

CHAPTER 1

Introduction

1.1 **Statement of the Problem: Different World-Views on Reality within Science and Theology**

1.2 **Background to the Research Problem**

For many decades, science and theology have accused each other of arrogance in their claims to know the truth. According to Polkinghorne & Welker (2000:6), in Western cultures, public expectation relies mainly on scientific procedures and not much, if indeed at all, on theology. Furthermore, people tend to seek answers to difficult and critical issues through scientific inquiry, despite the current crisis in scientific epistemology and a growing suspicion as to the actual benefits of much of technological progress. The common assumption in Western societies is that the measure and model for truth claims is found in the sciences.

Unfortunately, this stance can have many ideological side effects. However, instead of expressing dissatisfaction about this, theology must rise to the challenge. It cannot give up seeking to make its impact on common sense and on contemporary mentalities. Christian theology, according to Polkinghorne & Welker (2000:6), has to expose and expound its theological truth claims in

public discourse, and it has to warrant its claims to truth. All efforts to develop greater legitimise for theology by simply opposing the sciences should be discouraged. At the same time, theology and science have to clarify the limits of scientific insights, acknowledging its own limits

However, despite this negativity, Barrett (2004:10) states that there is now a growing realism and humility about the limits of the two disciplines. Furthermore, science is now coming to be seen - at least by many philosophers and sociologists - as a far more relativist project. That is, one that is being culturally determined in many of its assumptions and choices of projects, which many view as just one of the ways humanity seeks to make sense of their world.

Theology has now also come to recognise that its language is much less scientific and much more metaphorical than previously realised. The two disciplines are also now often seen as complementary ways of seeking to understand the world by involving mental models of reality that are inevitably incomplete in their own representation. What would be the outcome, one could ask, if the two disciplines could combine into what one could call a scientific theology?

At this point, the author would like to place on record that this thesis will focus on *Christian theology* specifically, rather than the more generalised and elusive category of *religion*. According to McGrath (2004:31-32), there are two

main reasons why one should approach a study of reality from this focus. Firstly, no general theory of religion commands universal assent. Secondly, it is clear that there are major divergences between the religions on a number of themes of direct relevance to the natural sciences. McGrath (2004:32) gives a good example of this divergence by stating that Islam has intense misgivings concerning any idea of a “natural knowledge of God”, independent of the Qur’an. Thus, according to McGrath, a scientific theology is fundamentally Christian in its foundation and in its approach.

In stating this, a question that comes to mind is: Is there such a thing as a scientific theology? Besides this, can the recent developments in epistemology and philosophy within science fit the current reasoning within theology when it comes to understanding reality? One could also ask if there is any justification in complementing science and theology to further the general understanding of what makes up reality.

On the surface, this seems impossible. Natural and social sciences work with empirical data; called an *inductive approach* to research. Theology, on the other hand, works *mostly* from a standpoint of faith, or a *deductive approach* to research, with its foundations being a belief in a Supreme Creator. In all fairness, one has to say mostly, as there are many theologians who prefer to study using a practical approach to the Bible. This approach is more experiential, and inclines one to do a lot more empirical research to find

answers. This approach is called an *a posteriori* method of research, and according to McGrath (2002:271), is used effectively within the natural sciences. In this method, understanding of reality arises primarily in an *a posteriori* manner, meaning, research is chronologically and logically regarded as a consequent to the revealed evidence gathered. The question is: Is this the only effective way to study reality? Unfortunately, in the author's mind, it leaves out important questions such as the reason and purpose for creation. This can be seen in almost every major world-view outside a Biblical world-view. This includes religions such as Islam or Buddhism, for example, which concern themselves with the reality of existence, yet fail to adequately explain the *reason* and *purpose* for existence - only Scripture, in the author's view can. However, when it comes to the natural sciences, one should grant to them that they have attempted to find the natural cause of events. The problem, it seems, is the lack of limits natural science seems to impose on itself, by often refusing to accept a greater higher first cause. This in turn has limited them, in many cases, to study the lower causes of events on which it becomes difficult to build any knowledge of God. Unfortunately, the analogies they use are weak at best. The conclusion is, that one must have had a first cause, that goes beyond scientific explanations and analogies, which actualised existence; this first cause will then explain the reason and purpose for existence. This is such an important subject that it will be studied further on in greater depth.

However, while ignorance and bias persist in both fields, observers on both sides have realised that consonance between science and theology is desirable. The two disciplines have much to offer each other, but how to accomplish this is the question?

The answer, it seems, lays in the fact that both concern themselves with exploring human rationality, although from different viewpoints. The one is a personal encounter with only the physical world; the other, a personal encounter with the metaphysical world as well; two differing views of what makes up reality.

The question is: How does one bridge this gap? It seems that the answer would be to set up a framework, within which both can express their viewpoints, as well as common factors sought and compared. To do this, one would need to explore what the overarching frame of reference is between the two, and work from there. The answer to this question will be the outcome of this thesis. Therefore, the following research questions, as well as objections expressed by both disciplines, would be, in the author's view, the best way to begin.

