



# FAITH, REASON AND SCIENCE

A THOUSAND YEARS AGO, THE ISLAMIC WORLD WAS AT THE FOREFRONT OF SCIENTIFIC DISCOVERY. WHY HAS IT FAILED TO KEEP PACE FOR SO LONG? AND WHAT CAN BE DONE TO RE-ESTABLISH THE ROLE OF SCIENCE IN THESE SOCIETIES?

**F**or six centuries Islam presided over a dazzling period of scientific creativity marked by seminal contributions to the natural sciences as well as to mathematics, medicine and philosophy. This is sometimes difficult to comprehend if you look at countries with predominantly Muslim populations today.

Take the Arab states, for example. Collectively they spend around 0.2 percent of their gross domestic product (GDP) on research and development; the average worldwide is 1.4 percent. More worryingly, they account for less than 1 percent of world scientific publications. Only two Muslim countries, Egypt and Pakistan, lay claim to a Nobel Prize in any scientific subject.

Muslim countries contain large numbers of people who take their faith very seriously – even in countries with secular governments. Is it fair to conclude, then, that strong religious faith impedes scientific creativity?

Alternatively, does faith help to

make for better science? Or should faith and science be kept at a respectable distance?

Opinions are divided, of course, but can probably be grouped into four main categories:

- Those who believe that science can be a bridge to faith and that academies of science can help forge a deeper understanding of why people believe.
- Those who believe that some aspects of traditional Islam are incompatible with modern life and that academies of science – either on their own or with others – should seek to reform traditional Islam.
- Those who would like to see faith and science kept apart, believing that faith is a private matter and has no role to play in the pursuit of scientific excellence.
- And those who see no conflict between science and faith. For example, many of those who are Muslim cite verses from the *Quran* as evidence that Islam encourages learning. They argue that the presence



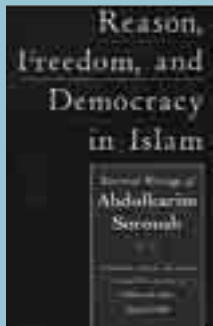
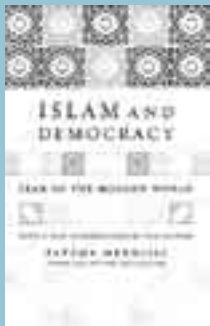
Ehsan Masood

of ‘scientific information’ on subjects such as human reproduction and astronomy in the *Quran* strengthens their belief that the book is of divine origin.

On the broad question of faith and science, the relatively popular practice of going to church does not seem to have dimmed the US’s ability to be the world’s largest producer of research, far ahead of the more agnostic Europe. At the same time, we know that countries with large numbers of observant Muslims also happen to be at – or near – the bottom of global indices of research output.

Why should this be so?

Part of the answer must lie in the largely ineffective education



systems that litter not just the Muslim world, but most of the South. Such systems of teaching were inherited from colonial times when rote learning was the principal method of acquiring knowledge. Pakistan's end-of-school examinations, for example, are still broadly based on a system first introduced by the British.

Poor schooling invariably creates poor quality graduates. Poor quality graduates, in turn, become lousy researchers.

Likewise, the relatively weak standards of democracy in Muslim nations cannot be ignored. It is by no means a coincidence that countries with high standards of research tend to have strong parliaments, genuine protection of civil liberties, and vibrant civil society organizations. In much of the Muslim world, by contrast, these factors are all relatively weak.

Some of this undoubtedly can also be attributed to the current practice of Islam, in which followers accord the highest respect to parents, grandparents, teachers and elders – all intended to shore

up the stability of families and communities and to maintain the existence of social mores. As a result, young people in Muslim countries grow up in environments where they are encouraged to conform and follow, not to question and challenge – important prerequisites for research creativity to flourish.

Islam often is described as a complete code of life – a set of rules laid down in the *Quran* and exemplified in the life of the Prophet Muhammed.

In many ways, this is true. The book contains detailed advice on a multitude of issues and on a multitude of scales. Among other things, it outlines the rudiments of a social security system, and lays out the “do’s” and “don’ts” of engaging in warfare. There’s also advice for couples who want to divorce, and a detailed account of penal codes that in some quarters have remained in place until this day.

