

Chapter 3 GOD'S INTERACTION WITH THE WORLD

Some Metaphysical Considerations

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3.1 THE WORLD AND GOD

3.1.1 What do we mean by "God"?

This may seem a strange question in a Christian course, however the word "God" can mean very different things to different people, even among Christians. In the interface between science and theology, even more diverse definitions can be found. Biblical theism encounters pantheism, panentheism, deism, semi deism, atheism, and agnosticism. Unless otherwise stated, we will use the word God to mean the God of Biblical theism, the triune creator and sustainer of the universe who has revealed himself through His works and His word, most clearly in the person and work of Jesus, the Word incarnate.

3.1.2 How does the world work?

The world we see about us could, in principle, work in a number of ways. Different models have been developed by different cultures. Science and magic (not to be confused with the occult) are different ways of answering this question. Science attempts to answer this question by examining the material interactions in the world. Magic seeks to understand by exploring the hidden connections between things. Historically, science has proved effective in understanding the work of the world, whereas magic has failed. Religion, in contrast, deals with personal relationships between the human and the divine.

3.1.3 How does God interact with the world?

The big question at the root of understanding the interrelationship between science and Christian faith is this: how does God interact with the world? Does He work in the world directly, or through secondary causes? Can God only work through one mode, or can he work via several modes? How are we to understand miracles? These notes will outline some possible answers to these issues.

3.2 METAPHYSICS?

3.2.1 Understanding the big issues

Metaphysics is a branch of philosophy that studies the big issues such as 'what is reality?'

What is knowledge? Is there a God? If so, how does he (or she!) interact with the world? Is there one reality or many? Is there a purpose or goal to everything (or anything)? In the area of the interaction of science and Christian faith there are several important areas.

3.2.2 Attitude to basic reality

What is reality? Is there an actual world "out there" with which we interact, or does it exist only in our consciousness? Naive realism would say "yes", there is a world out there, and what we sense is how it is. Critical realists would agree on the reality of the external world but would be more cautious about accepting appearances. The earth might look as if it were the centre of the universe, but is it really the centre? Idealists would say we have no way of knowing whether there is an external reality, what matters is our mental states. Science requires critical realism to be effective. Some people have adopted an idealist approach to some scientific questions. The scholastics regarded theories as useful fictions, not necessarily corresponding to the world. Part of Galileo's problem was that he insisted that Copernicanism was actually true, not a useful fiction. Similarly, some physicists have adopted the same attitude to quantum mechanics. Another important question is whether there is only one reality or several. Monists such as positivists argue that there is only one reality, the material world.

Transcendentalists also argue that there is only one world, the spiritual, and believe that the material world is an illusion. Dualists argue there is both a transcendental and a material reality.

3.2.3 Relationship of God and the world

If the world is indeed real, is that existence independent of or dependent on God? Has God created a world that is capable of independent action, or does God uphold the world? Is God one with the world, wholly or in part or is God transcendent? If God is transcendent, does He interact with the world continuously, occasionally, or only in the beginning?

3.3 WORLD VIEWS

3.3.1 What is a worldview?

A world view is a basic understanding of the world as a whole, how it relates together, not in the details of its operation, but in its metaphysical character. A worldview allows people to live, function, and make sense of what happens to them in their lives.

3.3.2 Examples

There are many examples of worldviews. There are a number of different though closely related worldviews within Christianity. More divergent from Christianity are the worldviews of Judaism and Islam. More distant still are worldviews of the atheist, pantheist, and polytheist. Science is not a worldview, although it arises out of a worldview. If people speak of a "scientific world view" they are either misusing the term or speaking of scientism, where some aspects of science have been elevated to metaphysical significance.

3.4 WORLD PICTURES

3.4.1 What is a world picture?

A world picture is an interpretative framework of some aspect of the world within a larger worldview. For example, quantum mechanics is a world picture, a description of how the world works at a particular level.

3.4.2 We may have several world pictures within one world view

World pictures are not exclusive entities. The quantum physicist will have one world picture for her science and another for her personal relationships. A worldview may be consistent with several different world pictures on the same subject. The Biblical doctrine of creation is consistent with both modern cosmology and the three-decker cosmology of the ancient world.