1.3 Statement of the Research Question and how this Research Aims to Investigate it

This study will concern itself with the nature of the scientific dilemma, specifically regarding science's failure to recognise Divine concurrence in the structure of

the universe and creation itself. Although the study will centre on specific views, it will also engage the various positions taken by scholars on reality within the respective fields of theology and science. As such, the following research question captures the core intent of this research project. The world, according to Huntington (1993:22), is divided, not so much by geographic boundaries, as by religious and cultural traditions, by people's most deeply held beliefs - by *world-views*. Further to this, Borg (2003:62) states that, "Our world-view is our *image of reality* - our image or picture or understanding of *what is real* and *what is possible*. Colloquially, our world-view is our 'big picture' of the way things are. Philosophically, it is our metaphysics or ontology". This is the core of the research question. **It is the author's intention to show, that a *Theistic World-View* is the most Biblically viable world-view within which reality can still be understood.** In order to reach that outcome, it will be necessary to follow a rigorous and wide reaching analysis of various world-views – scientific and theological – as they relate to the research question.

As such, when one looks at what science studies concerning reality and what Scripture states about reality, it seems as if the two disciplines are poles apart when it comes to each one's understanding of what reality is. However, when one looks a little closer at the two conclusions on reality, one begins to see that there seems to be similarities between the two. Although the conclusions are different, there is a common thread that holds the two disciplines together; that thread is a pursuit to gain a deeper understanding of

reality. However, science needs to realise – and many scientists do – that although they are studying a secondary cause; they are in fact studying the primary cause of everything, which is God. In Barbour's words (2000:159),

Some authors claim that theological and scientific accounts cannot conflict because God's primary causality is on a completely different plane from secondary causes in the sphere of nature. Others maintain that science and theology are complementary languages, expressing differing but not competing perspectives on reality.

One would tend to be strongly supportive of the latter part of Barbour's statement, which maintains that science and theology are often complementary when it comes to expressing each one's perspective on reality; one just has to look for it. Reasons for this, is that although the two kinds of causes, primary and secondary are inseparable, they are on such different levels that theological and scientific accounts are seemingly completely independent of each other. The one way to find an answer to this would be to start with a deductive process as to the source of humanity's existence, and to work forward from there to a final purpose.

Although there is no doubt that science has achieved enormous success as a way of knowing the structures and processes of the material world, physical science, it appears, leaves no place for Divine action. One needs to say "appears" as usually modern science presupposes that the universe is a closed system and that interactions are regular and law-like. In their view, one can

trace all casual histories, and all anomalies will ultimately have physical explanations; it is only a matter of time.

Unfortunately, according to Polkinghorne (1998:9), many people portray scientific discovery as resulting from confronting clear and inescapable theoretical predictions and by the results of unambiguous and decisive experiments. The perfect matching of the two is then held to establish unassailable scientific truth. But is this true? Clearly, most of the great early scientists, including Galileo, were serious believers who saw little if any conflict between science and theology. However, for reasons too complex to explore here, the two disciplines have counter developed over the centuries, like twins trying to establish their separate identities. An example of this is the statement by Einstein concerning the divide between science and theology. Although contrary to some popular beliefs, Einstein was not a Christian, he did not believe in a personal God. Rather, he identified the religious sense, according to the scientific journal, *Nature* (1940:605), with recognition of “super-personal objects and goals.” Nevertheless, his 1941 remark, “Science without religion is lame, religion without science is blind” (Einstein 1941:11), is one of the most significant statements made by a scientist who did not believe in a personal God. Thus, both science and theology involve themselves in a journey of discovery, both seek answers, and both concern themselves with truth.

1.4 Background to the Research Question

There is no doubt that the relations between science and faith are complex, as the following will attest to. From a religious perspective, it does seem that science usually negates faith as a way of solving issues, thus, in a way, rejecting a theistic view to understanding reality. Their modernistic approach is that scientific knowledge represents the sole cognitive entrance into what is *real*; the sole course of valid statements about what is *the cause*. Their argument is that science and science alone defines reality. As such, nature is as science defines it, and reality equals nature as defined by science. Thus, in the view of science, nature exhaustively defines reality itself (i.e. naturalism). Literally, there is no room for other dimensions of reality, much less knowledge of them. By contrast, theology believes that faith is required to widen the picture, to search and gain answers to greater truths than science can now present. Although science *believes* that their way of describing and explaining the nature of reality is in essence correct, faith makes more of the world than the human mind often imagines. In creation and in the Scriptures, God's work and His Word are far richer than limited minds can fathom.

According to McGrath (2005:139) however, in recent years there has been wide agreement, including a growing interest, in exploring the relation between science and theology. Many are openly speaking about a *new*

convergence in the disciplines, thus opening the way to new insights and understandings (see Ruse 2001).

In contrast, Dawkins (2003:151), a vocal proponent against anything religious, has an admirably robust response to this: “To an honest judge,” he writes - perhaps with himself modestly in mind, “the alleged convergence between theology and science is a shallow, empty, hollow, spin-doctored sham.”

In all fairness to Dawkins’ opinion, one of the major reasons for science rejecting theology as a way of knowing reality is because theology, in most cases, lacks verifiable data. Unfortunately, theology often basis the data it presents on assumptions (faith), not on experimental testing or empirical data. Regrettably, one cannot put God and all His attributes in a room and observe, record the data, analyse them and come to any rational conclusion. Furthermore, one cannot base their trust and belief in God on empirical knowledge alone; it is a walk of faith. It is only by His prevenient grace anyway that one can come to know Him (Rom 3:11; 12:3). Only God has all the answers to everything one sees, or cannot see. Science needs enlightenment by the Spirit, if they wish to have a deeper understanding of what makes up reality. Very few scholars will doubt that science has its usefulness in this world, but its overconfidence in believing that its epistemology are the only way to understand reality, is in effect, a limiting barrier. There is no doubt that the relations between science and theology are complex. However, as Galileo held, one

could learn from two sources, the book of nature, and the book of Scripture – both of which come from God and therefore cannot conflict with each other. Nowadays, this quote might seem out of place, especially when one considers how much information science has contributed to an understanding of what makes up reality. But, as the author has previously quoted, science, in its overconfidence, has started to limit itself to the value that theology can still contribute to understanding reality.

