

Evolution:



A house of cards!

{A consideration of the effects of evolution on the Christian faith, and a review of 17 alternative views of Genesis}.

By Mike Viccary

Dedication & acknowledgements.

I dedicate this work to the Lord Jesus Christ. He alone is worthy of praise for he alone has done all things well.

I would like to acknowledge a number of very key people who have helped me in my efforts over the years. First I want to say a huge “thank you” to my lovely wife Helen. Without her love and great friendship none of my writing and study would have been possible. The title for this book was her suggestion. Then I would like to thank all my five children, their spouses and their children who have been the most wonderful delight and joy for which I thank and praise God. Finally my thanks go out to all who have challenged me and who have made me think, and then think again.

All of this work is the product of my thought but it owes much to that which I have read and interacted with. I have sought to acknowledge those who I have considered throughout this work. All errors and faults are entirely mine. I hope and pray that none would be lead astray but that all would indeed come to see the great goodness of the Saviour and having seen it would embrace him for all they are worth.

All Scripture quotations are from the New King James Version unless otherwise stated.

May 21st 2020.

Mike Viccary.

Contents:

<i>Details</i>	<i>Page</i>
<i>Introduction</i>	<i>1</i>
<i>Part 1: Modern science, evolution and Scripture</i>	<i>5</i>
<i>Chapter 1: The nature of “modern science.”</i>	<i>6</i>
<i>Chapter 2: What is evolution?</i>	<i>73</i>
<i>Chapter 3: Evolution and its problems.</i>	<i>114</i>
<i>Chapter 4: Theistic evolution.</i>	<i>163</i>
<i>Chapter 5: Evolution and the Bible.</i>	<i>204</i>
<i>Chapter 6: What about general revelation?</i>	<i>250</i>
<i>Chapter 7: A Biblical view of “science.”</i>	<i>274</i>
<i>Chapter 8: Evolution and Genesis.</i>	<i>296</i>
<i>Chapter 9: Pause for thought.</i>	<i>332</i>
<i>Part 2: Alternative views of Genesis considered and refuted.</i>	<i>336</i>
<i>Chapter 10: Alternative views introduced.</i>	<i>337</i>
<i>Chapter 11: Thomas Chalmers.</i>	<i>344</i>
<i>Chapter 12: Hugh Ross.</i>	<i>357</i>
<i>Chapter 13: Henri Blocher.</i>	<i>365</i>
<i>Chapter 14: John Sailhamer.</i>	<i>372</i>
<i>Chapter 15: John Lennox.</i>	<i>382</i>
<i>Chapter 16: Bruce Waltke.</i>	<i>389</i>
<i>Chapter 17: Howard Van Till.</i>	<i>395</i>
<i>Chapter 18: C. John Collins.</i>	<i>417</i>
<i>Chapter 19: Vern Poythress.</i>	<i>424</i>
<i>Chapter 20: Tremper Longman.</i>	<i>436</i>
<i>Chapter 21: Francis Collins.</i>	<i>450</i>
<i>Chapter 22: Tim Keller.</i>	<i>455</i>
<i>Chapter 23: Denis Alexander.</i>	<i>458</i>
<i>Chapter 24: Bernard Ramm.</i>	<i>488</i>
<i>Chapter 25: John Walton.</i>	<i>498</i>
<i>Chapter 26: John Fesko.</i>	<i>513</i>
<i>Chapter 27: Peter Enns.</i>	<i>520</i>
<i>Chapter 28: Common themes.</i>	<i>542</i>
<i>Appendices.</i>	<i>555</i>
<i>Bibliography.</i>	<i>568</i>

Introduction.

Examine any school curriculum, peruse any TV schedule listing, or scour the internet for a while and you will come across certain things held to be without question. One of these is the idea that the world is billions of years old, and that life has developed from simple to complex throughout time by gradual changes. This general notion, of course, goes by the term “evolution,” and secular humanism and atheism has worked tirelessly to ensure that this doctrine has been the basis for modern understanding concerning our origins. Evolution is the default position in all walks of life, and to argue against it is seen as odd and bordering on the fringe. And yet the Christian faith has no room for such a world view. Nowhere does Scripture give permission or allowance for such a general view of the world as described by evolution. These two distinct claims will be the subject of this work which seeks to show that one of them is a fraudulent and bankrupt notion, whilst the other not only offers a far better picture of reality, but also one in which there is true hope for the troubled and weary.

The fear of man.

Thus the aim of this work is to appeal to the Christian to abandon allegiance to the idea of evolution. This does not bar those who are exploring Christianity, nor would those who do not yet believe in Christ be prevented from benefit. However the impetus for writing this work has come because there is so much confusion within the Christian world over the issue of evolution. This confusion also extends to the appreciation of the nature of science. Far too many Christians fear modern science and allow it to shape their view of God and His world.¹ I have lost count of the times when I have been confronted by pastors and church leaders equivocating on the issue of creation, relegating it as a sideline issue or simply a matter of personal whim. For some strange reason the Christian world has adopted a two-tier approach to Scripture. There are the essentials which all must sign up to, and then there are “secondary issues” about which there is breadth and choice. I appreciate that as Christians we are all from different backgrounds with different experiences, so that our stage of understanding and our grasp of the faith is different, but that does

¹ The phrase “modern science” has been employed throughout this work to indicate the current rise of science since the seventeenth century. I am well aware that there have been dramatic changes throughout the last 400 years but it seems to me that whatever age you care to view, the same basic principle operates in all. This principle is the dogged human (mental) pursuit of schemes and ideas increasingly divorced from Biblical considerations.

not mean we should simply allow people to remain in their essentially false understanding of doctrine. The doctrine of creation, and its relation with modern science, must be recovered in our day.

What does God require?

I have been particularly moved by two key Scriptures from the Old Testament. The first is the opening words of Psalm 29 which read as follows:

1 Give unto the Lord, O you mighty ones, give unto the Lord glory and strength. **2** Give unto the Lord the glory due to His name; worship the Lord in the beauty of holiness.²

The second is that marvellous statement detailing God's requirement of us as found in the book of Micah and chapter 6:

He has shown you, O man, what *is* good; and what does the Lord require of you but to do justly, to love mercy, and to walk humbly with your God? ³

What does the all-powerful, all-knowing God who created all things need that we should give to Him? The answer, of course, is nothing at all! What then shall I give to the Lord because of all His blessings and benefits to me?⁴ In the words of the Psalmist we should reply:

13 I will take up the cup of salvation, and call upon the name of the Lord. **14** I will pay my vows to the Lord now in the presence of all His people.⁵

To give of our strength and to give glory to God means that we take hold of His free gift of salvation fully. That gift of new life and restoration encompasses the *entirety* of life as the words from Micah clearly show. We dare not let anything of what God has supplied slip or pass us by. We need to take on board the whole counsel of God and live life with Christ as centre, focus, hub and purpose. Since all of creation was brought into existence by and through Him (things both visible and invisible), and since He has been crucified to bring about the new creation, how can we ever

2 Psalm 29:1,2. See also 1Corinthians 10:31; Colossians 3:17,23.

3 Micah 6:8.

4 Psalm 116:12.

5 Psalm 116:13,14.

endorse the things of this world?⁶

The structure of this work.

