

Christians at Work: Science, Faith and Inspiration

DISCUSSION QUESTIONS

1. In a recent *New York Times* op-ed entitled “Mystery and Evidence”¹, Cambridge philosopher Tim Crane discussed the differences between Christianity and science. He points out that, according to the new atheists,

Religions... are largely in the business of making claims about the universe that are a bit like scientific hypotheses. In other words, they are claims—like the claim that God created the world—that are supported by evidence, that are proved by arguments and tested against our experience of the world. And against the evidence, these hypotheses do not seem to fare well.

He wonders, then, why religion is so popular:

Is it because—as the new atheists might argue—they want to explain the world in a scientific kind of way, but since they have not been properly educated they haven’t quite got there yet? Or is it because so many people are incurably irrational and are incapable of scientific thinking? Or is something else going on?

Crane argues that this is the wrong way to see Christianity. While he recognizes that “it is absolutely essential to religions that they make certain factual or historical claims,” he suggests that “religions do not construct hypotheses in this sense”—the same sense as scientific hypotheses. In fact, he suggests that

...taken as hypotheses, religious claims do very badly: they are ad hoc, they are arbitrary, they rarely make predictions and when they do they almost never come true. Yet the striking fact is that it does not worry Christians when this happens. In the Gospels Jesus predicts the end of the world and the coming of the kingdom of God. It does not worry believers that Jesus was wrong (even if it causes theologians to reinterpret what is meant by ‘the kingdom of God’). If Jesus was framing something like a scientific hypothesis, then it should worry them.²

Crane thinks this is the wrong way to look at Christianity. He says, rather, that

Religion is an attempt to make sense of the world, but it does not try to do this in the way science does. Science makes sense of the world by showing how things conform to its hypotheses. The characteristic mode of scientific explanation is showing how events fit into a general pattern. Religion, on the other hand, attempts to make sense of the world by seeing a kind of meaning or significance in things. This kind of significance does not need laws or generalizations, but just the sense that the everyday world we experience is not all there is, and that behind it all is the mystery of God’s presence. The believer is already convinced that God is present in everything, even if they cannot explain this or support it with evidence. But it makes sense of their life by suffusing it with meaning.

¹ Sep 6, 2010: <http://opinionator.blogs.nytimes.com/2010/09/05/mystery-and-evidence/>

² Crane is apparently unaware of the kingdom parables, in particular the mustard seed and leaven parables, which describe well the growth of the kingdom seen historically, or the many parables (e.g. the ten maidens and the faithful and unfaithful stewards) which show Jesus’ awareness of the time of the second coming as indeterminate and potentially long in coming.

In Crane's view, there *is* a recognition of claims being made and of evidence, but the formation and testing of hypotheses is considered much less important than a commitment to the "meaningfulness... of the world," even allowing for the "mystery" it entails.

- a. Is it possible to see the Christian worldview as a coherent structure of beliefs which explains some subset of our available evidence and data (textual, historical, psychological, etc.)? Or is Crane right in saying "the religious attitude... does not seek to minimize mystery. Mysteries are accepted as a consequence of what, for the religious, makes the world meaningful."³
 - b. Whether we agree that Christianity can *in principle* be seen as a logical, coherent framework for addressing a range of data, is Crane at least right about the way many or most religious people live out their religion? How does his description match your life of faith?
2. In a letter to the editor of the *American Journal of Physics*, Mansoor Niaz quotes Nobel prize winner Martin Perl (physics, 1995) and his colleague E. R. Lee as describing the important role intuition plays in experimental physics.⁴ Nobel prize winner Leon Cooper (physics, 1972) adds to this,

Of course Perl is right. Pure reason is great. Experimentalists base their decision of what experiments to do on what feels right, what technology they're capable of using and their intuition as to what can be done and what really might be an important result. Experimentalists sometimes say that the first thing they try to do in an experiment is make it work. It is intuition guided by facts, conjectures, and thoughts about what really would be important.

