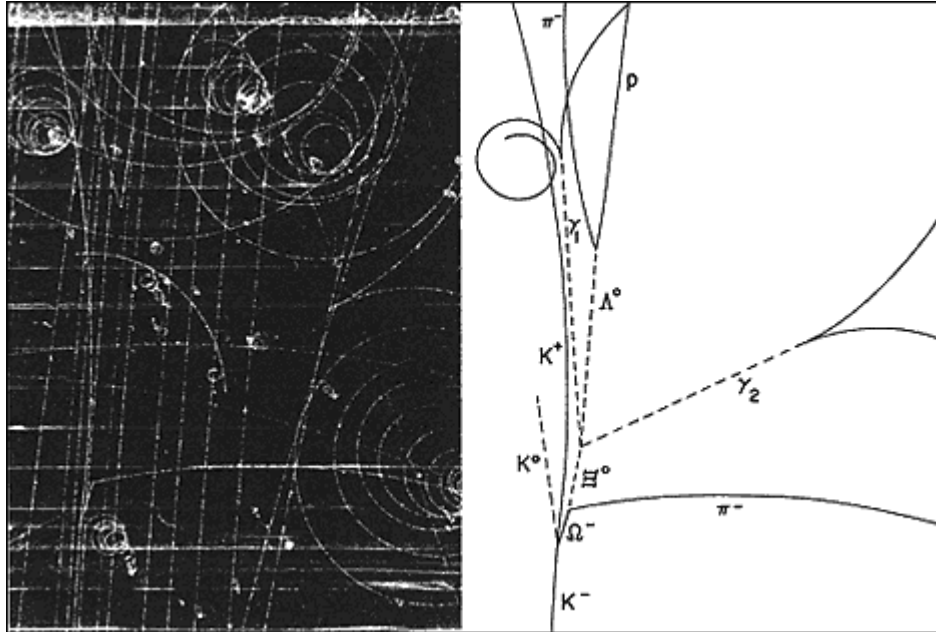




12th October 2008
Trinity XXI
Choral Evensong
Exodus 33 vv. 12–23
John 1 vv. 1–14



Seeing the Truth: Faith in a Scientific World

By The Chaplain, The Rev'd Dr Grant Bayliss

“In the beginning was the Word and the Word was with God and the Word was God.” (Jn 1.1)

So runs the most familiar translation of those great opening words of St John’s Gospel. And yet that very familiarity hides the complexity of what the Evangelist is trying to say. The Greek word *Logos* does mean speech and clearly we are referred back to the creative power of God’s utterances in *Genesis*, “And God said, ‘Let there be light and there was light’”, but it also goes far beyond it. *Logos* is also reason, the highest faculty of the human mind; it is the underlying nature of things, their essence; *Logos* is explanation and orderliness.

“In the beginning there was an explanation and the explanation was with God and the explanation was God.”

“In the beginning there was an orderliness, a purpose, a rationality to things and all things were made through it and without it was not anything made that was made... The darkness could not comprehend it, could not grasp it but in this reason and rationality was life and that life was the light of men.”

St John is making grand claims about the nature of both God and the universe. His God is a God who reveals order in things and his universe is one that can be, even should be, understood. The fault of the darkness, its essential evil lies in not understanding, not grasping the Light. It is a privation, rather than a substance.

What we have here is a totalising discourse. St John is claiming as Christian all truth and reason. Faith is for him not simply a way of living a life but the possibility of participation in the sustaining reality of the universe, which is Truth and Reason.

The contents of this paper are the views and expressions of the author.

The contents may not be used without the permission of the author, more information can be obtained from chapel@joh.cam.ac.uk

© Grant Bayliss



12th October 2008
Trinity XXI
Choral Evensong
Exodus 33 vv. 12–23
John 1 vv. 1–14

The Christian community which produced this Gospel did not live in a scientific world. The intellectual arena of the first century was dominated rather by law and politics and, in the elite circles, philosophy which, as with science today, tended to define the areas of legitimate social inquiry and so included what passed for natural sciences. Religion in this period rarely made such totalising claims but Christian faith was something new. Other religion then was, as many see it today, something private, quasi-magical, social or ethical.