This work is divided into two parts. In the first we shall investigate the idea of evolution by looking at a number of important subjects which bear upon it. Since evolution is presented as *science*, we shall begin in chapter 1 by examining the nature of modern science. We ask: what characterises this most important modern discipline? And we answer this by considering a number of essential themes under the heading of “modern science.” Chapter 2 is devoted to an examination of evolution as a subject, whilst in chapter 3 we outline the major problems this modern idea inevitably faces when viewed from God's perspective. Since the main aim of this work is to demonstrate with clarity that God has given us all we need to know through Scripture, and that what He reveals does not entail any concept akin to evolution, chapter 4 focuses on the subject of theistic evolution.⁷ Of course we live in days where the majority of leaders in the Christian church are bewildered by academia and its apparent invincible status, so the temptation to meld evolution and the Bible is very strong. In chapter 5 we look at the Bible and the question of how we ought to understand what God has said, with the aim to show that there is no need to fall into an acceptance of evolution or any external source. Chapter 6 considers the difference between general revelation and modern science, showing that the two are not identical as is often assumed by many. Having considered the connection between modern science and general revelation we offer in chapter 7 a Christian view of what *science* ought to look like. In chapter 8 we look at Genesis and how it should be viewed, and then in chapter 9 we take a pause and look at the whole subject in a slightly different way.

Part 2 considers the various alternatives to a literal view of Genesis that have been suggested by different people. It has been a constant concern to this author that there are so many writers attacking the simple and straight forward view of Genesis which has been followed (by and large) in the church for the best part of 1800 years since Christ walked this earth, and (more than likely) since the world began. In chapter 10 we begin by looking at the alternative views as a whole attempting to show the three main types of view. Chapters 11 to 27 comprise the main body of part 2. Each is a critique of the views offered by a prominent “evangelical” author. The choice of these seventeen writers has largely come about through interaction with the Christian church in various settings over the last forty years. I have had the great privilege of being enabled to visit churches across the UK, and we have lived in several different counties covering Scotland, England and now

6 John 1:10; Colossians 1:16,20; 1John 2:15-17.

7 2Peter 1:3,4.

Wales.⁸ Often, knowing my science background, people would query me on my view of creation in the course of conversation. On one occasion a Church of England vicar told me that he followed Henri Blocher. At the time I had never heard of Blocher and so was at a loss as how to respond. Needless to say, immediately after the conversation I bought Blocher's main book on the subject so I could respond. On another occasion I heard a dear Christian lady say that for her, John Lennox had settled the issue. I was enabled to speak briefly with her about the difficulty of evolution but she was convinced by what John Lennox had written. In another case I discovered a young man in his late twenties struggling with creation because of what John Fesko had written. It so happened that I had just studied Fesko's main work on the subject and was able to give him some help. In this and other ways I discovered the works of those who deny a literal creation and have included them here for consideration. In all of the cases I have mentioned, the struggle concerned the issue of authority. Whom should I listen to? Strikingly, the struggles faced were not just over creation, but encompassed such things as the nature of man, (i.e. gender, sexuality, family etc.), the question of abortion, the issue of culture and how it affects interpretation, the problem of "mental health," and other things besides these. At heart the problem with evolution is not just that it re-writes the doctrine of creation, but that it destroys life itself. Evolution is not just about origins, it is a way of life.

In chapter 28 I attempt a brief summary of the common themes that each of the seventeen writers deal with. It is not full nor complete because I tackle the various issues that arise from considering the work of each individual writer as we traverse their work. If chapter 28 were to become much fuller, then the danger of repetition rears its ugly head. I thought it best to stick with the individual writers because in the end all who aspire to teach are under greater scrutiny from the Lord.⁹ I have attempted to apply the truths of Scripture to each of the writers I have selected. However I recognise that I am by no means infallible, and so recognise too that my work could be (rightly) criticised. My aim has always been to make Scripture the first port of call and to make it central. This is why I have critiqued these seventeen authors. It is my earnest hope that this work has done justice to making Scripture the base and ground for all of life, and especially for the life of intellectual pursuits.

8 I had the great pleasure of visiting Northern Ireland in summer 1986 with a lovely Irish friend and we visited several churches during our stay there.

9 James 3:1.

Part 1: Modern science, evolution, and Scripture.

Chapter 1: The nature of “modern science.”

(A topical review).

A little after concluding my research programme in chemistry, I came across a book on the relationship between science and Scripture in which the author, Bernard Ramm made the following rather startling statement:¹⁰

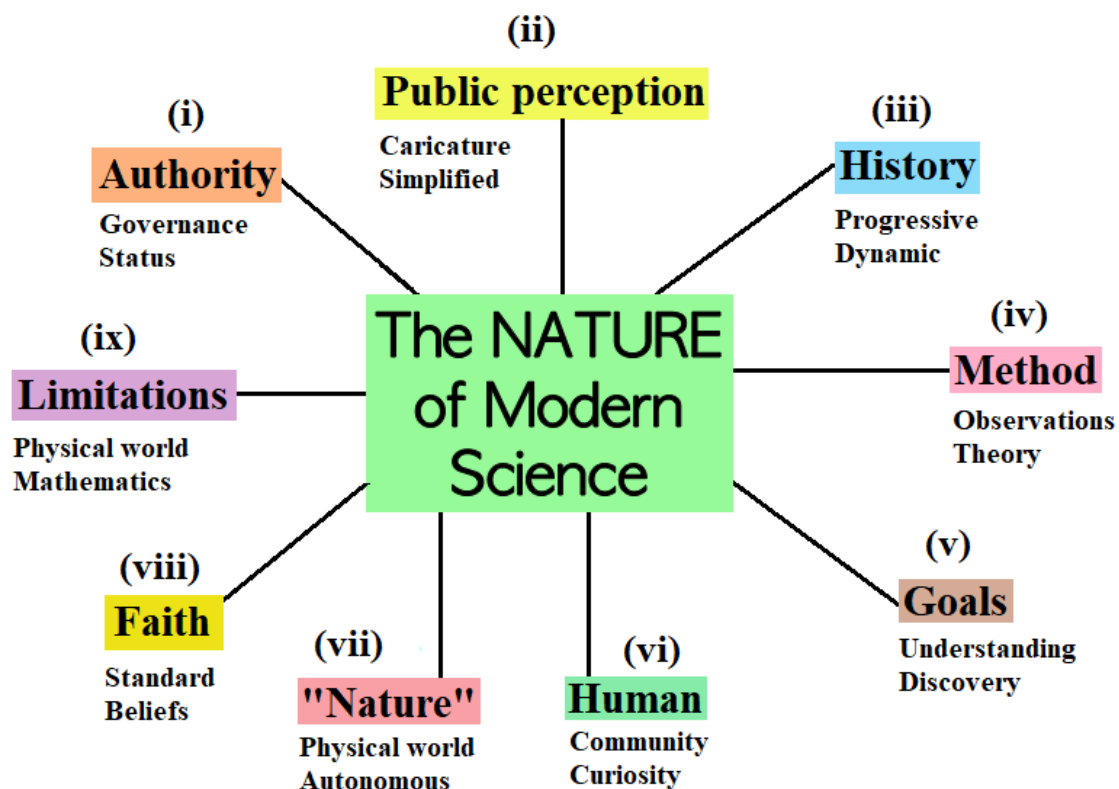


Figure 1.

“To define the task of science is difficult because to define science itself is difficult. School textbooks define science with an ease that we envy, but the task is not so simple in philosophy of science. The vexing problem of defining science is best seen when one tries to classify the sciences.”¹¹

¹⁰ For some brief biographical information on the writers, scientists, and philosophers mentioned in this book see Appendix 1.