This perspective opens up not just the need for moments of inspiration, but the important role played by intuition. An even more telling example is Nobel prize winner P. G. De Gennes (physics, 1991), who is well known in his field for occasionally publishing papers in which the answer is correct, but the supporting derivation flawed. So powerful was his physical intuition that he could discern the correct answer and then try to work backwards to derive it mathematically.

Ed Hull provides a further example which belies the stereotype of the methodical scientist bound to the data and the unmoored believer led hither and yon by inspiration:

[C. S.] Lewis described his moment of conversion as the endpoint of objective reasoning, calling himself "the most reluctant convert in all of England." On the other hand, Einstein, when asked what he would do if observations disproved relativity, said that he'd tell the observers they'd made a mistake, because the theory was correct.

³ It should be noted that Paul uses the Greek *mysterion* to mean something long hidden, now revealed. Christianity distinguished itself from the mystery religions of its day by its eschewing secret knowledge. Indeed, the Father of Jesus is not the inscrutable God of Islam—He reveals himself in his Son by design, and wants all to know Him and his truth. Indeed, the goal of the faith is not eternal blind, ignorant trust, but to completely know the Father (cf. Jn 14, and in fact the theme of knowledge, light and darkness running through Jn). "I no longer call you servants, because a servant does not know his master's business. Instead, I have called you friends, for everything that I learned from my Father I have made known to you" (Jn 15:15). This brings to mind the words of C. S. Lewis: "Talk to me about the truth of religion and I'll listen gladly. Talk to me about the duty of religion and I'll listen submissively. But don't come talking to me about the consolations of religion or I shall suspect that you don't understand."

⁴ Vol. 78, Jan 2010, p. 5.

- a. How do these anecdotes compare to your understanding of the practice of science? How does it compare to the picture conveyed in the popular media?
 - b. If scientists are so intuitive, how does science differ from the arts?
3. Psychologists have shown that the learning process often involves an “ah-hah” moment, rather than a simple, linear deductive path.⁵ As Einstein points out, the deduction chain is often constructed after the key insight has occurred. This is an attribute of the learning process itself, and undermines the traditional picture of science as progressing by methodical deduction and faith as characterized by inspirational or intuitive.
- a. Scientists use experiments to gather evidence about, and understanding of, the physical world. What things do you learn about in your life of faith? What evidence do you gather and use?
 - b. How does learning in science differ from the life of faith? How do the above descriptions of science differ from *your* life of faith?
 - c. The realization of the commonality of intuition to both science and faith tears down an apparent wall between the two. But does it also remove the need for, or evidence of, the movement of the Holy Spirit?
4. Psychologists have also described the way learning proceeds often by immersion in the subject, followed by a period of incubation leading (if all goes well) to a moment of inspiration. Tom Wright likened this immersion to the notion of Christian love:

My sense from talking to some scientific colleagues is that, though it’s hard to describe, something like this is already at work when the scientist devotes him- or herself to the subject matter so that the birth of new hypotheses seems to come about, not so much through an abstract brain... but more through a soft and mysterious symbiosis of knower and known, or lover and beloved...

Love is the deepest mode of knowing, because it is love that, while completely engaging with reality other than itself, affirms and celebrates that other-than-self reality. This is the mode of knowing which is necessary if we are to live in the new public world, the world launched at Easter, the world in which Jesus in Lord and Caesar isn’t.⁶

Do you think Wright is correct in drawing this analogy? If so, what might the Scripture—or even the experiences of the mature believer—have to offer in the discussion of learning and even scientific knowing?

⁵ Psychologists have been discovering many interesting things about learning. For instance, rats can even learn when knocked out by anesthesia [*Science* **321**, p. 1153 (Aug 29, 2008)]. (This has not yet been shown for undergraduate physics students.) More relevant, “simple choices (such as between different towels or sets of oven mitts) ... produce better results after conscious thought, but... choices in complex matters (such as between different houses or different cars) should be left to unconscious thought” (such as “sleeping on it” before making the decision) [*Science* **311**, p. 1005 (Feb 17, 2006)].

⁶ “Can a scientist believe in the resurrection?”, The James Gregory Lecture, 2007.