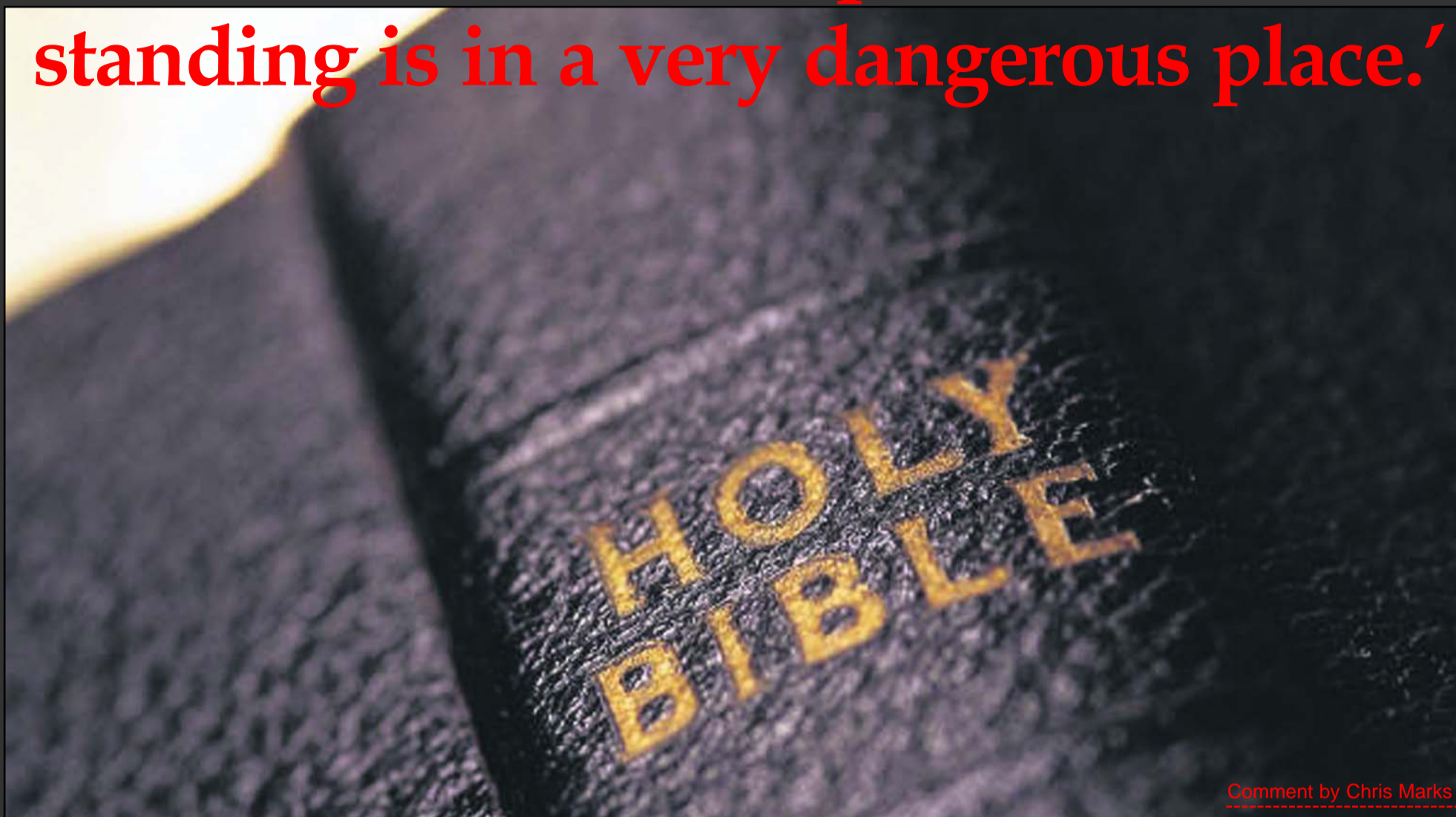


'If simple 'belief' is allowed into the discussion the development of understanding is in a very dangerous place.'



Comment by Chris Marks

In recent months one particular debate has been at the centre of scientific teaching in the United Kingdom.