3.5 NON-MONOTHEISTIC CONCEPTS OF THE WORLD

3.5.1 Supernaturalism

Characteristics

Implies that events in the world are determined entirely by the interaction of supernatural forces. These may be independent entities or embodied in "natural" forces and objects. These entities may be neutral, hostile, or friendly towards each other and humanity.

Examples

Animism and spiritism, common in so-called primal cultures, and widespread through much of Asia and Africa, are good examples of supernaturalism. The spirits are not so much worshipped as feared and placated. Some more mystically inclined "deep ecologists" appear to argue for a return to such beliefs.

Consequences

Science is impossible under such circumstances. Indeed, it is both irrelevant and dangerous. Irrelevant because what matters in the world is not how the material world interacts, but the supernatural agents that inhabit it. Dangerous, because systematic inquiry may offend those spirits. This does not mean that cultures with supernatural worldviews lack empirical knowledge. Many have considerable practical expertise. Any understanding of relationships, however, are likely to involve magic, rather than science.

3.5.2 Pantheism**Characteristics**

God is nature, nature is God. Pantheists therefore worship nature as God, and see God as a personification of nature. In most cases however, the pantheist's God is impersonal, not personal.

Examples

The ancient Greek concept of Nature as a divine, eternal, self-sustaining entity was pantheistic, as are some versions of Hinduism. Some "deep ecologists" are also pantheistic.

Consequences

Despite the reverence for the world that pantheism might appear to engender, in reality pantheism generally leads to a utilitarian attitude to the world. Pantheism does not encourage science, although as with supernaturalism, much practical knowledge may be collected. It does encourage a mystical or rationalistic contemplation of the world. Deductive, inductive, and empirical sciences might verge on sacrilege, because by investigating the world you are investigating the divine. However some pantheists, such as Einstein, would appear to approach studying the world with a sense of awe and would see science, at least "pure" science, as something like worship.

3.5.3 Naturalism**Characteristics**

Naturalism is the belief that the physical world is all there is. Two kinds of naturalism can be distinguished, metaphysical naturalism, which states that matter is all there is, and pragmatic naturalism, which says that matter is all that matters. Metaphysical naturalism is atheistic, whereas pragmatic naturalism tends more to agnosticism.

Examples

Positivism is a good example of metaphysical naturalism. Pragmatic naturalism can be best illustrated by persons or groups who, while claiming to follow a non-naturalistic system, live and act as though material things were all that were important. Large-scale belief in metaphysical naturalism is historically rare. The most significant example is (or was!) Marxism. Pragmatic naturalism is, unfortunately, much more common.

Consequences

The consequences of naturalism for science are complex. Some scientists (like Richard Dawkins) promote such an approach. Marxist States strongly supported science and believed they were scientific. However no metaphysical naturalist system has survived for long enough to see whether it is a help or a hindrance to science in the long term. Pragmatic naturalism is more likely to see science as a means to an end, rather than worth doing for its own sake. Metaphysical naturalism is commonly confused with methodological naturalism, especially by

the “Intelligent Design” (ID) movement. Methodological naturalism is the assumption in science that explanations for natural phenomena should first be sought within the natural world, without automatic appeal to supernatural causation or other intelligent agents. It does not exclude such agents.

3.5.4 “Scientific” Metaphysics

Physical scientists’ interest

Transcendent laws?

Although long out of fashion, in recent decades some cosmologists have shown an interest in metaphysical questions. One area is the question whether or not there are transcendent laws operating in the natural world which science can discover, or if the scientific “laws” are merely useful fictions.

Teleology

A second area is the development of the anthropic principle, the possibility that the physical constants that run the universe appear fine-tuned for the appearance of life and even intelligence raises the possibility of design. This is a teleology far more profound than that of Paley. Teleology may also extend from physics to biology, with the suggestion that organic evolution is a consequence of those same laws, and that particular patterns and outcomes in evolution may not be random, but deterministic. This sort of biological teleology is again very different from that of Paley or the ID movement.

Eschatology

If the universe has a beginning, possibly fine-tuned, then it may also have a goal, and even a hope. This is despite the cosmologist’s vision of “freeze or fry”. Speculations by people such as Tipler and Dyson, that humanity’s descendants and inheritors might somehow survive the “Omega Point” or even reverse entropy, take physics beyond the limits of science into metaphysics.

