Editorial
Thinking Through The Design Argument

When God wanted to remind Job that He was in control of the universe in spite of the tragedies Job had suffered, He directed him to consider interesting facts about nature such as the earth's measurements, the treasures in snowflakes, the wisdom in the clouds, and the properties of constellations and gas nebulae which only a God like Jehovah could have ordained (Job 38, 39). The experience of personal tragedy and the existence of suffering and injustice on a national scale, however, often leads one to question the existence of God or the justice of God. While theology is better equipped than science to clarify issues related to God's justice, is science better equipped than theology to deal with issues related to God's existence? Does the world and the cosmos resemble an intelligibly designed artefact and if so, does this necessitate belief in a creator God? Where does the scientific establishment stand on this issue?

One point of view, represented by scientists such as Oxford biologist Richard Dawkins, [1] insists that only naturalistic explanations are required to explain the perceived design particularly in the biological world and that reference to the existence of God or purpose in nature is inappropriate. While natural processes can be understood in terms of cause-effect sequences, when it comes to the origin of all things in the Big Bang no first cause is necessary. As Peter Slezak,[2] philosopher of science, comments, "However difficult to comprehend in an intuitive sense, modern cosmological theories assert that this universe began to exist over ten billion years ago out of literally nothing, without being caused to do so". Scientists of this persuasion may talk about a religious experience but this is obtained through the pursuit of rational knowledge rather than through the experience of transcendence. Einstein's references to God, for example, were "merely the evocative personifications of a universe full of wonder but free of any purpose". [3]

Another point of view, represented by Adelaide University physicist Paul Davies,[4] insists that while naturalistic explanations may be given for the development of complexity and design in the biological world, it doesn't make sense when it comes to explain the fine-tuning of the physical constants of nature and the laws of physics. Fine-tuning is evidenced in the close balance that exists between expansion and gravity in the universe to take one example of this phenomenon. If expansion dominated, matter would fly apart too rapidly for condensation into galaxies and stars. If gravity dominated, the world would collapse in on itself. In comparing this fine-tuning with

biological complexity, Davies comments that, "The whole argument [Darwinian natural selection] depends on nature being able to select from a collection of similar competing individuals. When it comes to the laws of physics and initial cosmological conditions, however, there is no ensemble of competitors. The laws and initial conditions are unique to our universe. If it is the case that the existence of life requires the laws of physics and initial conditions of the universe to be fine-tuned to high precision, and that fine-tuning does in fact obtain, then the suggestion of design seems compelling".[5] Davies thus argues, as distinct from Dawkins, for an underlying purpose in the way things are. While the Christian position of a creator God who designed a universe with human beings in mind is consistent with Davies' 'underlying purpose', his personal preference is for some highly attenuated principle behind the order of the world.

Still another controversial scientific viewpoint, represented by molecular biologist Michael Behe,[6] is that living organisms at the molecular level contain processes that are irreducibly complex and could not have developed naturalistically from simpler patterns or forms. It is contended that these irreducibly complex forms, such as the blood clotting mechanism in mammals, must have been designed with all components in place originally, otherwise the clotting function just couldn't operate. This perspective is completely different to the naturalistic evolutionary perspective of Richard Dawkins. The feature article in this volume by molecular biologist Ewan Ward and ecologist Marty Hancock discusses Behe's arguments in some detail and examines the important implications for Christian faith. The authors also discuss William Dembski's [7] mathematical attempt to analyse systems through 'an explanatory filter' to determine if a design principle is present or not. Both Behe and Dembski attempt to establish a design principle for nature without proposing the existence/non-existence of a designer. They do this to demonstrate the scientific dimension to design rather than the religious dimension.

The creationist movement, particularly in the USA, has embraced the design emphasis in the works of Davies, Behe, and Dembski and views their design analysis as supportive of a belief in a creator God who made all things in the beginning according to His master design and purpose, even though the authors themselves do not press this conclusion. The subsequent impact of the creationist emphasis on design in high schools in the USA has been so strong that a special workshop on intelligent design was convened by the National Association for Research in Science Teaching at their annual conference in March this year in St Louis. Al-

though the work of Davies, Behe, and Dembski has received criticism from scholars, Christian and non-Christian within the scientific and educational establishment, their work is regarded as highly significant in many Christian education circles.

Given the many differences of opinion on this topic, is it possible to arrive at a conclusion about God and design in nature? Let me share with you some of my thoughts on the issue as it currently stands. I often ask myself this question. Is it ever likely that the scientific evidence for a creator God, a Master Designer, will be so compelling that people will have no choice but to believe in a creator? The clue to answering this question is to look at the way people interpret the current scientific evidence. The fact is that when nature is examined by scientists across all spectrums and cultural beliefs, some interpret the evidence as suggestive of an eternal purpose behind the cosmos or a creator God and others view the evidence as equally supportive of atheism. The laws of physics, for example, are suggestive of universal purpose in the mind of Paul Davies but to Steven Weinberg,[8] "the more the universe seems comprehensible, the more it seems pointless". This suggests to me that God will probably never be discovered through a scientific logical analysis of nature. To a person who has chosen to adopt a Christian worldview for other reasons, however, this does not mean that scientific knowledge cannot enhance their position, only that it may not establish that position categorically. If my experience over thirty years in both the scientific community and the Christian community is any guide I suspect that God is largely to be known through personal experience rather than through logical analysis. In the meantime I enjoy the challenges that science presents in wrestling through issues such as design in nature and even discover facets that enhance my faith. While faith, then, engenders passion in my science, there is a sense in which science protects my faith from fanaticism. Whatever we make of the current design debate (check the web sites referenced in the first feature article) and the relationship between science and faith, let us keep in mind that the pursuit of God and the pursuit of knowledge are alike exciting journeys which can give substance to our lives. I hope you enjoy this edition of the journal.

REFERENCES

1. Dawkins, R (1988) *The Blind Watchmaker*. Penguin, London.
2. Slezak, P (1996) Book Review. *Science & Education* 5, (2), p209.
3. Ibid, p.205.
4. Davies, P (1992) *The Mind of God*. Penguin, Ringwood; Australia.
5. *Ibid*, p204.
6. Behe, M J (1996) *Darwin's Black Box: The Biochemical Challenge to Evolution*. The Free Press, New York.
7. Dembski, W A (ed) (1998) *Mere Creation: Science, Faith and Intelligent Design*. Intervarsity Press, Illinois.
8. Weinberg, S (1977) *The First Three Minutes*. Andre Deutsch, London, p149.

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