

Model Abstract

Title: Contribution to science and technology by contemporary Muslims.

Name of Author: T.O. Shanavas

Name of Institution/Affiliation: IRFI

City and State: Adrian, Michigan

Observations:

1. In the lists of semi-finalists (300 in number) of 2010, 2011, and 2012 Intel Science Talent Search competition for US high school seniors, presence of Muslims are none to rare while students from Indian and Chinese communities constitute more than 1/3 of the list.
2. Population based analysis shows Organization of Islamic cooperation (OIC) countries have very few scientists, engineers, and technicians compared with a world average and also with countries of the Organization for Economic Co-operation and Development.
3. The contributions of 46 Muslim countries combined together to the world's science literature is less than India or Spain contributed.
4. Of the 28 lowest producers of scientific articles in 2003, half belong to the Organization of Islamic cooperation (OIC) countries.
5. The OIC countries produce negligibly few patents. According to official statistics, Pakistan has produced only eight patents in the past 43 years.
6. According to World Bank data, high-technology export is dismal from Organization of Islamic cooperation (OIC) countries

Elements of Muslim Communal physiology: A Barrier against scientific Progress

1. Muslim leaders, scholars, and Imams across the world feel intimidated by science so that they avoid any honest discussion of science or new ideas in the community and mosques.
2. Productive scientists who invent new technology or discover new laws or propose new theories question the soundness of widely accepted concepts, theories, and facts. Islamic centers, Imams, and Muslim scholars, even 99.9 % Muslims at large discourage questioning widely accepted *tafsirs*, concepts, theories, etc.,.
3. Islamic centers and community leaders discourage critical thinking especially when the outcome conflicts with their own point of view.
4. Another reason for the weakness of Muslim scientific productivity is the shameful lack of interest in science displayed by Imams and Muslim leadership. Science is never

discussed in mosques and Muslim conferences. Sadly, Muslim umbrella organizations even in the United States avoid discussion of science in their national meetings.

5. Most Imams have minimal or no training in science. They refuse to acknowledge it and so, cannot give effective guidance for Muslims' life in the scientific field in order to escalate productivity in science among Muslims.

6. Muslims among the scientific community have mental dichotomy and lead a double life. They have a truth to tell in the mosques and another for their external professional lives. The old Latin expressions, "contra evidential credo (I believe despite the evidence)" and credo quia evidentialia (I believe because of evidence)," most accurately differentiate their dual lives. Such an attitude has major negative impact on Muslim scientific productivity as well as critical thinking among Muslim children.

6. The poor scientific track record of Islamic countries might suggest that there is something about Islam inherently inimical to research. George Sarton, a professor of History of Science at Harvard University states: "Briefest enumeration of the Arabic contributions to knowledge would be too long to be inserted here... The creation of a new civilization of international and encyclopaedic magnitude within less than two centuries is something that we describe, but cannot explain." Therefore, there must be a difference between the Islam practiced in initial history of Muslims and the Islam that is practiced today. What is practiced today by Muslims is an extremely oppressive orthodoxy that is emanating from a Middle Eastern country. Across the Muslim world even the secular among them are compromising more to this orthodoxy that suppresses free inquiry and critical-minded scholarship.

Solution for Muslim Renaissance

What are the critical components necessary for any Muslim community with serious ambitions in science?

1. A minimal requirement is an education system and mosques that embrace science as well as a critical approach. If Imams and Muslim leadership are willing to embrace *ijtihad* — unfettered reasoning — and critical investigation of the natural world, they could help unlock the great human potential of the Muslim world.

2. Muslims at large, Imams, Muslim leadership must accept that the Qur'an and the Universe are twin manifestations of the Divine Act of Self-Revelation. The interpretation of the Qur'an is generally called *tafsir* and of the Universe is called science. The book of nature in material medium and the Qur'an in human vernacular come from the same divine source. So the interpretations of one divine revelation (the Qur'an) cannot contradict that of the other revelation (the Universe). The truth emerges when the *tafsir* of both Divine manifestations merge into one.

3. Muslim leaders, Imams, and Muslims all over the world must understand that their encouragement of science will not escalate Muslim productivity in the scientific field in presence of their simultaneous suppression of free inquiry and critical-minded scholarship.