making flourished in the Muslim world and how an assembly-line method of copying texts by hand was developed.
- **How disease spreads and how it can be healed.** Contributions from Muslims in the field of medicine are varied, deep and long established. In the prologue to his Canterbury Tales, Chaucer listed several physicians from the Islamic world. The National Institutes of Health [explained](#) that the English writer listed these "great physicians of the past that his 14th-century audience could be expected to recognize" to bolster the bona fides of the character of the "Doctor of Phisyk."

In his speech, Obama added that "Islamic culture has given us majestic arches and soaring spires; timeless poetry and cherished music; elegant calligraphy and places of peaceful contemplation." That's all certainly true — note that he didn't say Muslims "invented" any of that, but that "majestic arches" and "elegant calligraphy" have been a part of the culture. Altogether, we judge Obama was on firm ground this time.

Posted by [Justin Bank](#) on June 5, 2009.

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