A good example of why science needs theology is the controversy surrounding Darwinism. There have been several misunderstandings regarding his views, but, even Darwin himself believed, to a certain extent, that God had created the entire evolutionary process, but not the detailed structures of particular organisms. Darwin is on record as saying, “I cannot think that the world as we see it is the result of chance, yet I cannot look at each separate thing as a result of design” (Darwin 1860:312).

One could easily avoid the conflict between science and theology, by simply keeping the two fields in separate compartments, which Barbour (2000:2) calls the *independence view*. According to him, this alternative view holds that science and theology are strangers who can coexist as long as they keep a safe distance from each other. As such, one could then comfortably distinguish the two by the questions they ask, the domains to which they refer, and the methods they employ. In this way, both could tend to their own business, and not meddle

in the affairs of each other. The question is whether this is in the best interest of each field, and the whole of reality?

In a letter to the Reverend George V. Coyne, Pope John Paul II (1988) said, “Science can purify religion from error and superstition; religion can purify science from idolatry and false absolutes. Each can draw the other into a wonder world, a world in which both can flourish”. These are sensible words which science will do well to heed, if they are to make more sense of the world they occupy. Therefore, the assumption they need to work from is to first acknowledge that they do not have the final word, as a “higher power” exists. Thus, the work presented in this thesis is written from the premise and conviction that *theism* is a viable world-view, able to explain the cause and end of reality as expressed by Scripture.

Although one might interpret the following statement as being subjective, the common ground for studying reality is firstly found in studying creation. In the author’s opinion, *creation has a purpose*. If there is no purpose for creation, what would be the point of studying it? The knowledge would be of no real value, except to a limited number of scientists whose data will lead nowhere. Therefore, the author believes that once the purpose for creation is agreed upon - which should be from a Biblical perspective - science and theology can then further their studies around these ideas, to bring more value to how one sees reality. However, those who study within the realm of natural science do not

necessarily have to be believers, for theologians to work with them, as both disciplines do have common ground to work within, which is how reality functions.

1.5 Research Methodology

In terms of the research methodology, the author has opted for a literary study of authors - past and present - combining this with a dialogical and complementary method of research. The author believes that this would further improve the productive relationship which has, as previously referred to, been taking place between science and theology for some time now. The author also believes that researching results between the various methods used by science and theology in their exploration of reality will provide a more integrated assessment of both viewpoints. This should also make it easier to reach consonance, where necessary, on the topic of reality.

Further to this, the dialogical method will also be integrative in nature. That is, the commonality found between the two disciplines will be, where needed, merged with the epistemological point of departure being complementary concerning reality. The study will therefore concern itself with qualitative research. For example, the basis for research will be a critical assessment on the opinions and insights of previous researchers within the same fields, directed by a strong presupposition to a *theistic world-view*.

In saying this, the author would like to place on record that this work is prone to subjectivity, as it is being written from a Christian perspective. This will result in the author being prejudiced to certain ideas and specific author's viewpoints, specifically those opposed to any form of *faith*, and those who are intolerant to any form of theology questioning their views. Although the author will dialogue with their viewpoints, as explained, it will be in a rather critical manner where necessary. At the same time the author will compliment sources, regardless of whom they are, who contribute to an overall understanding of what makes up reality. Reasons for using the above methods is that one can so easily get caught up in fruitless polemic discussions, that whatever the objectives set out in the beginning to achieve through the study, can become clouded, and even lost. Fortunately, this is not what this work is about, rather, each should be learning from the other.

Throughout this study, the epistemologies of both science and theology will be reviewed, specifically their views regarding ontology. In particular, the empirical data used by science will be reviewed and critiqued, once a world-view emerges concerning their view on evolution as the only way of understanding reality. A case study of Darwin's evolutionary theory will also be undertaken and reinterpreted to strengthen the case for theism. In this particular study, Darwin and others of the same persuasion will be critiqued on their epistemology. This will be achieved by using a deductive process, with the result being how they arrived at their conclusion, and how the latest data from science has affected the

Darwinian view of evolution. Further to this, the metaphysical nature of being will be broadly explored, i.e. how do evolutionists view the nature of being, and how does it conflict with the scriptural view found in Genesis concerning the nature of being. This will work in tandem with the Darwinian case study.

The study will also consider the deterministic view in the light of evolution and evaluate it specifically from the postmodern mindset. Some authors have suggested ways in which traditional ideas of God's role can be reformulated to recognise both law and change concerning reality. A challenge to *The Open-Theism* view will, for example, be undertaken within this particular study of determinism, as this is one of the more controversial modernistic views being proposed today regarding reality. Areas such as: whether God knew that when He created human beings it would lead to the fallen world as it is now seen will be explored.

1.6 The Objective of the Research Methodology

The object of the research method is to bring together the idea of reality and its relationship to the doctrine of creation, and combine it with the field of science regarding its idea of how one is to understand creation. The aim of these research models will be an attempt to bring together the commonality that both disciplines have concerning what reality is and how it affects humanities frame of reference. It will start with the theory of evolution and its struggle for

existence, and the Biblical view of what the purpose for creation is within the realm of reality. The final chapter will conclude with the differing views on the consummation of the world, and a case for theism will then be presented within this chapter. As such, one can sum up the two opposing forces as follows:

- A God world relation regarding its view of creation and reality in the light of Scripture;
- A science world relation regarding what evolution and reality should be in the light of empirical knowledge.