¹¹ **Bernard Ramm**. The Christian View of Science and Scripture. First published in 1954. Reprinted 1987. William B. Eerdmans Publishing Company. Grand Rapids, Michigan. USA. P34.

This was an alarming discovery, for in my understanding the business of science, certainly in part, was to clarify things by providing **accurate** descriptions and definitions. To a chemist the terms, “metal,” “acid,” “atom,” “compound,” and so on, all have very **definite** meanings. Biologists are **meticulous** in characterising animal features and behaviour, whilst physicists pride themselves for **precision** in their measurements. Reading Ramm's work stimulated my own investigation and so I began by considering the nature of modern science, not in a formal way as might be undertaken by a philosopher, but instead under eleven separate headings.¹²

More than twenty years has passed since then and I now find that although my thinking has not changed that much, it is more convenient to view modern science using the nine headings shown in figure 1. To be clear, in what follows we will attempt to look at some of those things that philosophers have had to say about modern science, but because it is such a complex subject the topical approach seems by far the best means for grasping its essential nature.

(i) Authority.

There is little doubt that modern science holds a distinct and elevated position in our society today. One philosopher of science made the following common observation:

“There is an abundance of evidence from everyday life that science is held in high regard. ... The high regard for science is not restricted to everyday life and the popular media. It is evident in the scholarly and academic world and in all parts of the knowledge industry.”¹³

Despite protests by those advocating a more **natural** approach to life, and despite the negative publicity many science-based companies attract, it is still at the root and branch of our everyday existence.¹⁴ Secondary school students are all required to take at least one science subject at GCSE which is designated by law as a core subject.¹⁵ Whenever there is a crisis in the nation such as an outbreak of “BSE,” “foot and mouth,” or a pandemic such as “Covid-19,” government officials can be heard repeatedly saying that they are only “following the science” as they make their decisions.¹⁶

12 **Mike Viccary.** Ushering in an old age. Unpublished. 1993.

13 **A. F. Chalmers.** What is this thing called Science? 1982 (second edition), The Open University Press. Pxx.

14 The move towards “organic” produce, the worry over plastic waste, and the protests by such groups as “Greenpeace” and “Extinction Rebellion” are cases in point.

15 The National Curriculum was ushered into law in 1988 under a conservative government. The minister responsible was Kenneth Baker and, for the first time, the content of the curriculum was set by law.

16 The peak of the BSE outbreak occurred in 1992. <http://www.independent.co.uk/news/uk/bse-epidemic-is-at-its-peak-ministry-says-1555676.html> . The last major “foot and mouth” outbreak was in 2001. The “Covid-19” pandemic started in China in December 2019 and spread throughout the world in early 2020. The following statement from the Parliamentary Office of Science and Technology makes this point abundantly clear:

“Governments ostensibly use science to enhance the evidence base for policy; identify, analyse and manage risks in

Perhaps one way to establish the fact that modern science is dominant in our current culture is to consider how historians have viewed its rise. Writing in 1950, the Cambridge historian Herbert Butterfield, described how modern science changed everything from “*the character of men's habitual mental operations,*” to “*the very texture of human life itself.*” In the introduction to his book on the origins of modern science he wrote:

*“[the scientific revolution] outshines everything [in history] since the rise of Christianity and reduces the Renaissance and Reformation to the rank of mere episodes, mere internal displacements, within the system of medieval Christendom. Since it changes the character of men's habitual mental operations even in the conduct of the non-material sciences, while transforming the whole diagram of the physical universe and the very texture of human life itself, it looms ... large as the real origin of the modern world and of the modern mentality...”*¹⁷

In 1959 the historian Charles Singer argued the point that modern science had become firmly embedded within our culture during the first part of the twentieth century. He charts the changes from the nineteenth to the early twentieth century:

“It is evident that, in the last two generations, there has been a basic change in the status of science. This has affected the whole spiritual climate in which we live. Until the twentieth century the main inner life of civilised societies had been supported, for thousands of years, by activities quite outside the realm of scientific ideas. It is true that for the last few hundred years, and notably since the mid-eighteenth century, science has sometimes come to the aid of industry or agriculture by raising production or otherwise bettering the human lot. But on the spiritual side, save among isolated groups, science did little to exercise the intellect or satisfy the hunger for knowledge, and even less to appeal to the sense of beauty.

In England, until the later nineteenth century, science hardly penetrated the educational system and is still not integrated with it. Science seldom attracted general public interest until the beginning of the twentieth century. The place of science in the older universities remained at best secondary, at worst precarious. Since then the immense and accelerating increase in scientific activity and the resulting mass of real and applicable knowledge has changed every side of life. Having come to control and direct industry, it is now rapidly and manifestly transforming the very face of the earth and the lot of its living inhabitants, whether

formulating and delivering policy; and ensure that the public perceives this advice as authoritative and trustworthy. But academic reviews have pointed to more political factors that lead to shortcomings in the use of science in policy making. These include using science selectively or to:

- justify predetermined decisions or positions*
- erroneously frame issues as predominantly scientific (e.g. in substituting for moral or value judgments)*
- act as a scapegoat when things go wrong*
- offer undue certainty and reassurance while critical uncertainties are downplayed*
- delay making contentious or complex decisions”*

Parliamentary Office of Science and Technology POSTNOTE June 2003 Number 196.

17 **Sir Herbert Butterfield.** *The Origins of Modern Science 1300-1800.* 1950. London. G. Bell and sons. P7,8.

human, animal, or plant. A true history of science should end by discussing these latter-day metamorphoses. That last chapter must be a very long one and difficult to write. I am incapable of dealing with it and must perforce leave it to others."¹⁸

Of course one of the driving forces for change were the two world wars in which scientific discoveries advanced rapidly.¹⁹ Following the end of the second world war the development of rockets and space technology was followed by advances in materials, communications, and then, in more recent years, in the field of genetics and biotechnology. All of these developments have had a dramatic impact upon our lives.

The American historian of science, Richard Westfall, writing in 1986 argued that science was the ground for *"every dimension of modern life."*

*"For good or for ill, science stands at the centre of every dimension of modern life. It has shaped most of the categories in terms of which we think."*²⁰

To conclude this brief survey of how historians view the status of modern science, consider the very full assessment by Steven Shapin, written in the early part of this twenty-first century.

*"Science Made the Modern World, and it's science that shapes modern culture. That's a sentiment that gained currency in the latter part of the nineteenth century and the early twentieth century – a sentiment that seemed almost too obvious to articulate then and whose obviousness has, if anything, become even more pronounced over time. Science continues to Make the Modern World. Whatever names we want to give to the leading edges of change – globalization, the networked society, the knowledge economy – it's science that's understood to be their motive force. It's science that drives the economy and, more pervasively, it's science that shapes our culture. We think in scientific terms. To think any other way is to think inadequately, illegitimately, nonsensically. In 1959, C. P. snow's Two Cultures and The Scientific Revolution complained about the low standing of science in official culture, but he was presiding not at a funeral but at a christening. In just that very broad sense, the "science wars" have long been over and science is the winner."*²¹

1959 seems to be a pivotal year!²² Singer outlined the new focus towards science in his work, whereas in the same year the physical chemist C. P. Snow, sought to reverse what he saw was the low status of science amongst the educated. By 1966 the Labour government formed a new

18 **Charles Singer.** A Short History of Scientific Ideas to 1900. 1959. Oxford. Pp.