There is growing support and pressure to include 'creationism' as part of biology syllabuses, with an increasing number of science students challenging Charles Darwin's theories of evolution in favour of creationist ideas.

Creationism believes that humans, life, the Earth and the Universe were created by a supreme being, or deity's, supernatural intervention. The intervention may be seen either as an act of creation from nothing or the emergence of order from pre-existing chaos.

Many creationists hold these beliefs in line with the teachings of their religious faith, which critics, of which I am one, attack as no basis for a scientific theory.

In the UK this debate has been brought to the fore and evangelical Christian and Muslim students have become increasingly vocal in challenging the notion of evolution.

At present students are failing university exams for quoting sayings from the Bible and the Qu'ran as scientific fact.

In February, Muslim medical students in London distributed leaflets that dismissed Darwin's theories, claiming that they were false.

In response to this science academics have taken action to try and keep creationism off the science teaching agenda. On April

11 The Royal Society, Britain's leading scientific academy, held a talk entitled 'Why creationism is wrong and evolution is right' challenging the creationists to argue their case in rational and scientific manner.

For all the arguing the question remains 'is creationism a valid scientific theory and should it be taught to science students in the UK?'

The answer to this question is centred around one point that needs addressing - does 'creationism' fulfil the needs to be classed as a scientific theory?

Science is about disbelief, knowledge is accepted as provisional and a scientist is willing to have any idea disproved through research and scientific investigation. Darwin's theory of evolution is accepted not as a fact but as the most practical and established theory to explain the development of life on earth and in the universe.

Evolutionary theory can provide masses of research and evidence, both written and physical, to back-up its claims, although it is only used by biologists as a starting point to gain a wider understanding of the issue, it is not treated as fact, it is open to interpretation.

The main criticism of the creationist doctrine is that it is not built on evidence and research but on religious belief.

Creationists' questioning of evolutionary theory comes not from a stand-point of forwarding

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scientific understanding but from a stance of defence.

If the theory of evolution is seen to be correct the ideas in many religious texts regarding creation are therefore proven to be false - believers of these religious ideas need to protect their belief system.

In fact, the Muslim group that produced the leaflets distributed at the Guys Hospital site of King's College, used a passage from the Qu'ran (the religious text of the Islamic faith) as their evidence for creationist theory.

It read, 'And God has created every animal from water. Of them there are some that creep

on their bellies, some that walk on two legs and some that walk on four. God creates what he wills for verily God has power over all things.'

I believe this kind of 'evidence' cannot stand up to the painstaking work of scientists and cannot be used as a basis for any debate; if simple 'belief' is allowed into the discussion, the development of understanding is in a very dangerous place.

Creationists have developed some bizarre ideas in order to prove their belief systems correct. Given the religious belief that God created all living things at the same time, then no living thing could have come into being at any other point.

This means that dinosaurs and man walked the earth at the same time, with dinosaurs being wiped out by the great biblical flood because they were not present on Noah's arc.

Dinosaurs were obviously too big to save and all of the water-based dinosaurs (for which there is fossil evidence) forgot how to swim.

Again there is no evidence for these theories other than passages in religious texts, and much of the creationist literature available is focused on proving evolutionary theories wrong and not providing any evidence as to why they are right - that is other than the religious texts themselves.

This is not how a scientific theory is presented, scientific theories are proven incorrect with

fresh evidence available to disprove the claims.

In scientific debate there is nothing to say that the creationists ideas are definitely false, but to be accepted as relevant theories these ideas need to be presented in the correct manner.

The award-winning geneticist and author Professor Steve Jones, who delivered the Royal Society's lecture, believes that the rise of such belief-based theories is dangerous to scientific development.

"There is an insidious and growing problem. It's a step back from rationality. They [the creationists] don't have a problem with science, they have a problem with argument."

"And irrationality is a very infectious disease as we see from the United States."

Creationists don't appear to like argument, which means they cannot be involved in scientific debate.

Many scientists accept that there could be a 'god', if you trace history back far enough you can always ask the question, 'But where did that come from?', which leaves much scope for debate; but this cannot happen when one side of the argument has decided upon an idea as fact.

Scientific academia is vitally important to the advancement of our understanding of the world, and that is why academics and science students cannot allow 'belief-based' theories into the debate.