

# A right to voice dissent against the establishment

Is science the new dogma? Can religion coexist with progress? You debate the issues.

*Sir*—Your News Feature “Studies of faith” (*Nature* 432, 666–669; 2004) is right to call science “the orthodox worldview” of the industrialized world and in many ways, it has also become, to use Tom Wolfe’s phrase, “a court from which there is no appeal”.

As you note in your Editorial, “Where theology matters” (*Nature* 432, 657; 2004), this is perhaps most clearly seen in medical research. It is often presented as being carried out purely to relieve pain and

maximize personal autonomy. Yet most religious traditions would disagree with these aims, suggesting that well-being additionally depends upon other, ‘spiritual’, factors such as expressions of love and fulfilment of purpose.

Critical dissent has played a central role in advancing scientific understanding, and the right to dissent should be held in high esteem by scientists. In the past this dissent has primarily been by thinking scientists against the religious establishment.

It seems ironic that these roles have now been reversed, with much dissent coming from thinking religious communities against the scientific establishment.

Like it or not, such dissent should be accepted, perhaps even embraced, since it may provide a means to a more balanced view of the place of science in society.

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## Science flourishes in a secular democracy

*Sir*—I read with great interest the Commentary article “Time for enlightened moderation” by A. Rahman and A. Nasim (*Nature* 432, 273–274; 2004), which calls for Islamic nations to renew and reaffirm their commitment to science, in order to achieve socio-economic modernization and to combat fundamentalism, extremism and terrorism. It gives an excellent historical perspective on the relationship between science and Islam, provides accurate statistical facts and figures related to the scientific output of Islamic nations and outlines a realistic agenda for the future.

However, it misses two key elements that recent history has proven to be essential in moving forward in science: secularism and a working democracy, as exemplified by Turkey.

As the Commentary acknowledges, Turkey is the only member of the Organization of the Islamic Conference (OIC) states with universities ranking among the world’s top 500, and it leads OIC states in terms of annual output of research papers, according to Thomson ISI.

Turkey’s leading position among the OIC member states owes much to the reformer Mustafa Kemal Atatürk, who established the modern Turkish Republic in 1923. A unique feature of modern Turkey, among OIC members, is the constitutional secularism that forms the basis of the state. This is further strengthened by a genuine democracy that has its roots in the transition to a multi-party democratic system, steered by Ismet İnönü, after the Second World War.

In addition, the Turkish Republic has given the utmost importance to university education. For example, the university reform introduced by Atatürk in 1933 was a significant step forward in the pursuit of scientific excellence, and Istanbul University became a refuge for many

renowned Jewish scientists who fled Nazism in Europe. Later, the ‘university project’, led by Ihsan Dogramaci as president of the Council of Higher Education from 1981 to 1992, increased the number of Turkish universities to a level that nearly tripled the per capita figure for the OIC’s inhabitants. At the same time, the establishment of university research funds and of the Technical Research Council were instrumental in increasing Turkey’s output of scientific papers.

Turkey can be a role model for Islamic nations, striving to correct the false image of Islam as being linked with extremism, fundamentalism and terrorism.

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## It’s not just theologians who are morally troubled

*Sir*—Your Editorial “Where theology matters” (*Nature* 432, 657; 2004) fails to mention that it is scientists, not theologians, who are out of step with society. The seemingly important ethical question, “Why [should society] be denied a medical advance just because some of its members find it morally troubling?”, is disingenuous.

I question the assumption that only a small minority are troubled by the ethics of medical research. In the United States, scientists who believe that “all scientifically sound lines of research should be pursued simultaneously” are in the minority. Although US polls reveal a large majority in support of stem-cell research for therapeutic purposes, they also indicate broad support for President Bush’s stance on federal funding restrictions. Scientific progress within strict ethical limitations seems to be the majority opinion.

Thankfully, we live in a democracy

where public policy is decided by elected representatives, not a scientific oligarchy. A better question is why certain individuals should be allowed to pursue a line of research when most members of our society find it morally troubling.

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## Eastern creeds are less dogmatic about scripture

*Sir*—Your Editorial, “Where theology matters” (*Nature* 432, 657; 2004) is surprisingly biased towards the ‘religions of the book’ that originated in west Asia, and to Christianity in particular.

It is surprising because your News Feature “Studies of faith” (*Nature* 432, 666–669; 2004) in the same issue mentions both the Buddhist and Hindu approaches to stem-cell research, and another article, “Buddhism on the brain” (*Nature* 432, 670; 2004), describes the Dalai Lama’s interest in and approach to science.

An increasing amount of science is done in east and south Asia, and many scientists in the West (particularly the United States) are emigrants from those countries. To the extent that they are religious at all, followers of these religions (Buddhism, Hinduism and others) tend to be less dogmatic and more philosophical — less insistent on following the ‘holy writ’ of ancient texts and more in favour of searching for one’s own path in the modern world, consistent with certain basic ideas of ethics. Thus, their answers to the issues you raise in the Editorial would be quite different.

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