The intent of the study will also be to show that most major alternate world-views are self-defeating and inadequate and that theism is a most viable world-view, and in the author's view, stands the test for truth. An exposition of the following metaphysical systems will also be undertaken, namely, *Pantheism*, *Deism*, *Agnosticism*, *Rationalism*, *Evidentialism*, *Experientialism*, *Pragmatism* and *Atheism*. Their views on reality will also be explored, and they will be critiqued on how they view the existence of God, and how He interacts with creation. From this, the author will then further cement the hypotheses that theism is a valid viable alternative in comparison to other metaphysical views.

The major proponents of these specific views and the impact that they have on one's understanding of reality is a necessary study. One can only come to a reasonably clear understanding of what makes up reality from Scripture, if

one understands the beliefs and views of others. An example would be if one held to a belief in *rationalism* or *empiricism*, one would already be caught up into two contrasting ideas of what makes up reality. The former stresses the *mind* in the knowing process, and the latter lays emphasis on the *senses*, and both depart from man.

With its stress on the mind, rationalism holds to an *a priori* aspect to human knowledge that is something independent of sense experience. By contrast, empiricists stress the *a posteriori*, or what comes through empirical experience.

When it comes to a belief in God, one again gets two differing views on His existence. Rationalists tend to argue for the existence of God from an *ontological view*, whereas empiricists, who are deists, support their belief in God from a *cosmological view*, or from the world to a cause. Cosmologists, for example, use an inductive approach as their method to try to prove the existence of God.

Clearly, a study into how one perceives *God* will no doubt have a direct impact on how one perceives *reality*. The author has only used the first two views to show the differences and difficulties that one will face throughout this study. The purpose of this study will also be to find, if possible, commonality between the differing views, and use the information as a point of departure to

cement a study in later chapters regarding theism as being a viable choice, if one wants to come to a correct understanding of what makes up reality.

This study will also take the form of an exploration into what makes up the physical universe in relation to reality, as there are several differing views on how the universe was created. For example, Alberts (1996:10) states that three lines of answers are possible:

1. It all happened by chance. However small the chance may be is beside the point. An infinite number of universes may have started up spontaneously and among them this one. Alternatively, there is only this one universe and by chance it turns out the way it is, down to the last detail, including men and microbes.
2. The second answer is to stay with what can be observed and experienced, nothing is known beyond that. Based on this, there can be no conclusive answer to the question; where did it all come from?
3. Thirdly, one could say that it was all purposefully designed by a pre-existent being, called God. By pre-existence one simply implies that God was already there when it all started up, and His origin does not, and need not be part of the answer.

Although the above three approaches broadly represent the religious beliefs of atheism, agnosticism and monotheism, as embodied in the faiths of

Christianity, Judaism and Islam, the important point to recognise is that all three views start off with an initial step of sheer unproven belief, yet a belief that is not confuted either.

The difficulty in showing the scientific world that theism is a necessary step in furthering their understanding of reality, is that science deals with facts. However, facts themselves do not necessarily make up science. In the view of Barton (1999:17), facts are the way that the natural scientist builds a coherent framework for understanding the world. But, as this framework has developed, it has now conflicted with another framework for understanding the world, that of theology. Thus the thrust of this research is to bridge this gap, and find complementarity through presenting a theistic view of the world, in which science and theology can comfortably work to further each ones understanding of reality. As the following research points out, there was a time when science and theology were very much in dialogue with each other.

According to the historians of science (i.e. Hooykaas 1972; Jaki 1980; Pearcey & Thaxton 1994), modern science arose in the context of a Christian world-view, and were sustained by that view. But even if that was once so, argues Poythress (2003:111), modern science seems to sustain itself without the help of clear *theistic* underpinnings. In fact, he further argues, many in the scientific world consider God to be the *God of the gaps*. Meaning, where empirical data fails to answer a specific theory, God is the convenient plug to stop the theory from bleeding to death. The situation looks different if one

refuses to confine God to *the gaps*. In the view of Poythress (2003:112) God involves Himself, according to the Bible, in those areas where science does best, namely, areas involving regular and predictable events. For example, areas such as those that involve repeating patterns and sometimes those that require exact mathematical descriptions. Thus, although the scientific world will not, in many cases recognise this fact, it is the theistic God of the Bible that is involved in those areas they are studying.

It is therefore irrational for science to confine God to the gaps, and then to try and explain the so-called unexplainable. Science should realise that God also orchestrates the regularities that science studies. These regularities go by various names such as, natural law, scientific law and theory. One can safely say that all naturalists are positivists, meaning; they believe in and rely on the existence of scientific laws. What science needs to recognise and acknowledge if it wants to make any further inroads into the laws that govern the world, is that it is transcendency speaking, acting, and showing in time and space.

The real misunderstanding of science though, is its refusal to acknowledge that God is the creator of these laws that govern existence. When science studies the laws, for example, that govern quantum physics, they will, in all likelihood, lead the scientist back to a transcendent source: God. Although many might refute this view that one can come to an understanding of God through an inductive study of nature, Martin (1997:71-75) states that a method

called *The Transcendental Argument for the Existence of God* or TAG is the argument that logic, science, and objective ethical standards (an inductive study), presupposes the existence of God? The basic idea of TAG, when used against natural science, is easy to understand and state. It maintains that certain things that science assumes are true, can only be true if there is a God.