Many churches and theologians today seem content to retreat within these borders; to reduce the claims of Christian epistemology to a mere fraction of our lives. Sometimes it results in a divorce or compartmentalisation of life - God can only have an impact on spiritual things; other times, as in creationist circles, it leads to a strong advocacy of blind faith and irrationalism in the face of evidence and reason. However, if we here at St John's wish to be faithful to the Johannine vision we must be far more ambitious in our integration of faith and thought; but with a humble listening and openness to all truth.

Debate still rages among philosophers of science as to whether the modern scientific world is contingent upon Christianity. Experimental investigation, a rarity in the ancient world, is often linked to Christian doctrines of creation. While a realist metaphysic arguably underpins the utility and creative productivity of such standard scientific principles as experimental repeatability and Occam's Razor ("All other things being equal, the simplest solution is the best"). Almost all scientific advance has come from the assumption that reality is intelligible and can be fruitfully modelled by less than the sum of its constituent parts; moreover the preference for elegant symmetry which has been such a feature of the standard models of physics, even as they have changed and developed, belies at least an aesthetic equation of beauty, truth and reality.

I am no scientist. Tonight I can offer little more than a few personal reflections to introduce this series. Other speakers will say more, with greater insight, bringing to bear not just their faith and awareness of the debates within science and religion but also practical scientific experience and success. I do however love big questions and throughout my life I've been fascinated with big science in the usual amateurish way, particularly astronomy, cosmology and particle physics. I never saw them as conflicting with my faith – funnily enough it wasn't until I reached university that anyone told me that they should.

As a teenager, writers like Pascal had given me a strong sense of the vocation of the scientist. And so the image on tonight's service sheet held for me great spiritual beauty as well as scientific significance. It epitomised for me the spirituality of our first hymn, "Teach me, my God and King, in all things thee to see" (George Herbert). It may look like a random scribble or a piece of abstract modern art but it is in fact a plate from a bubble chamber, taken in Brookhaven 1964. But not just any photo, this is the experimental discovery of the Omega minus particle or baryon, which comprises not the usual up and down quarks we find in every day matter but 3 strange quarks. Its existence, mass and decay model had all been predicted by Gell-Mann and Ne'eman as they sought a more fundamental, simpler, more elegant explanation for the menagerie of cosmic particles then discovered. The tiny black line here, near the bottom, measuring just 2cm across the original plate, confirmed and expanded a new and exciting direction in our understanding of the universe.

Playing around with an old cloud chamber I talked my physics teacher into letting me use at lunchtimes, I felt a real consonance between the searches of faith and physics for big answers. I saw parallels between the work of these scientists who could not directly observe their goal, only interpret the signs of a particle's passing and that of Moses hidden away in his cleft in the rock, unable to see God directly, only watching the passing of his back parts. Even so, it was a surprise to find the Jewish writer Philo of Alexandria making a similar point about this same passage 2000 years ago.

The contents of this paper are the views and expressions of the author.

The contents may not be used without the permission of the author, more information can be obtained from chapel@joh.cam.ac.uk

© Grant Bayliss



12th October 2008
Trinity XXI
Choral Evensong
Exodus 33 vv. 12–23
John 1 vv. 1–14

While other university friends argued that God was capable of acting everywhere except the physics lab, I believed that, without the creative and sustaining action of God, there would be no physics lab. The *miracle* is that we can even begin to understand the world around us, rather than reject it as some immoral or amoral chaos to which we are subjected or enslaved. At the time, I saw a simple balance between the ‘how’s of science and the ‘why’s of theology.

Fifteen years later, as with most things, my views are rather more complicated. As a teenager I had never even heard of meta-narratives! Didn’t grasp that there was no such thing as an unmediated truth or uninterpreted fact! Now I see my old stance as unwittingly vulnerable to a retreat into compartmentalisation or some “God of the gaps”. It attempted less than theology should; and curiously held science at arm’s length at the same time. Science never interrogated my faith. It was just awe and wonder. However, a more robust correlation and partnership between faith and science is needed if we are to be faithful to the Johannine vision; but with the possibility of greater fruitfulness comes a greater vulnerability.