19 For example: the development of aircraft, tank, explosives, jets, radar, and the atomic bomb to name but a few.

20 **Richard Westfall.** The Scientific Revolution. 1986. History of Science Society Newsletter. 15(3).

21 **Steven Shapin.** Science and the Modern World. (Third edition. Edited by: Edward Hackett; Olga Amsterdamka; Michael Lynch; Judy Wajcman). CAMB, MA:MIT Press. 2007. Pp 433-448. P433.

22 One hundred years after the publication of Darwin's On the Origin of Species.

department, (the Ministry of Technology), which would usher in a new scientific age.²³ But according to Shapin (writing in 2007), if you do not think scientifically, you are doomed, for “*to think any other way is to think inadequately, illegitimately, nonsensically.*”²⁴

Shapin's assessment of the status and position of modern science within society is comprehensive. It isn't just that modern science has a place at the **high table** of society influencing the decision-makers, for it is now the very centre of life. It is modern science that energises industry and the military not, as in former times, the historian or the sociologists:

*“Sixty years after Hiroshima, and over a century after General Electric founded the first industrial research laboratory, it is almost too obvious to be pointed out that it is the natural sciences that are now so closely integrated into the structures of power and wealth, and not their poorer intellectual cousins. It is science that has the capacity to deliver the goods wanted by the military and by industry, and not sociology or history.”*²⁵

And modern science governs how we view all things, from the global problems we face, to what it means to be human:

*“Few observers disagree when it is said that science has changed much about the way we live now and are likely to live in the future: how we communicate, how long we are likely to live and how well, whether any of the crucial global problems we now confront – from global warming to our ability to feed ourselves – are likely to be solved – indeed, what it will mean to be human.”*²⁶

The prevailing world view in society at this present time has a large component which derives from modern science. Contrast society today with that which operated in the centuries prior to the Reformation, for example. Life in those medieval times was governed by what the king (or queen) had to say, and their rule in turn was heavily influenced by the medieval Christian church. For the man in the street, life had its focus around the church calendar and the rule of the king. If you thought about life, it would be in terms of the church's teaching and the duty you owed to royalty. Today, the man in the street thinks little of God other than as a swear word or as an object of ridicule. His main focus is secular, and his secularity is driven by modern science.

23 http://bufvc.ac.uk/wp-content/media/2009/06/the_white_heat_of_tech.pdf

24 **Steven Shapin.** Science and the Modern World. P433.

25 **Steven Shapin.** Science and the Modern World. P436.

26 **Steven Shapin.** Science and the Modern World. P436.

(ii) Public perception.

How is it that modern science has come to dominate modern thought? It may be argued that most people do not really think in a scientific way at all. Not everyone excelled at science in school and certainly not everyone takes their science studies further at higher levels. However when you look at life in our day, the very nature of it oozes the thought: “modern science has given you life.” Think of your homes. If you live in a newly built home, the materials and features it boasts are the products of modern scientific research. The entertainment centres, the kitchen, the smart sensors and so on are all developments that have come from exploration in the sciences. Or think of the workplace. Factories today are automated and robotic. The NHS is staffed by doctors and nurses steeped in the biological sciences and surrounded by modern technology. The plethora of modern investigative techniques is astounding. We have X-ray machines, ultrasound, PET, MRI, CT or CAT and many others beyond.²⁷ Or consider the continual development of modern transport. As a teenager in the 1970s I thought it beyond imagining that you could wind a window down by pressing a button! Think now of the sensors and computers found in cars both for comfort and environmental stability, and also to control the running of the car. Even those who work in regular jobs such as, bus driver, plumber, accountant, and so on, have been surrounded by the fruits of modern science in what they do. The buses driven today are far advanced from those of the middle of the last century. The accountant uses computer software to keep the books of the company, and the plumber more often deals with a variety of plastic products than the old copper or lead pipes of former eras. Even though many do not use modern science in their lives, they are bathed in the fruits of it.

When the National Curriculum was introduced it wasn't that science was a poor option amongst other subjects. I took my O' Levels in 1973 and 1974 (12 subjects) and my A' Levels (maths, physics and chemistry) in 1976 more than a decade before the National Curriculum, and all my contemporaries did 4 O' Levels in science. It is now more than 30 years since the National Curriculum was established making science a core subject in schools, but perhaps of more significance, as far as public awareness is concerned, has been the influence of the media. I can remember the effect the Apollo moon missions had on our country. At about the same time the *Star Trek* series was aired on the TV. Other sci-fi programs included, *Dr Who*, *Lost in Space*, *Land of the Giants*, *Time Tunnel*, and the various animated series, *The Jetsons*, *Thunderbirds*, *Captain*

²⁷ In case you were wondering! PET = positron emission spectroscopy. Monitors and detects specific radioactive labelled substances injected into the body to investigate specific organs. MRI = magnetic resonance imaging. Analyses internal features using high powered magnets and the effect of high frequency radio waves on protons in the body. CT & CAT = computer (aided) tomography. Uses X-rays and computer analysis to view bones and even soft tissues.

Scarlet and the Mysterons, and *Fireball XL5*. On top of these were the various science-based programmes such as *Horizon*, *Tomorrow's World*, *Burke's Special*, *The Sky at Night*, and the prodigious output of the *Natural History Unit* fronted by David Attenborough. These, perhaps more than school science, had the effect of training the populace to at least accept a scientific mindset if not adopt one by osmosis. Today we still have David Attenborough whose output is monumental, but then we have also had: Chris Packham, (naturalist), Brian Cox (astrophysics), Robert Winston (medicine), Magnus Pyke (nutrition), David Bellamy (botany), Johnny Ball (mathematics), Adam Hart-Davis (general science), amongst others.²⁸ There have been programmes on all manner of science-based subjects throughout the last fifty years. The BBC has even taken it upon itself to provide lessons in science for students at school.

When anything of note concerning the world is aired on our screens it is the likes of the science presenters we listed above who get the hearing. A disaster looms on the horizon and the BBC correspondent shows us an interview with Attenborough or Packham to give the story some beef. Anyone who doesn't grasp the situation from a scientific view point is marginalised. How many *Christian leaders* are called for interview at times of difficulty or when a disaster occurs? I am hard pressed to name even one. Perhaps the archbishop of Canterbury may be called upon for comment (possibly), but I cannot think of anyone else. Modern American evangelists are soundly ridiculed and the stereotypical vicar is put up as a figure of fun. To be a scientist alone is cool. The scientist alone is respected and listened to. Thus the media press the public to view all things from a scientific point of view. If we were to travel back in time to the medieval period the situation would be radically different. All would be viewed from the perspective of the church and the king.

But there is one other factor which keeps the public under the authority of modern science, and that is the many fruits that it has (supposedly) spawned.²⁹ Every life time sees dramatic changes. I remember my grand parents born in 1900 and 1901 and hearing their life stories as a teenager in the 1970s. How life had changed for them! And yet what tremendous changes have transpired since then. Computing has progressed exponentially. I grew up using a slide rule for maths but the computers, tablets, and smart-phones we use today are of such power that we think nothing of downloading the latest film or having a video conference with distant relatives. When I was courting my wife in the late 1970s I had to ask permission to use the phone in our home, and yet today (2020) my 10 year old grand daughter has her own smart-phone! These and other gadgets we seem to depend upon, reinforce the idea that modern science is our mother and good guardian.