Primarily, these scientific assumptions are the beliefs that logical reasoning is possible. It thus states that scientific inference is justified, and that objective moral standards exist. So if an atheist uses logic to refute a theistic argument, or uses scientific evidence to undermine some Biblical position, or even argues that God's omnipotence and moral perfection are incompatible with evil in the world, and thus that God does not exist, TAG maintains that he or she is implicitly assuming God's existence. Thus one could infer that logic and science would be impossible without God. As such, the laws that govern the world cannot be incompatible with the One who created them, and natural science needs to come to this realisation. As previously referred to, this realisation can only be found in accepting theism as a valid viable alternative in comparison to other metaphysical views

1.7 The Context of the Research Problem

As presented throughout the preceding work, what distinguishes world-views is their acknowledgement or denial of an intelligence and purpose beyond all manifestations of perceived reality. The acceptance or denial of a personal God,

thus divides all world-views into basically the scientific and theological.

However, one could also regard supplementary world-views such as the agnostic and ideological views and those of a similar belief as separate from the science theology debate, and thus would warrant a separate discussion? But, in the author's view, these beliefs would rather fall within the broader category of *World Religious Beliefs*, and therefore would fall outside the scope of this research.

Understandably, according to Gilkey (1989: 284), theology and science represent a relation to reality that is cognitive or believed to be so. Therefore, since science and theology are interdependent, the issue of the truth of science and that of theology, and the relation among these sorts of truth, represent a central issue to each of them. It is this issue of knowledge concerning the truth of reality that the author seeks to address throughout this work. The main thrust of the argument will be science's failure to answer questions surrounding humanity's journey of life and their final destination, life after death. Therefore, the following is a breakdown of how this will be accomplished.

1.8 The Goals of this Research

The dialogue between theology and science, according to Weder (2000:291), can only make sense if they share a common subject. This implies, however, a certain epistemological disposition in both theology and natural science as both

produce a construction of reality that can and must be distinguished from reality itself. The scientific character of an approach establishes itself by defining the rules and axioms according to which the construction of reality is to be achieved. Therefore, one should not understand the term construction in a merely constructivistic sense. On the contrary, one should rather judge every single construction of reality by the criterion of its adequacy to present a model of reality itself. There is an inescapable degree of circularity here. Different sciences can take multidimensional approaches to the same reality. The aim of dialogue is therefore to broaden the notion of the real by considering as many dimensions as possible (see Polkinghorne 1994:9). There are, of course, considerable differences in the composing accounts of reality. This is most prominent; firstly among the different natural and social sciences, and then between theology and all other sciences.

Science constructs its reality assuming a uniform secularity. That is, understanding the reality of the world without any extra worldly factors. It is a closed system with a continuous chain of cause and effect (see Troeltsch 1913:729-753). Theology, on the other hand, has to respect that alternative approaches to reality, do discover God amid their secular experiences, and therefore might describe reality by using words evoking transcendence. Dialogue would be impossible if either were to claim the following:

1. If natural science were to claim a secular character for reality itself instead of sticking to the secularity of its construction, or

2. If theology were to claim that transcendent reasons are indispensable for describing reality, so that any secular approach would be excluded as false and inadequate.

According to Weder (2000:291), two conditions are necessary for dialogue to avoid these pitfalls:

1. Natural science has to keep in mind the limits of its construction of reality and has to recognise the basic openness of reality to a deeper (and eventually religious) dimension; and

2. Theology has to use the word *God* in such a way that transcendence is not an indispensable factor in explaining reality, but rather a dimension enriching perceived reality (see Schweiker 2000).

Theology must therefore not use religious ideas in such a way as to exclude secular explanations. Its religious interpretation of reality must fully respect the possibility of secular explanation. An example could be the conversion of Paul, which one can determine as a work of the Spirit with full respect for psychological descriptions. Besides, one can imagine that the

interpretations of theology are in reality improved, if one does not exclude secular explanations. *To sum up, theology has to use the word God, not as the counterpart of secular opinion, but as the opportunity for deeper insight: to discover the enigma of reality amid riddles solved as well as unsolved.*

Concerning this, it is a human moral trait to seek explanations. In science, one could claim that they are doing research simply for the sake of understanding how nature performs. Science may argue that it studies nature to make sense of the surrounding world; to give a name to phenomenological activities, or unexpected happenings. One can argue that science is, to a large degree, having much success in explaining the unexpected, but is it enough? Science should accept that to achieve breakthroughs in the dialogue between science and theology, scientific methods, as advanced as they are, hold no intrinsic guarantee that it can lead to ultimate truth, specifically when it comes to unexpected happenings. A classical case, in the eyes of science, is the contingency of the universe. Once this question is addressed, it then leads one to then query the age of the universe, the age of the earth, and the age of humankind, and then questions, just keep leading to more questions. One then has to contend with the many differing views as well, e.g. those who hold to an old earth creation, and those who hold to a young earth creation. Further to this, it is not only scientists but also theologians who differ in this but one of many particular areas of dispute.

