

Where theology matters

The voices of religion are more prominent and influential than they have been for many decades. Researchers, religious and otherwise, need to come to terms with this, while noting that some dogma is not backed by all theologians.

Theologians and philosophers have been arguing about religion and science for centuries, so we won't presume to break any new ground here. Besides, nearly 800 years ago, Thomas Aquinas found a way to reconcile the two — as did Einstein, who wrote in 1930 that: "The cosmic religious feeling is the strongest and noblest motive for scientific research." Why not just leave it at that? Why not simply accept Pope John Paul II's view that science and religion each "bring out different aspects of reality"?

The reason is that the two traditions regularly stray onto each other's territories and stir up trouble. Consider the political battles over the teaching of 'creationism' and 'intelligent design' in schools — an attempt by some religious people to foist their beliefs, masquerading as science, on others. Science bases its conclusions on empirical data, not on the authority of the Talmud, Bible or Koran. And even though some may find it distressing that science recognizes no god, forcing it to do so will only produce bad science.

Meanwhile science, allied with business, is encroaching on religion's turf by unleashing technologies that raise profound questions about human nature. Religious thinkers and secular ethicists are right to raise concerns, and scientists shouldn't just charge ahead without listening to them. Perhaps researchers will find a way to extract stem cells without destroying the early embryo, and today's hot bioethical dilemma will go away. But others will come along to replace it.

Jewish bioethicist and chairman of the US President's Council on Bioethics, Leon Kass, cuts to the heart of the problem: "Victory over mortality is the unstated but implicit goal of modern medical science." And immortality has long been the realm of religion.

Medical science aims to relieve suffering — an unquestionably noble goal. But religion thinks it wrong to emphasize this value over all

others. Kass again: "In parallel with medical progress, a new moral sensibility has developed that serves precisely medicine's crusade against mortality: anything is permitted if it saves life, cures disease or prevents death." Most religions accept the inevitability of suffering and death, and seek to invest life with meaning, rather than simply extend it.

Religion and science also have different methods and standards. "Proponents of human embryo research have argued that all scientifically sound lines of research should be pursued simultaneously," writes Kevin FitzGerald, a Jesuit priest and molecular biologist at Georgetown University. "From a scientific perspective, this approach makes the most sense. In science, when there is uncertainty, one does all the research indicated to gain the desired knowledge and understanding," he adds. "But what is best for science is not always best for a society and its members."

FitzGerald would avoid experiments he finds ethically unacceptable. Others ask why society should be denied a medical advance just because some of its members find it morally troubling. This is a real concern if, as suggested on page 666, those morals are expressed with more conviction that some theologians would support. For example, not all Catholics believe that the Vatican's position on the status of embryos rules out embryonic stem-cell research.

Too often the debate is full of the rhetoric of televangelists and biotech lobbyists, who caricature each other as godless Frankensteins and ignorant Bible-thumpers. But looking back through testimony put before the President's Council on Bioethics, one is struck by the high-mindedness and sincerity of the discussion.

Secular scientists (probably the majority) should avoid underestimating the influence and rights of those who believe that only a god can give meaning to the world, human suffering and mortality. ■

Spinning out of control

Researchers should beware of 'public relations' screens that are anything but helpful to science communication.

Those who report on science should give constant thanks to those scientists who explain their work with generosity and patience. Cynics who argue that researchers just crave publicity should recognize that the enthusiasm with which such information is typically imparted belies any suspicion of self-serving motives.

Paradoxically, this willingness to engage with journalists is threatened by the idea in the scientific community of 'public engagement'. Many companies and research institutes now have slick PR offices in which the ethos is informed not by the scientific tradition of exchange and interaction, but by a culture of marketing. It may be natural that organizations want to trumpet their achievements in triumphant press releases, and journalists are generally canny enough to decode the hype. And it is unsurprising that large companies often demand that their researchers be chaperoned in interviews by press officers.

It is more disturbing when government-funded research agencies, such as the US National Institutes of Health, erect PR screens between their scientists and the media, so that all correspondence is mediated via e-mail by a press officer. One result is that scientists

might come to believe it sufficient to respond to enquiries about publicly funded research with chunks of management jargon.

A recent set of questions from a journalist was sifted by this mechanism to elicit the following response, doctored here to spare some blushes: "Based on past and current progress, the NIH believes that mouthwashology is a key enabling technology platform with the potential to transform the diagnosis, treatment and prevention of halitosis. NIH's recently announced Alliance for Halitosis is designed to facilitate and accelerate the progress of the twenty-first century research teams needed to realize the promise of these and future mouthwash technologies for halitosis sufferers." A polite follow-up message from the reporter, tactfully refraining from pointing out that this statement was useless to any self-respecting journalist but suggesting that it failed to address any of the questions originally posed, met with stony silence.

It will be a sad day if scientists start to believe that this sort of bland and meaningless corporate-speak absolves them of the responsibility to tell people what they are actually doing. ■