28 I have not mentioned the many American presenters such as Carl Sagan, Bill Nye and so on.

29 Every age has its technology, its great projects and labour-saving gadgets whether it is fuelled by what we know as science or not.

And then there is genetic engineering. On the one hand this rapidly developing science is feared by many (as evidenced by the reaction against genetically modified foods), whilst on the other hand it is lauded whenever it seeks for cures to genetic conditions such as cystic fibrosis, and other (currently) incurable diseases like cancer and Parkinson's disease. But at what cost are we allowing such research to take place? A great deal of genetic research is based upon the study of embryonic development. The HFEA allows experimentation on embryos up to day 14 of an embryo's existence.³⁰ There is a call by current genetic scientists to extend this time limit for more research opportunities.³¹ And yet once a human sperm successfully meets a human egg and fertilisation occurs, the resulting new single cell cannot be considered as anything but a new human life. I shudder to think what has been going on in the name of scientific research amongst the genetics laboratories, and I fear how God views our generation. Historians and other writers delight in demolishing Christian heritage as less than progressive, or as bigoted and so on, but what will our descendants say about the blight and horror being perpetrated in modern genetics laboratories? Now is not the time to pursue this topic in any depth, but it is worth noting that there is hardly a whimper amongst the populace concerning this research. And the church is strangely silent too. Shame on her. We like to challenge the population of repressive cultures for their naïve acceptance of dictatorial rulers, but why are we allowing such horrific investigations today?

Modern science is in authority today. It governs our education, fuels our leaders' decisions and is pursued with vigour within the many research departments throughout the land. We depend upon it for our health, jobs, travel and entertainment. Even if we are ignorant of its tenets and principles we bow to it and offer it its due worth. Who would dare challenge the modern scientist? People have no qualms about ridiculing a man who honours God, but dare to challenge what a scientist declares and you will be laughed at mercilessly.

(iii) History.

In order to grasp the meaning of something it is often helpful to know where it has come from. When you meet someone for the first time it is normal to ask where they originate from so that you have some idea about their lives. Since modern science is a discipline engaged in by people

30 HFEA. The Human Fertilisation and Embryology Authority is a government body tasked with regulating embryo research. Whilst in the UK there is a strict legal limit to research up to day 14, other countries use this time as a suggestion only. See: <https://www.bakerinstitute.org/media/files/files/8a0b4eac/chb-pub-greenwall-intl-012219.pdf>

31 https://www.bionews.org.uk/page_95816
<https://bmcmethics.biomedcentral.com/articles/10.1186/s12910-017-0198-5>
<https://link.springer.com/article/10.1007/s40778-018-0135-7>
<https://www.ft.com/content/40f521ac-9ef0-11e8-85da-eeb7a9ce36e4>

(scientists), it follows that enquiring into these forerunners and their lives is a necessary task. The historian of science Charles Singer argued this very point at the start of his work:

*“What is meant by science?’ is the question that will naturally be asked on opening this book. Yet this question, if answered at all, can hardly be answered at the outset. In a sense the book is itself an answer.”*³²

Who were the key players, and why did they think the way they did in the culture they lived in? However saying that you need to grasp the history of science to understand science is simply side-stepping the main issue. If you want to write a history of science you need to know what to include and so you need some form of definition to begin with. These thoughts highlight a prevailing problem in all human intellectual pursuits. To define science you need to view its history, but to look at its history you need to define science. So where does one begin? In truth we cannot answer that question until we have a solid base from which to stand. However people have done what they could by beginning from some point which *they* deemed to be the starting point! Some historians begin with the ancient Greeks from Thales of Miletus born around 624 BC. Others see a clear demarcation at around the sixteenth and seventeenth centuries. Still others chart the development in all ages and cultures and, inevitably, use an evolutionary framework upon which to hang their key points. I do not want to argue the merits of one scheme over against another suffice to point out that in all histories of science there are some features upon which all seem to agree. There may well be countless common themes in all histories of science but in what follows, I shall simply note three.

First it is common to hear historians appealing to mankind's insatiable curiosity. Singer puts it like this:

*“There is an unquenchable and irresistible thirst of the soul that demands an explanation of the world in which it finds itself. ... Nothing emerges more clearly from a survey of the history of science than the lasting and essential sameness of the human spirit. The same aspiration for a coherent and comprehensive plan of his universe has characterised the mind of man from his very dawn and has survived a thousand defeats.”*³³

Another historian Colin Ronan, says much the same thing:

32 Charles Singer. A Short History of Scientific Ideas to 1900. 1959. Oxford. P1.

33 Charles Singer. A Short History of Scientific Ideas to 1900. P1,288.

*“For science is something which has appeared in every culture on Earth; it has grown naturally out of man’s innate curiosity about the world in which he finds himself.”*³⁴

Why is man so curious? What drives him to seek answers? Why do questions arise in the heart? It seems to me that such considerations lead to the inevitable conclusion that at base man is unfulfilled and unsatisfied. Of course modern man has made a premium of his curiosity. Life is an adventure, a process of discovery, and those who do not see it in such terms are considered boring or mundane. And yet for all his pride and vigour, what man has ever come up with an answer that fully satisfies? None!

A second common theme is that science is no static thing but develops and changes from era to era, and from culture to culture. This is a feature which is evident to all who have dealings with research in a university setting in the last fifty years or so. How quickly the work of former scientists is not just forgotten but superseded! Singer made this astute comment on the ever changing nature of science:

*“The science of one age has often become the nonsense of the next.”*³⁵

This thought is also evident when we view the development of modern science from the seventeenth century to the present time. Attitudes to the nature of the universe have changed dramatically in each era. Where once the world was considered to be a system imbued with living things, it changed all of a sudden during the Scientific Revolution to become simply a vast mechanical machine operating according to fixed laws. By the time we reach Charles Darwin (who published his main work in 1859), the prevailing view had changed again to a more dynamic and animated picture. Barbour helpfully delineates the different eras with reference to its views of the universe in terms of *nature*. This concept is one we will discuss later, but Barbour's designations illustrate nicely the fact the science continually changes its view of what is true and real. Thus the medieval period viewed the universe in terms of “*nature as a hierarchy of Beings*.”³⁶ In Galileo's time (1564-1642) the prevailing view had become “*nature as particles in motion*.”³⁷ But following this in Newton's era (1642-1727), the new idea was “*nature as a law-abiding machine*.”³⁸ After Newton in the eighteenth century the picture is described as “*nature as a deterministic*

34 **Colin Ronan.** The Cambridge Illustrated History of the World's Science. 1983. Cambridge University Press and Newness Books. P8.

35 **Charles Singer.** A Short History of Scientific Ideas to 1900. P1.

36 **Ian. G. Barbour.** Issues in Science and Religion. 1966. Harper and Row Publishers. P18.

37 **Ian. G. Barbour.** Issues in Science and Religion. P26.