The author believes that the most important reason in finding mutual understanding is commitment to a shared goal, as previously expressed. Dialogue is unfortunately impossible without two sides, and yet in some sense all the participants seem to be on the same side. The richness of so many discussions that have taken place arises, not from the clash of opposites, but rather by the contribution of variant views. Science and theology see things from different perspectives, but both focus on reality. Put positively, partners in dialogue must have room to manoeuvre while remaining in their proper roles. An example of this is the dilemma between Determinism and Divine Cause. The arguments from both sides are convincing, yet the result can lead to different endings for the believer; therefore, these differing issues need to be addressed and consensus reached at some particular point in time. Thus the following three goals are the objectives of this thesis:

1. An important aim of this research is to gain critical insight into *how* the differing world-views affect how one understands or perceives reality.
2. A secondary aim of this research will be to demonstrate that God is the *source* of all creation, through a study of Determinism and Divine causality
3. The primary goal will be to show that a *Theistic World-View* is the most Biblically viable world-view within which reality can be understood. The

primary aim is thus to make a novel contribution towards the science/theology debate, by presenting a Biblically accepted world-view that contributes to a better understanding of reality within the disciplines of science and theology.

1.9 The Effect of the Research Question on Science and Theology

Many accept that science affects how people view reality. The reason is the credible data they produce to explain and make sense of existence. In contrast, a religious faith that does not take account of what is seen to be the discoveries of science seems out-of-date, irrelevant, and incapable of providing credible direction and value to life. When one presents God as Creator and one who sustains life, and a God in which one must believe exists and must trust by faith, one confronts a view that projects annoyance, doubt and even anger. The reason being, the pictures portrayed by theology regarding the world unfortunately fails in many cases, to match the empirical data produced by science and considered to be true by those who need physical evidence in which to place their trust. Therefore, eminent scientific arguments will be evaluated and where possible placed within a viable understanding of how one believes Scripture views reality. Throughout this work, these views and conflicting ideas will be evaluated for their credibility and viability regarding reality.

The author is confident that by engaging the different viewpoints proposed by namely, science, philosophy and theology, one would be in a much better position to argue and present a theistic view as the most acceptable view, whether from a scientific or Biblical premise. Accordingly, from that premise then, to present a view of reality from a theistic point of view. The following is a few common arguments presented by science, theology and philosophy for and against a belief in a Divine Creator, thus affecting how one views reality.

1.10 Can one argue for the Existence of God from Nature and Science alone?

The following presented views, are wide-ranging world-views accepted by scholars, with the methods they use to explain what they believe makes up reality. Throughout this thesis these views will, in one-way or another, be referred to in a general sense, as the argument for a theistic world-view as the most Biblically viable world-view emerges.

1.10.1 The Epistemological Argument

Regarding this view, Frame (1994:102) states the following;

Epistemological arguments traditionally start with the phenomenon of human rationality and ask how that can be. If the world developed by pure chance, it would be highly unlikely that human experience would mirror the

reality of the world in the way one usually assume it does ... The theory of evolution, of course, tries to show (usually on a non-theistic basis) the likelihood of human rationality developing into a reliable interpreter of the world.

Lewis (2002:38) however, argues that “nature is quite powerless to produce rational thought. Rational thought is not part of the system of nature ... It is when you are asked to believe in reason coming from non-reason that you must cry halt, for if you don’t, all thought is discredited”. In response to this Frame (1994:104) states, “If evolution seeks to ensure the preservation of species, then it would seem to have personal characteristics or to be the tool of a person. If it is entirely impersonal with no personal causes, then it has no power to make logic normative.”

Further to this, Frame (1994:103) reasons that, “the hypothesis of absolute personality i.e. God, explains the data far better than the hypothesis of ultimate impersonality i.e. chance. An absolute personality can make a rational universe, because He himself is rational and His plan for creation and providence is therefore rational”. As Lewis (2002:62) puts it, “the rational and moral element in each human mind is a point of force from the Supernatural working its way into nature ... Reason is something more than cerebral biochemistry”. Thus, according to Frame (1994:104), “When unbelievers use logic to raise objections against Christianity, they are using something which manipulates it, how they may. However it points in the opposite direction i.e. to the existence of absolute reason or God”.

1.10.2 Metaphysical Arguments

According to Frame (1994:105), metaphysical arguments, “begin with some fundamental reality in the universe and try to show that reality presupposes, implies, or somehow requires God”. A preliminary review of the following three metaphysical arguments will be undertaken:

- Teleological argument;
- Cosmological argument; and
- Ontological argument.

1.10.2.1 Teleological Argument

The teleological argument reasons that to say the universe is so ordered by chance, is unsatisfactory as an explanation regarding the appearance of design. It is far more reasonable, and far more probable, that the universe is the way it is because God created it with life in mind (Holt 2005).

Although Stephen Hawking, the author of *A Brief History of Time* (1988), is no proponent of this view, he did state that, “It would be very difficult to explain why the universe should have begun in just this way, except as the act of a God who intended to create beings like us”. Although one would view this as nothing more than a deistic view of God, it is nevertheless a profound statement from

someone who is reputed to be atheistic. Indeed, Hawking (1988:127) further stated regarding the intricate design of the universe:

if the earth were ten percent smaller or larger, it would be unable to sustain the atmosphere we breath; if it were a little nearer the sun, we would fry; a little further away and we would freeze; if it were not on a twenty-four-hour spin cycle, no life could exist on it; if it were not tilted at exactly 23.45 degrees we would not be alive to discuss it; if our ozone layer were a tiny fraction thinner, no living matter could survive.

Thus, according to Frame (1994:106), one cannot but be impressed by the intricacy of micro-creation. Accordingly, one begins to get a sense (albeit a very inadequate sense) of the Creator-creature distinction.