Examples

Einstein

Albert Einstein was disturbed by the consequences of quantum mechanics and is said to have once complained “God does not play dice”. “God” to Einstein was a pantheistic God, at one with the universe. Such a statement is an expression of what IS, based on what OUGHT, arising from a particular worldview.

Hawking

Stephen Hawking has written on “The mind of God”. However his God is a shorthand for the overarching principles that govern physical laws. In so far as he has any theological concept of God it is a deistic one (see below).

Davies

Paul Davies has gone the furthest in developing explicitly metaphysical themes in his writings on science. He appears to have moved from agnosticism to deism as a result of the metaphysical consequences of cosmology.

3.6 MONOTHEISTIC WORLD VIEWS

3.6.1 Deism

Moving from non-monotheistic to explicitly monotheistic worldviews, the first we should consider is deism. Deism is a degenerate form of Christianity, Judaism, or Islam, that rejects God's action in the everyday world or on a personal level. Deists thus reject revelation, and, in the case of "Christian" deism, they are also Unitarian. Deists see God as the supreme watchmaker and the universe as a supreme mechanism. God is only active in the beginning and since that first moment of creation has left the world alone. The watch has been made and since then has ticked away by itself. The 18th and 19th century deists saw God as active in creating the world as a whole. However the discovery by geologists and astronomers that creation is an ongoing process over a long period of time invalidated this. Modern deists, such as Davies, would see God in fine-tuning the Big Bang. The world is a closed system and God either does not or cannot act in the world.

3.6.2 Semi-deism

Semi-deism also regards God as the watchmaker. The universe runs independently of God under normal circumstances according to natural laws. However semi-deists also see God as "intervening" in the world from time to time. These events are "supernatural" because they cannot be explained by natural mechanisms, and are miraculous. God is seen to be especially present in miraculous events to a degree He is not present in every day events. One image of God in a semi-deistic worldview is God as mechanic, constantly tinkering and fine-tuning the world, rather like a divine mechanic. Rather less flattering is the picture of God as magician, performing inexplicable wonders. Anything that is inexplicable is likely to be regarded as a sign of God's direct action. "God of the gaps" thinking is a common outcome of the semi-deistic worldview. Semi-deists will however defend such gaps as long as possible as they are proof to them of God's activity.

Semi-deists typically regard creation and origins as a miraculous event inexplicable by natural causes. In practice they view creation selectively. Most have no difficulty with the origin of individuals through natural processes. Some, such as Young Earth Creationists, regard the creation of the earth and universe as requiring supernatural activity, while nearly all regard the creation of life and species as supernatural. Why species and life should enjoy a special status that rocks, galaxies, or even individuals do not, is not clear among most Christians regarding God's interaction with His world. It is also clear that many agnostics and atheists also regard semi-deism as the Christian position. However popularity does not necessarily make this the actual worldview of the Bible.

3.6.3 Theism

What is theism?

The word is variously used in the literature. To some it refers to any belief in any god, singular or plural, as opposed to disbelief, which is atheism. More specifically in our context, it refers to theism in the special sense, which is contrasted to deism and semi deism. Theism here means a worldview in which God is constantly active in the world as creator and sustainer. The distinction between "natural" and "supernatural" events, so important to semi deists, is irrelevant to a theist. God works continuously in the world, whether He does so by natural seeming or supernatural-seeming processes is a secondary issue. A theist need make no *a priori* assumptions about any act of God being achieved by natural or supernatural means, that difference is something that can be worked out from the evidence.

God as actor—interacting with nature

As with semi deism, several analogies have been developed to illustrate God's interaction with the world. One is God as playwright. A playwright who also directs the performance creates a story, supervises construction of the stage, and directs the action. The play is truly their creation. In the process the playwright freely interacts with other people—actors, stage mechanics, etc.—to achieve the goal. In Christian theism God is also an actor in the play, through the incarnation, rather as Shakespeare is said to have acted in some of his own plays. Dorothy Sayers has developed this model.

God as artist

A second analogy is God as creative artist or novelist. The artist or author imagines and creates a world, a subcreation, entirely within their imagination. Characters within this world have their own reality but it is dependent completely on the ability of the artist or author to actualise it. This model has been developed by a number of people including Dorothy Sayers and JRR Tolkien.

