WORLD VIEW A personal take on events



Focus on political Islamic groups to boost science

For science to realize its potential in the Muslim world, attitudes need to change at a societal level, not just an individual one, says **Dyna Rochmyaningsih**.

R ecent terrorist attacks in Europe and the continued activity of the jihadist group ISIS in the Middle East have thrown the spotlight firmly back on radical Islam. Some studies blame the Muslim world's poor and unstable economies for the spread of this fundamentalism. Presumably then, improving the economy could help Muslim societies to tackle these radical movements.

Science can play a big part in this economic development, as it has in other places. But because some Muslims see a conflict between science and their faith, the philosophical question of how to reconcile the two is at the heart of many efforts to advance scientific development in the Muslim world.

Earlier this month, the organization Muslim-Science.com gathered a task force of prominent Muslim scholars in Istanbul to discuss the importance of reconciliation to "the future of the Islamic Project and its ability to embrace modernity".

The marriage of faith and science produced advances in mathematics, medicine, physics and astronomy during the Middle Ages. To recreate the enlightened attitudes present during this golden age, the scholars argue, Muslim scientists need to build broader societal support for science.

In my view, this focus on personal reconciliation is a naive way to address the problem and one that is unlikely to have much effect. Reconciliation is philosophically and theologically important for individual scientists, but will have little impact on wider society. It demands critical thinking. And, ultimately, the scientists it concerns form a tiny part — about 0.01% — of the world's Muslims.

Attempts at reconciliation could even make the situation worse, and harden anti-science attitudes in

Muslims. That has happened in Indonesia, home to the world's largest Muslim population, with the publication of the book *Adam Was Born*, which attempts to reconcile Islamic faith and evolution. By re-analysing verses of the Koran as positive to science, the author, Agus Mustofa, enraged traditional clerics and polarized opinions.

The problem is that, unlike Catholicism, Islam has no unifying voice of authority to rule on koranic interpretation. Although it is legal for Mustofa to interpret the Koran, clerics have much more influence, and this gives them great power.

Rather than reconciliation, it is important to monitor and understand the way in which political and ideological groups influence how young Muslims view science.

The radical Islamists of ISIS see science as an attribute of their ene-

mies. They have denounced the great Medieval Muslim scientists Ibn Sina and Ibn al-Nafis as heretics and atheists. It is clear that such rhetoric — if influential — will hold back scientific development in Muslim countries.

NATURE.COM Discuss this article online at: go.nature.com/bd9ngj Here in Indonesia, for example, groups such as the Muslim Brotherhood and Hizbut Tahrir have a strong presence in high schools and universities, and this gives them profound influence on young Muslims' views of the world, including science.

The influence is not all negative to science. The Muslim Brotherhood, although hostile to evolution, encourages talented scientists to develop their careers and helps to place them on postgraduate courses overseas, typically in Japan. Many of these people return to Indonesia as university lecturers.

However, some Muslim groups think that asking a lot of questions is a Jewish trait, and one not to encourage. The convener of the task force, Usama Hasan, says that just as the Nazis labelled quantum mechanics as Jewish science, so fundamentalist Muslim groups talk about *kafir*

science — the science of the unbeliever.

These groups have much more potential to influence the future scientists, engineers and politicians of the Muslim world than individual researchers. Yet Muslim scholars have largely ignored them.

The organizers of the Istanbul event, for example, also held a meeting on science education in the Muslim world. Scholars at the meeting have proposed recommendations that will be submitted in June to the Organisation of Islamic Cooperation. None mentions the potential of political and ideological groups.

The Atlas of Islamic-World Science and Innovation, a report initiated by Britain's Royal Society and published last December, says that science and technology is being held back by the same issues in the Muslim world as in many developing

nations: poor funding, low investment in people and a lack of international collaboration.

This report, too, ignores the potential of political Islamic groups. As a result, it make the same recommendations for improving science in the Muslim world as for, say, South America. We must look at what makes each region unique.

There is no easy way to counter the impact of political Islamic groups on science, but it should be studied and accounted for. And it should certainly take priority over the reconciliation of science and faith.

Reconciliation is an individual process, and something that is intangible in the realm of policy-making. By contrast, hard-line groups can influence whole societies. To capitalize on this influence, we might need to reform science education in primary schools in the Muslim world, and teach young people to think for themselves before they are exposed to political ideas.

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