As such, Frame (1994:108).writes:

The teleological argument like the epistemological argument begins with the observation that the universe is a rational order, accessible to the human mind. It is built on the premise that truth and rationality are moral values. He continues that, the epistemological argument is reduced, in turn, to the moral argument, and the two arguments yield the same theistic conclusion ... Once again we must answer: from the absolute personality, the Biblical God.

However, on the other side of this thinking is Immanuel Kant (see Kant 1965), who, influenced by David Hume's questioning on cause and effect (see Hume 1946), stated that one's knowledge of the world comes from ones mind interacting with it through observation. Kant further inferred that conclusions

which go beyond observation are invalid. Therefore, such arguments as the Teleological and Cosmological arguments do not hold up, because they go beyond space and time. In other words, according to Kant and Hume, one usually gains knowledge of cause and effect through observing and interpreting things *within* the world, from a specific frame of mind.

1.10.2.2 The Cosmological Argument

The cosmological argument, argues from the existence of the world or universe to the existence of a being that brought it into existence and sustains it. In the view of Holt (2005), it takes the suggestion that the beginning of the universe was uncaused, to be impossible ... Nothing comes from nothing; the cause of the universe was by something outside it.

In line with this thought, Frame (1994:110-112) says

Belief in causes is an aspect of a commitment to reason ... and that all events in the world have causes. To deny that is to claim that some events are irrational happenings. But if some event took place without a reason, how could reason know it? If reason does not find a cause, it does not conclude that there is no cause; rather, it looks further. Once reason finds what it regards as the complete cause, the final and ultimate explanation for the phenomenon under consideration, then it must cease its inquiry.

Every event in the world has a cause, meaning, that everything in the world happens for a reason. But suppose there is no first cause ... then there is no

‘cognitive rest’. But the world is not self-existent and self-explanatory; it is not causeless; it is not an ultimate reason. We know this by the reasoning of our moral and epistemological arguments. The ultimate source of moral norms is personal, i.e. God. The ultimate source of rationality is the ultimate reason for everything.

Lewis (2002:42) takes this a little further:

What exists on its own must have existed from all eternity; for if anything else could make it begin to exist then it would not exist on its own but because of something else. It must also exist incessantly: that is, it cannot cease to exist and then begin again. Absolute reason must exist and must be the source of my own imperfect and intermittent rationality.

The cumulative philosophical and scientific evidence for an origin of the material universe provides strong reason to conclude that there must have been a non-physical originating cause of the physical universe according to Jastrow (1982:17), an agnostic astronomer. He admits that this is a clearly theistic conclusion.

1.10.2.3 The Ontological Argument

The ontological argument is an argument that attempts to prove the existence of God through abstract reasoning alone (see Holt 2005). Frame (1994:114) believes that, “the ontological argument is in some ways the most fascinating – and exasperating – of all the classical arguments”.

The classic formulation of Anselm's (1968) ontological argument first proposed by him in Chapter 2 of the *Proslogion*, goes as follows: "God is that-than-which-no-greater-can-be-thought, and He must, therefore, exist, i.e. He is necessary, for otherwise He would not be that-than-which-no-greater-can-be-thought". Kant's (1987-76) objection to all the other traditional arguments centred on this ontological argument, because He saw that they all depend upon the concept of a necessary being; a being that must exist.

Frame (1994:114 -115) formulates "the ontological argument as follows:

- Premise 1: God has all perfections;
- Premise 2: Existence is a perfection;
- Conclusion: Therefore, God exists".

Although most twentieth-century philosophers reject this type of *proof* (see Allen1985:215), many highly competent and distinguished philosophers have accepted versions of it.

Frame (1994:116) continues to state that, "the term 'perfection' ... presupposes an already known system of values. What is perfect to a Christian might not be perfect e.g. to a philosophical naturalist". He states that the term *perfection* in Anselm's *proof* is perfection in Christianity, where God saw all He had made and declared everything to be *good* (Gen. 1:31; 1 Tim 4:4). In other

words, the ontological argument proves the Biblical God only if it presupposes distinctively Christian values and a Christian world-view of existence ... This is why ontological arguments have been used to defend so many different kinds of gods". Frame (1994:116) concludes that, "either the ontological argument is a Christian presuppositional argument - and thus is reducible to our earlier moral argument - or it is worth nothing".

1.10.3 Religious Experience Argument

The argument from religious experience is the argument that personal religious experiences can prove God's existence to those that have them. One can only perceive that which exists, and so God must exist because there are those that have experienced Him. While religious experiences themselves can only constitute direct evidence of God's existence for those fortunate to have them, the fact that there are many people who testify to having had such experiences constitutes indirect evidence of God's existence even to those who have not had such experiences themselves (see Holt 2005).

1.10.4 Miracles Argument

According to Sproul (2003:170), this is an important argument which has far-reaching implications, since if miracles are true they, "authenticate by giving

outward credentials, as it were, to those who claimed to be speaking the word of God”.

Further to this Lewis (2002:160) writes, “The ordinary procedure of the modern historian, even if he admits the possibility of miracles, is to admit no particular instance of it until every possibility of *natural* explanation has been tried and failed. That is, he will accept the most improbable *natural* explanations rather than say that a miracle occurred”. In the view of McDowell (1991:136):

In theory, it is the job of science to observe the natural world and seek to understand the natural world through that observation, i.e. empirical research ... In practice scientists often overstep science's domain and attempt to deliver pronouncements on subjects with which science by definition is unable to deal i.e. philosophy and religion.