God as sustainer

A third analogy is the TV Model, most cogently argued by Donald McKay. It describes God's moment by moment sustaining of the universe by comparing it to a TV. Just as a TV picture is sustained by the signal and current, so the world is sustained by God. The world is separate from God, just as the TV picture is separate from the power station and transmitter, but it is not autonomous. All these images are metaphors, they illustrate some aspect of the theistic worldview. Each is incomplete, and people will differ in the degree to which they find them helpful.

3.6.4 Biblical Theism**Definition**

Biblical theism means different things to different people, however there are several consistent threads. The triune God is both creator and sustainer. God is sovereign over all things, not just some things. God can act in the world through both natural and miraculous processes, He is no more or less present in one or the other. This God reveals himself through the book of His words and the book of His works. In the former God has spoken through His prophets but most clearly through His son, Jesus Christ, by whom, and for whom we are being and will be reconciled to God through the cross. Creation has a goal, that is that all things will be under Christ's lordship in the new heaven and new earth.

Consequences

The main consequence of Biblical theism is Christian faith in which one is constantly moving from individual perception to interaction with God—from the I to the Thou. With respect to science this means that science is not an anthropocentric activity but one where the individual is constantly interacting with God the creator through his works. For the Christian this occurs in parallel with the interaction with God's word and the individual's personal faith. For the Christian in science the practice of science must be something that engages the whole person, not just a part isolated from the rest of him or her.

3.7 GOD'S INTERACTION WITH THE WORLD**3.7.1 Theistic world view/scientific world picture**

The worldview of Biblical theism has several consequences for the scientific world picture. It affects what we think about the nature of causality and about the laws of nature.

3.7.2 Causality

First causes

God is the first cause of the universe as creator, the first cause that introduces novelty into the world, and the first cause of the sustaining of the world. God is the agent that makes these events possible.

Secondary causes – Mechanism

God may choose to achieve these events “directly” or supernaturally, or through the secondary causes, what we might call natural processes. How we distinguish between the two is not as easy as might appear, as the following section will discuss. Therefore it is best to acknowledge that God is creator and sustainer of and in all things, regardless of whatever mechanisms may or may not be identified for that action.

3.7.3 Laws of nature

Prescriptive?

People often speak of the “laws of nature” as if they actually existed. However what we have are rather particular descriptions of how the natural world works. If they are well supported they are called laws. However as scientific theories are in constant flux it is epistemologically dangerous to regard these as fixed prescriptive laws in an absolute sense, no matter how well attested we may think they are. If we think there are such prescriptive laws (however well we may or may not understand them) then as theists we must regard them as God ordained. The question then remains: can God over ride them as He chooses, or is He bound by them? If we say that God is bound by those laws we are potentially limiting God in the same ways as the deists did.

Descriptive?

Alternatively, we can regard the “laws of nature” as just descriptions of the way the world normally works. Because all things are enacted by God the sovereign creator and sustainer, the “laws of nature” are simply descriptions of the way that God normally works. They are not prescriptive in any way, any more than a regularity in the work of a novelist or painter prescribes him or her to always work in that style.

3.8 MIRACLES

What is a miracle?

Miraculous events occur sporadically through the Bible. They play a key part at specific times in the history of God – the Exodus (see Humphreys 2003)¹ and the conquest of Canaan, the ministry of Elijah and Elisha, the life of Jesus and the early apostolic ministry. Many events in the lives of many Christians through history have also been described as miraculous. Miracles mean different things to different people. To some they are events which have no explanation. To others, such as the philosopher, David Hume, they are events clearly contrary to natural laws. Some regard “miracle” as a synonym for “magic”.

Problems with these definitions

Each of these definitions has its problems. If a miracle is an inexplicable event and this event is explained by some future scientific discovery, then “miracle” is only an excuse for our ignorance. If we define them as events contrary to natural

¹ Professor Colin Humphreys, Goldsmith’s Professor of Materials Science at Cambridge University, shows that there are scientific explanations for the plagues and he also provides a carefully argued case for the Exodus occurring at near the top of the Gulf of Aqaba and for the location of the true Mt. Sinai in Arabia.

law then we may rule miracles out *a priori* if we believe that natural laws prescribe all that can happen. It is also a position of some arrogance in that it assumes that the natural laws that we understand are the final story. If “miracle” is equated with the “magical” then any significance of the miracle beyond the curious may be lost in credulity.