38 **Ian. G. Barbour.** Issues in Science and Religion. P35.

mechanism.”³⁹ And then with Darwin the more recent view has become “*nature as dynamic process.*”⁴⁰ Thus modern science is no static body of knowledge but something which changes in every era as A. F. Chalmers, has noted:

*“It will, I hope, become increasingly clear as this book progresses that it is essential to understand science as an historically evolving body of knowledge and that a theory can only be adequately appraised if due attention is paid to its historical context.”*⁴¹

Now such a situation illustrates two things. In the first place it reinforces the idea we discussed earlier that mankind is never truly satisfied with what he discovers and beholds. In the second place it demonstrates clearly that it is not possible to reach that which is absolutely true, for if it was possible, then firm and definite conclusions would stand for all time. Modern science is characterised by a schizophrenic attitude. On the one hand it likes to dogmatically assert that such-and-such is true (from the available data), but then on the other hand it suggests that all is tentative and none can rest assured that a final answer has been arrived at. This is no more so clear than in statements made by the medical fraternity on how to raise children, or on what is the best form of nutrition and exercise to engage in. My wife and I laugh now about the firm dictates we received from midwives and doctors on how to feed and lay our children in their cots. As our children have grown and have had children of their own the advice they have received (from the current best available evidence) is very different from the assured best advice we received!⁴²

A third common theme in histories of science is a look at the sources of inspiration for what appear to be new ideas. The interplay between observational data and imagination or theoretical construction is an interesting study. At one time theory and the imagination are dominant, whereas at other times gathering data and experimentation take centre stage. Each of these two sides of science are never found completely alone. Even the Greeks who seemed to specialise in the theoretical exclusively, made use of observations in the real world. However the source for ideas and connections does not solely originate from the observations, nor from prior thought of former workers. In every era there appears to be what may be termed *flashes of insight*, the *spark of intuition*, or a *revelation*. Sometimes it is the making of connections between what to many others seem like unrelated ideas. A variety of writers in discussing the nature of science and its connection

39 Ian. G. Barbour. Issues in Science and Religion. P58.

40 Ian. G. Barbour. Issues in Science and Religion. P86.

41 A. F. Chalmers. What is this thing called Science? P35.

42 Please do not take this observation as a signal to ignore advice. It is always good to consider whatever advice may be offered, but in the end there is a natural and common sense way to raise children.

with the Christian faith have made such observations. Apparently Rene Descartes formulated his philosophy of science on the basis of three vivid dreams⁴³ Darwin's contemporary Alfred Russel Wallace got his notion of the survival of the fittest during a severe bout of malarial fever. In reporting the experience Wallace said:

*"There suddenly flashed upon me the idea of the survival of the fittest."*⁴⁴

The process of theory formation is not one of mechanical sophistication, nor does it consist of the application of logical thought. Instead we discover from the historian of philosophy and theology John Dillenberger, that:

*"... hunches, intuition, unanticipated possibilities belong to the domain of theoretical science as much as do concrete observation and controlled experiment."*⁴⁵

The former physicist and famed writer on science and faith, Ian Barbour prefers to speak of a *"creative imagination,"* but cannot help reference the role of intuition in his view of theory formation:

*"Although inductive and deductive ideals accurately portray certain aspects of scientific activity, they omit from their accounts the leap of creative imagination. There is a logic for testing theories but no logic for creating them; there are no recipes for making original discoveries. ... Many creative ideas have occurred unexpectedly in an intuitive flash."*⁴⁶

The physicist Harold K. Schilling also emphasised this origin for theory formation when he wrote that:

*"There can be little doubt that most of the truly great and revolutionary ideas of science came into being intuitively during periods of revelatory insight, rather than by syllogistic or inductive logic."*⁴⁷

43 **J. R. Vrooman.** Rene Descartes. A biography. 1970. G. P. Putnam's Sons. New York. P45. See also: **Leonard Smith.** Religion and the Rise of History. (Martin Luther and the Cultural Revolution in Germany 1760-1810). 2009. Cascade Books. Oregon USA. P35-37.

44 **Ernst Mayr.** The Growth of Biological Thought. (Diversity, Evolution and Inheritance). 1982. Belknap, Harvard University Press. Cambridge Massachusetts, USA. P497. See also: **Ian T. Taylor.** In the Minds of Men. (Darwin and the New World Order). 1987. TFE publishing, Toronto, Canada. P78; **William Bryant.** The Birds of Paradise. (Alfred Russel Wallace: A life). 2006. Published by iUniverse. New York, USA. P151,152.

45 **John Dillenberger.** Protestant Thought and Natural Science. (A Historical Interpretation). 1961. Collins, London. P285,286.

46 **Ian. G. Barbour.** Issues in Science and Religion. P142,143.

47 **H. K. Schilling.** Science and Religion. (An Interpretation of Two Communities). 1963. George Allen and

The oscillation between what goes on in the mind and what man experiences through his senses indicate a less than well integrated being, but the experience of sudden revelations and so forth, lead us to ask: where did that come from?⁴⁸

History, therefore, tells us that modern science is something which has evolved over time and so will continue its development in future years. It also teaches us that mankind is insatiably and unsatisfyingly curious, and it shows us that we are not simply governed by mind and matter. All of these discoveries point us to the inevitable conclusion that mankind is essentially lost and desperate. A view of history does not lead us to an optimistic or rosy view of modern science.

(iv) Method.

Perhaps this more than any other feature would be thought to clinch the matter concerning the nature of science. We have just noted that revelatory *flashes of insight* play a role, but surely the main business of modern science is the careful and meticulous attention in the pursuit of data and of making observations, followed by the application of the mind to make well reasoned explanations? One view of the “method of science” goes something like this:

1. Gather data and observations relevant to a particular question.
2. Organise the data into a reasonable scheme based on a hypothesis or initial “guess” as to how they can be explained.
3. Test the hypothesis suggested by making repeated or further observations or by devising an experiment for the purpose.
4. Gather new data and observations (from the experiment devised) to refine the hypothesis into a theory.

Others suggest a simpler three-step system as shown in figure 2. The arrow from experiment to observation is meant to indicate the cyclic nature of the process. Writing on the nature of discovery, a number of researchers used a definition of the scientific method which agrees with our discussion so far. According to these scientists, the method of science:

“... is usually conceived as being made up of four main kinds of interrelated activities: gathering data, finding parsimonious descriptions of the data, formulating

Unwin Ltd. P42.

48 It is very tempting to speculate but I simply want to note that man is more than a mere collection of atoms!

explanatory theories, and testing the theories. Sometimes the second category (description) and third (explanation) are merged."⁴⁹

Harold K. Schilling gives a very similar description of the scientific method, but in his definition he highlights the role of induction and deduction:

*"Now "the scientific method" is often said to have four components, namely observation, inductive generalisation, deductive prediction, and experimental verification."*⁵⁰

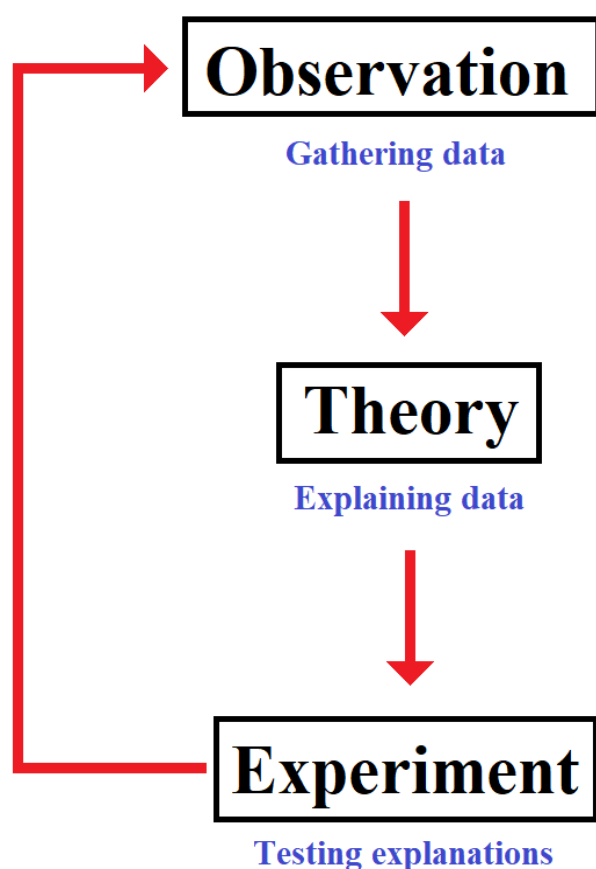


Figure 2.