As often, there is something of a disjunction between popular perception and academic consensus. For all that philosophers of science categorise the epistemological transitions from induction to falsification, from steady progress to paradigm shifts, science remains embedded in popular language and culture as something ‘objective’. For some this has positive connotations, for others negative; but the illusion of greater objectivity is almost universal. Theology and faith bring contrasting associations: few would speak of theology as “queen of the sciences” today.

However, I believe that the Christian approach to living in our scientific world should derive primarily from a faith obligation to God as Truth, resulting in a Christocentric fallibilism. The reason I am a Christian is not because of any intellectual argument but rather my experience of the triune God. However, an unreflected experience of God is not enough; intellectual arguments must follow. For at its heart, theology should be “faith seeking understanding”, a response to the Gospel challenge, not to blind trust but rather a deeper seeing.

This is a favourite Johannine theme, with repeated contrasts of light and darkness, sight and blindness. From the opening images of the *Prologue* – no one has seen God but the Son has made him known (*Jn.* 1.18; *cf.* 14.8–14) – Jesus’ ontological status is in part derived from his different quality of seeing. It is a deeper seeing that brings John the Baptist to first recognise Jesus as the Christ, the Lamb of God (*Jn.* 1.29–36). And when Jesus calls his first disciples, he does not offer the answer to life the universe and everything on a plate but rather invites them to a deeper engagement with the world: “Come and see” he says (*Jn.* 1.39).

Jesus is the one who brings a wider deeper vision, physical and spiritual; the Pharisees those who wish to keep everyone in a state of blindness and deny the reality around them (*Jn.* 9).

The heart of Christian faith is then a fundamental openness to the reality of things. If we want to say that God is Truth, then he needs no defence from what is true and we must pay attention to all the truth claims of the world.

We must not elide the differences. I am almost as disconcerted by attempts to draw parallels between the *Genesis* 1 account and the Big Bang as by those who impose a literal reading. Johnian Fred Hoyle may have been encouraged to advocate his Steady State alternative precisely because of his abhorrence of this supposed consonance; but the two narratives are fundamentally different. And as we ask different questions we must allow the narrative dominance to alter, without total separation.

The contents of this paper are the views and expressions of the author.

The contents may not be used without the permission of the author, more information can be obtained from chapel@joh.cam.ac.uk

© Grant Bayliss



12th October 2008
Trinity XXI
Choral Evensong
Exodus 33 vv. 12–23
John 1 vv. 1–14

Such a combination of rationalism and multivalent narrative possibility is by no means a novelty but rather characteristic of many ancient Christian writers. The first complete patristic *Commentary on Genesis* by Didymus the Blind in the fourth century, follows what was by then a well-trodden path in saying that clearly God did not create the universe in six days but the account's purpose is merely to indicate creation's orderliness; and he applies the creation narrative on several levels, not just to the cosmos but to human consciousness. Christians then as now could be ultra-critical of contemporary science or philosophy when it suited them; but largely the common store of current knowledge was plundered. Indeed it is where the *Commentary* is most reliant on the best of contemporary science that it has least to offer to a modern reader, as anyone who has seen the relentless mocking of Pliny the Elder on TV's *QI* will know.

The Johannine Christian must face the new questions posed by modern scientific advances with rigour. We must test our faith in the face of all truth; even, as Nicholas Lash once put it, to the point of destruction. There must be no retreat behind the walls of blind faith or “God says...” Neo-Darwinian evolution is the best scientific model available today for describing biological life, including human beings. But accepting that does not necessarily entail an atheistic stance, nor relegate faith to a mere series of relativistic moral choices. Yet once one accepts Darwin and Mendeleev's narratives within a Christian framework, serious questions are asked about the omnipotence of God – are his choices in eternity somehow limited that this is the best of possible worlds? About the righteousness of God – can the advent of conscious enjoyment of creation ever justify the suffering not just of so many human beings but whole species doomed to extinction as mere stepping-stones on the path of evolution? About the love of God – the deist's blind watchmaker may be intellectually defensible but is such an uninvolved figure worthy of worship or capable of relationship?

There is no either/or but nor can we simply state both/and. A more complex interpenetration is required; and sadly it is all too often lacking from both scientists and theologians. The challenge of being a person of faith in a scientific world requires a commitment to all truth; only a God who is Truth is worthy of worship. And so, over the coming weeks, I invite you to a real engagement, to the open and vulnerable stance which is Christ's call to truly see.