3.8.1 Biblical Miracles

Definition

The Bible defines miracles somewhat differently to most people. In the Bible miracles are “signs” of God’s presence, care and salvation. They can also be signs that point to or illustrate a particular aspect or characteristic of God or lesson about Him. Miracles are “mighty acts” by which God preserves and saves His people. They are “wonders”, events that excite awe and worship of God.

Examples

There are a great many Biblical miracles of many different types. A list of well-known examples might include the arrival of Rebecca at the well, destruction of Sodom and Gomorrah, the crossing of the Red Sea (see Humphreys 2003¹), Elisha’s floating axe, the healing miracles, and the resurrection of Jesus.

Characteristics

Each share the common features in that they were significant actions by God in either the lives of the people concerned or the history of God’s people. In other ways they were very divergent. The arrival of Rebecca at the well in answer to Abraham’s servant’s prayer was “fortuitous”. There was nothing unusual in it except for the fact it occurred in answer to his prayer—and paved the way for the marriage of Isaac, and the continuation of the Abrahamic line. The Crossing of the Red Sea was a mighty act of God, but one that the Bible attributes to a “natural cause” an east wind that blew all night. This event has been successfully modelled for the northern end of the Gulf of Suez with a northeasterly wind of about 70 kmph blowing for 12 hours. However Professor Colin Humphreys (2003) locates the Exodus crossing near the top of the Gulf of Aqaba¹.

For the Biblical writers the explicability of the miracle did not diminish its significance as an act of God. No explanation is given for the destruction of the cities of the plain except fire and brimstone raining from heaven. However natural explanations can be conceived—volcanic eruptions, meteorite impact, explosion of venting natural gas, and so forth.

The healing miracles do not necessarily involve anything beyond what might occur naturally. What is miraculous about them is their timing and speed. Some miracles seem beyond explanation, Elisha’s floating axe head is one. Others involve something very special, the appearance of transcendent realities within the confines of the natural world. The resurrection of Jesus is the supreme example of this. The key thing to note is that while miracles differ in significance, their significance is not related to whether the event was fortuitous, explicable or inexplicable.

3.8.2 Miracles—Approach

Miracles in the context of Biblical theism

With the Biblical understanding of miracle as sign, wonder and mighty act we can then develop a context to understand miracles within Biblical theism. The approach includes principles to remember, traps to avoid, and questions to ask.

Principles to remember

Principles to remember are the fact that God is sovereign in and over all events. God is as present in miracles as He is in everyday events. What makes a miracle a miracle is its significance.

Traps to avoid

The second important thing to remember is to avoid particular traps. These include thinking that miracles can only be events that are inexplicable. Another trap is the reverse, thinking that explicable events are not and cannot be miracles. A third trap to avoid is thinking that particular modes of divine action, such as creation are miraculous and are inherently inexplicable. This is to use "miraculous" in Hume's sense, not in the Biblical sense.

What is the meaning and purpose of the miracle?

Because a miracle is defined by its significance in the history of God's people, it is always important to consider the miracle and purpose of the miracle. This will keep us focused on the Biblical understanding of a miracle and its significance at the time and to us.

What is the cause?

Considering the cause of a particular miracle is therefore not particularly useful in most cases. However we should always be aware that the particular causation is not what defines a miracle. Therefore Christians should not be alarmed if it becomes possible for a particular miracle—such as the virgin birth—to be explicable by natural causes. All that has been discovered is the way in which God achieved that miracle.

Miracles today?

If God is constantly at work in His creation then there is no reason for Christians not to pray or to expect miracles to happen. However we should also be aware that miracles do appear concentrated into particular epochs of history, so they may not be the norm. However if we do pray for miracles we should also be aware that they might come in forms unlooked for. A miraculous deliverance from drowning may be in the form of a rescue helicopter, not just angels descending from above.

3.9 SOME QUESTIONS FOR DISCUSSION

- How can we tell when an unwarranted metaphysical conclusion is being made from science?
- What is so special about the species that many Christians insist on miraculous origins for them when they do not insist on miraculous creation of rocks and galaxies or individuals?
- How might a semi deist and a theist differ in their attitude to prayer?

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