The mention of these forms of logic is important as we shall see in a moment, however when it comes to the philosophy of science the picture is a very bleak one, if we view modern science from the perspective of this world and what it has to say.

In the first place the various linear procedures we have outlined here are in fact nothing special to modern science. A little thought, and the reader should be able to recognise these features as the normal process of human thought. You can see this in the development of a little child. The toddler picks up an object and uses all its senses to experience the object, looking at it, putting it in its mouth, touching it and so on. They try out various actions such as waving it, banging it and pushing it, and in so doing they learn by their experiences, trying to make sense of what

they have in their hands. Part of their learning involves input from mum and dad, but all of their growing play can be analysed using the above set of procedures which is often thought of as being exclusive to modern science. Now rather than follow each step in logical progression, the toddler

49 Pat Langley, Herbert A. Simon, Gary L. Bradshaw, and Jan M. Zytkow. *Scientific Discovery. (Computational Explorations of the Creative Processes)*. 1987. Published by the MIT press. Cambridge, Massachusetts, USA. P18,19.

50 H. K. Schilling. *Science and Religion*. P41.

engages all three more or less at once. They feel, taste and look at an object and then try something new based on a view of what they think may happen. It is the same with all of us. We are experiential beings taking in information in huge amounts on a daily basis. Through all sorts of means we have been influenced to form a picture of reality with which we can make sense of the world. These, in essence, are the means of theory-formation in a person's life. Then we make use of what we have come to know through observation and influence to engage with the world. In effect we are trying out our own world view by testing its validity through new experiences and so on.

Now that modern science **does not** have any especial method which defines it and sets it apart, we have abundant testimony from a variety of writers and thinkers. My statements above are not made simply from one man's perspective but have been corroborated by scientists, historians of science and philosophers. The physicist and writer on the relationship between science and faith, Ian Barbour made this definitive statement:

“At the outset it should be stated that there is no “scientific method”, no formula with five easy steps guaranteed to lead to discoveries.”⁵¹

The physicist H. K. Schilling, who was also moved to write on the relationship between modern science and matters of the Christian faith, made a similar assertion:

“There are two things that need to be said explicitly about the alleged scientific method, first, that there is no such thing, as it is commonly conceived. What this means is that science has no unique recipe for concocting a scientific brew, and one that assures satisfactory results and guarantees against failure.”⁵²

The professor of historical theology John Dillenberger adds his assessment in line with the above in his work on the “Protestant” view of natural science:

“Today, there is little patience with the notion of a single pattern or method in science. James Conant, through the Harvard Case Histories in Experimental Science, has clearly exploded the notion of a single scientific method, or even the idea that one can speak of method in any meaningful sense at all. ... The notion of a single scientific method, definable in definite procedural stages has been abandoned, if it ever existed.”⁵³

51 **Ian. G. Barbour.** Issues in Science and Religion. P138.

52 **H. K. Schilling.** Science and Religion. P36.

53 **John Dillenberger.** Protestant Thought and Natural Science. P273,285.

The palaeontologist Stephen Jay Gould describes the mechanical view of the scientific method as mythology:

*“But our ways of learning about the world are strongly influenced by the social preconceptions and biased modes of thinking that each scientist must apply to any problem. The stereotype of a fully rational and objective 'scientific method,' with individual scientists as logical (and interchangeable) robots, is self-serving mythology.”*⁵⁴

Finally the philosopher of science A. F. Chalmers (a former physicist) comes to the same conclusion:

*“As will by now be clear, my own view is that there is no timeless and universal conception of science or scientific method.”*⁵⁵

So there is no definitive method attributable to science. Many of the above writers in an effort to categorize science in some overarching way, refer to it as utilising a variety of methods each of which are tailored to the case in point. This amounts to saying that modern science is a very human affair and that scientists aim to bend their whole beings into discovery. The former professor of physics at Harvard University and Nobel laureate, P. W. Bridgman, summed up the methods of science in a very telling way as follows:

*“The scientific method, as far as it is a method, is nothing more than doing one's damndest with one's mind, no holds barred.”*⁵⁶

Modern science, then, is very much all about the action of the mind, and this fact opens up an interesting line of enquiry for the Christian, given Scripture's assessment of human kind and their ability with regard to thinking.⁵⁷

The theologian and professor of divinity at Cambridge, Charles E. Raven argued that whatever may be the subject of a particular investigation, the “*main process*” used “*is the same whether we are investigating the structure of an atom or a problem in animal evolution, a period of history or the religious experience of a saint.*”⁵⁸ H. K. Schilling asserted with equal vigour that the

54 **Stephen Jay Gould.** In the Mind of the Beholder. Natural History. Volume 103. February 1994. P14.

55 **A. F. Chalmers.** What is this thing called Science? P169.

56 **P. W. Bridgman.** Reflections of a Physicist. 1950. Philosophical Library Inc. P351. See also: Yale Review. 1945. P444.

57 See, for example: Psalm 94:11; Romans 1:21; 8:7; Ephesians 4:17,18 etc.

58 **C. E. Raven.** Natural Religion and Christian Theology. 1953. Cambridge University Press. Volume 2. P10.

“general processes” which are found in any statement of the scientific method are also components found in “every other field of scholarship that seeks knowledge – including theology.”⁵⁹ Thus P. W. Bridgman could conclude that:

*“The so-called scientific method is merely a special case of the method of intelligence”*⁶⁰

Charles E. Raven has gone even further by asserting that this method is no more nor less than common sense.

*“For, of course the process of experiment, of the observation and testing of its results, and the subsequent repetition and checking and defining, is as old as human nature It is nothing but what we call common sense Moreover it is the universal means for solving our problems in every field of intellectual effort.”*⁶¹

The so-called method of science turns out, therefore, to be nothing more, nor less than what may be termed the “method of intelligence,” and this is no more than exercising common sense!

It is worth pausing and reflecting upon what we have learned so far. Modern science cannot be set apart on the basis of a distinct method. Its method is simply the method all human beings use when they want to investigate any subject. Such thoughts are not aired in the public domain well, for most people are still under the impression that modern science is distinct because of its methodology. Granted most people do not use sophisticated equipment in their investigations, but these gadgets and tools are, in reality, merely extensions of the five senses. The so-called method employed by scientists is merely a description of what all human beings utilise as a matter of course, (the “method of intelligence”). That is not to say that all engage in the “method of intelligence” equally well. Some, (perhaps scientists), use it in a heightened and refined way, whereas others might use it poorly or without too much attention to the process of thought required. However whatever the level of use, the method of intelligence is just that which is contained within the faculties that **every human being** was born with. We have sense apparatus and we have minds, and these are used to make sense of the world. Thus we cannot appeal to a particular method to set modern science apart as a special subject from others. Having shown that modern science does not have an especial method, P. W. Bridgman then appeals to another aspect which he believes will help in defining science, namely that which is studied:

59 H. K. Schilling. Science and Religion. P37,38.

60 P. W. Bridgman. Reflections of a Physicist. P370.

61 C. E. Raven. Christianity and Science. 1955. Lutterworth Press. World Christian Book Series Number 4. P20.

“What primarily distinguishes science from other intellectual enterprises in which the right answer has to be obtained is not method but the subject matter.”⁶²

We shall review this assertion when we come to look at the subject of “Nature” in a later section. For the moment it will be worth analysing the method of science a little deeper by thinking about the way in which philosophers have viewed this modern movement.