Dostoevsky (1990:21) states that, “the genuine realist, if he is an unbeliever, will always find strength and ability to disbelieve in the miraculous, and if he is confronted with a miracle as an irrefutable fact he would rather disbelieve his own senses than admit the fact. Faith does not spring from the miracle, but the miracle from faith”.

Blanchard (2002:24) correctly puts forth that science must come to the realisation that theology can contribute to their work of explaining nature and the phenomenon that many times supersedes nature. Therefore, one also needs to ask, can theology and science learn from each other?

1.11 Can Theology and Science Learn From Each Other?

Although science believes that their way of describing and explaining the nature of reality is in essence correct, God's Word makes more of the world than the human mind often imagines. In creation and in the Scriptures, God's work and His word are far richer than limited minds can fathom.

Science can argue concerning what reality is from as many realms and ideas as they choose, but clearly they base this on a limited understanding of how the cosmos was formed. By contrast, the Word of God widens the picture, and gives deeper meaning to the purpose for creation and causes one to search for answers to greater truths than science can produce.

Further to this, the reality as perceived by the world is marred by sin. Not only is humanity limited in its understanding of reality by its senses, but their senses are also largely controlled by the sin nature that came via the fall of Adam. There is a huge gap; a *diastasis*, between ordinary reality and reality as revealed by the Scriptures. This gap, which science has been trying for centuries to bridge, albeit it from a holistic pretence view, can only be bridged by the Spirit, as experienced in an overarching frame of reference.

The Bible claims that God knows everything (1 Sam 2:3, Job 21:22; 36:4), He has all knowledge. If this is true, then the Bible is the word of someone who knows everything there is to know. If one wants to come to conclusions about anything, the only sure way would be to start with the word of the One who has all knowledge.

Ham (1987: 40) rightly states; “we Christians must build all our thinking in every area on the Bible. We must start with God’s word, not the word of finite, fallible man. We must judge what people say on the basis of what God’s word says – not the other way around”. Too many people, unfortunately, have started with the word of humans and then judged what the Bible states. In the view of Tillich (1963:17) this is false; he writes-

A phenomenological description is one which points to a reality as it is given, before one goes to a theoretical explanation or derivation. Often, that encounter of mind and reality that produces words has prepared the way for a precise phenomenological observation. In other cases such observation leads to the discovery of a new dimension of life, or conversely to reducing two or more assumed dimensions to one.

One can already see from this brief statement, that the problems which are seemingly normal within the study of reality, is the many conflicting ideas of what the study should consist of, and what the outcome should produce. This is not only from a scientific view but also from a theological view as well. There

seems to be no general consensus or single premise that one can work from, other than pluralism, placed within a theistic world-view.

Thus, one is able to come to a reasonable understanding of *why* one exists if the accepted premise is that there is a Divine creator who has created for a purpose. Without first settling this premise, reasons to explain existence become futile, and will invariably lead to theories that contradict the Biblical account of creation.

Although a brief study has been undertaken on certain metaphysical arguments, in the following chapter the different models and systems within metaphysics will be evaluated. Their positions will be researched on their practicality to explaining reality, including their views on a Divine creator and creation itself. The aim of the study, as previously discussed, will be to show that theism is a valid viable alternative in comparison to other metaphysical views. Reason for this is that most alternative views to theism either fail to explain the purpose for creation, or fall short of the Biblical account of creation.

In succeeding Chapters then, the author proposes to accomplish the following.

Chapter 1: The differing world-views related to the disciplines of science and theology on reality will be introduced, and where fitting, commonality sought and explored.

Chapter 2: The author will undertake a case study of Darwinism, to start the process of showing that theism is a very viable Biblically legitimate view on creation from where reality should be studied, as opposed to the evolutionary process that is many times proposed by science to study and understand reality.

Chapter 3: The research will then turn to the deterministic view in the light of evolution, and assess it specifically from the postmodern mindset. This will be achieved through a case study of *Open-Theism* and its deterministic view of God and reality, to show that even some academically accepted postmodern views on reality, fail as a viable theistic world-view.

Chapter 4: Further to this, a study of God's providence and its relationship to miracles, prayer, personhood and sin will also be examined. In the process the question will be asked: If God has settled His plans, and He will do what He is going to do, then does it really matter whether one prays or not? The purpose of this chapter is to show that a theistic God is intimately involved with His creation, and that Christians are able to live in the assurance that God is present and continuously active in their lives.

Chapter 5: Finally, it will be established that as technology has increased, many of the issues surrounding eschatology have become obscure, and difficult to deal with. The author will show that at times, eschatology has become a topic of

debate, resulting in accusations and acrimony among scholars. Yet it will also be established that the Bible is rather clear as to what the end entails, whether that is towards the believer or non-believer, strengthening the case for a theistic world-view as a very Biblically viable world-view.

To conclude this section, Murphy & Ellis (1996:18) rightly say: “Presently agreed upon understandings of the nature of reality are seriously incomplete...” Thus the author’s central proposal to the debate is to present the view - as continuously put forth throughout this introductory chapter - that a theistic world-view should have a major role in the theology-science dialogue today, if anymore headway is to be made in furthering and complementing science and theology’s understanding of reality. A theistic world-view is thus still a very appropriate understanding of reality.

This introduction to some of the themes, has laid the groundwork for the first major topic to be explored in depth. To begin, the following chapter will deal with the differing systems and models used within science and theology to explain reality. Unfortunately, the natural sciences continually assume that God is no necessary hypothesis; therefore it is imperative that theology puts forth counter-claims to these assertions, which so easily undermine basic Christian beliefs in a loving and purposeful God, who has a definite plan for humanity.