In most Muslim countries today, religious leaders aim to interpret Islamic teachings to the letter of the law. But invariably, there are issues, questions and contexts not covered

in either the *Quran* or the life of the Prophet. Muslim jurists generally agree that the practice of Islam can be distilled from four sources: the *Quran*, the Prophet’s life, scholarly consensus (a kind of peer review), and independent reasoning.

However, most traditional scholars today accord only a small role to independent reasoning. Throughout the Muslim world, this view, and the broader role and position of religious leaders largely, goes unchallenged. That’s partly because most intellectuals lack the knowledge to engage in debate, but also because of a fear of being labelled enemies of faith – something that carries heavy personal consequences.

Intriguingly, however, for the first six centuries after the death of the Prophet in 632 AD, there was a vigorous scholarly debate, particularly on the question of the place of reason in interpreting revelation.

Two hundred years after the death of the Prophet, a rationalist movement began in Islamic countries, which lasted until the 12<sup>th</sup> century. For much of that time, the movement also had the backing of political authorities. Rationalists argued – against the view of most Muslims – that the *Quran* was a ‘created’ work and not necessarily of divine origin. Some also argued that reason alone should be the basis for making decisions.

But rather than letting the debate take its course, rationalists

used the force of their political power to insist that citizens bow to their views. Dissenters were punished, and prisons were full of scholars and ordinary folk who chose to disagree. Torture was widespread.

As we now know, in the end the rationalists were defeated. Crucially, when opposition to their ideas became a mass movement, they lost their political patronage. With the exception of a brief period at the turn of the 20<sup>th</sup> century, talk of rationalism and reform within Islam has since been isolated to a few individuals.

The point of this foray into Islamic history is threefold. First, it indicates that Muslim societies have a strong tradition of rational thought; second, that the engagement of faith and reason has not been an altogether happy one; and third, that if research and creativity are to be revived in Muslim countries, revivalists and reformers will need to re-engage with theologians.

Cast a gaze at the map of Muslim countries, and you will find few places where this is happening. Iran is an exception. There, academics such as the philosopher of science Abdolkarim Soroush have a large readership, especially among the young. Soroush is a strong proponent of a greater role for reason within Islamic theology (see [www.soroush.org](http://www.soroush.org)).

But Iran is unusual in the Muslim world in that it is an Islamic

state, a theocracy, and a largely Shiite one at that. In recent years, Shiite theologians have traditionally been more receptive to new and different interpretations of faith compared to their majority Sunni counterparts.

While Abdolkarim Soroush has not had an easy time at home, his mostly clerical detractors are at least willing to engage in debate because they recognize that his arguments have historical validity.

A 'Sunni Soroush' would face a potentially more hostile audience. At best, his or her motives would be questioned. At worst, he or she may even be branded an apostate – a person regarded as having betrayed their religion – a label that would immediately ruin any chance of building public trust. In many Muslim countries today, apostasy still carries the death penalty.

One researcher who is courageously willing to live with such a risk is Morocco's Fatema Mernissi (see [www.mernissi.net](http://www.mernissi.net)). Mernissi, a sociologist and historian of gender relations in Islam, is well-equipped to debate and engage in dialogue with the Islamic faith establishment on its own terms.

For much of the 1990s, she focused her work on the erosion of women's rights in Muslim societies, arguing that it is often misogyny, rather than Islamic teachings, that has led to such a situation. She is currently exploring the relationship between access to information and

communications technologies and the rise of civil society movements in Morocco.

Researchers such as Mernissi and Soroush are not, however, the tip of a large iceberg. They are relatively rare. Only time will tell whether they have blazed a new trail, or are isolated, one-hit wonders.

More Mernissis and second-generation Soroushes are more likely to flourish in institutions that encourage creativity and original thinking. Developing such institutions, perhaps, is the biggest challenge for science academies in countries with predominantly Muslim populations. ■

❖❖❖ *Ehsan Masood*  
*Freelance journalist and*  
*former director of*  
*communications*  
*LEAD International*  
*London, UK*