What philosophy has to say!

Philosophy is the subject which seeks to consider all the available evidence in order to make sense of the world, its meaning, purpose and working. C. E. M. Joad, a philosopher and popular broadcaster in the early twentieth century, described philosophy as:

“... a clearing house to which the results of all other human enquiries are brought and in which the records of all forms of human experience are sifted, assessed and evaluated.”⁶³

According to Joad the purpose and aim of philosophy is:

“To satisfy the impulse of curiosity. ... to know the meaning of this surprising world in which we find ourselves, to understand the significance, and, if possible, to discover the purpose of human life in general and of our own lives in particular.”⁶⁴

Quite a claim! And whilst Joad is very clear about the intention of philosophy, he is also equally candid as to its value and success:

“What is the point of life and how ought it to be lived? Philosophy concerns itself with these questions, not aspiring to answer them with finality, but considering and discussing them and studying the answers which have seemed convincing to greater men than ourselves. Philosophy, then, is a record of the soul's adventures in the cosmos.”⁶⁵

At the end of his book he concludes:

“Finally, the fact that no agreed answer has yet been discovered to the most fundamental questions cannot but suggest to the honest thinker that all systems

62 P. W. Bridgman. Reflections of a Physicist. P351.

63 C. E. M. Joad. Philosophy. (Teach yourself books). 1956. The English Universities Press Ltd. P16.

64 C. E. M. Joad. Philosophy. P15.

65 C. E. M. Joad. Philosophy. P15.

hitherto constructed are in some degree false. Those who have no tincture of philosophy are inclined on all questions not susceptible of proof to supply the place of knowledge by converting other people's conjectures into dogmas. The philosopher, on the other hand, will admit that even his so-called knowledge is conjectural, and regard fanaticism, bigotry, and dogmatism not only as an offence against manners, but as a betrayal of the truth. It is for the sake of the questions which philosophy studies, and of the methods with which it pursues them, rather than for any set of answers that it propounds, that philosophy is to be valued.”⁶⁶

Thus, philosophy, according to Joad at least, cannot really aspire to give us answers, for “*no agreed answer has yet been discovered to the most fundamental questions.*”⁶⁷ All that can be hoped from it is a very tentative set of conjectures, and an enjoyment of the journey!

So much for philosophy! But what of its assessment of modern science? How does modern science come out after an investigation by philosophy? To answer this I want to look briefly at one book written by a former physicist turned philosopher (A. F. Chalmers) with the title: ***What is this thing called Science?*** Chalmers attempts to give a review of the various ways that modern science has been viewed, particularly with regard to its involvement in theory formation. He begins by looking at what were the first steps taken by modern science in the sixteenth century, namely, the process of induction.

Induction.

Inductive reasoning starts by considering a range of evidence or information and makes a generalization about the gathered evidence that may be considered ***probably*** true. In essence inductive reasoning seeks to derive a general rule from specific observations or evidence, In some instances it is effectively an educated guess based on the information to hand. Given this body of data what conclusions can I draw from it all? Now the conclusion made from the use of inductive logic may be weak or it may be strong, but it is never 100% certain. As an example of a strong inductive argument consider the following:

- The sun has risen every morning that I have woken,
- The sun rose this morning.
- Therefore the sun will rise tomorrow.

66 C. E. M. Joad. Philosophy. P221,222.

67 C. E. M. Joad. Philosophy. P221,222.

From the stand point of modern experience the above argument is taken for granted by all of us, but it is by no means certain! Indeed one day it will not be true because the Son of God will return to judge the living and the dead, the heavens will be rolled up like an old garment, and in the new heavens and earth there will be no more need of sun nor moon.⁶⁸ But here is a much weaker inductive argument:

- The chairs in the living room are all red.
- The chairs in the kitchen are all red.
- All chairs everywhere are red.

We can see from these simple examples that the strength of an inductive argument depends upon the comprehensiveness of the evidence alluded to, and the scope of the generalization or conclusion made. If we had said “all chairs in **this house** are red” that may have been more likely, or realistic conclusion. We might be more inclined to accept the conclusion reasoning that the person owning the house had a penchant for red chairs, or maybe they were given a job-lot from some large organisation that happened to use red chairs in their premises!

Now from the point of view of secular thinking, it has become clear that induction has two serious problems. Chalmers shows one of the problems by referring to an illustration of what he calls *the inductivist turkey*, an illustration first used by the philosopher Bertrand Russell. This is how Chalmers retells the story:

*“This turkey found that, on his first morning at the turkey farm, he was fed at 9 AM. However, being a good inductivist, he did not jump to conclusions. He waited until he had collected a large number of observations of the fact that he was fed at 9 AM, and he made these observations under a wide variety of circumstances, on Wednesdays and Thursdays, on warm days and cold days, on rainy days and dry days. Finally, his inductivist conscience was satisfied and he carried out an inductive inference to conclude, “I am always fed at 9 AM.” Alas, this conclusion was shown to be false in no uncertain manner when, on Christmas eve, instead of being fed, he had this throat cut. An inductive inference with true premises has led to a false conclusion.”*⁶⁹

Of course the same situation is found by all of us as we wake and rise each morning as we have already noted. We trust that as we wake the sun will rise (even if obscured by cloud) and the day will be much the same in general terms as any other day. Nevertheless, there will come a day when

68 Psalm 102:26; Isaiah 13:13; 34:4; 51:6; Acts 10:42; 17:31; Revelation 21:23.

69 A. F. Chalmers. What is this thing called Science? P14.

we may not see the whole day out! But truth to be told, from a *secular* standpoint, we have no justification for this belief, just as the turkey cannot presume that every day for him will be one in which he is well fed! According to Chalmers, then, “*inductive arguments are not logically valid arguments,*” and it is eminently possible for conclusions made from true premises to be false.⁷⁰ Any appeal by an inductivist to the logic of induction to show the value of induction, will, of course, be engaging in a circular argument, for it not possible to “*use induction to justify induction.*”⁷¹ Chalmers goes on to point out that observations made by an inductivist will be a finite set, whereas the generalisation that he (or she) makes encompasses an infinite number of statements. This means that:

*“The probability of the universal generalization being true is thus a finite number divided by an infinite number; which remains zero however much the finite number of observation statements constituting the evidence is increased.”*⁷²

We have seen, therefore, that it is not possible to be sure that the generalisation made from a finite set of observations will be true, because we can find no justification within the secular world for such a hope. It is necessary to add here, however, that for the Christian there is certainty. Our trust in the belief, for example, that tomorrow will be much like today is grounded in the nature of God who promised that He would hold all things in their regular course until such a time comes when the Son is ready to be revealed in all His glory.⁷³ It is essential therefore, for us to come to know God and His ways, for in these we can be certain.

Observations.

Another problem for the inductivist (and for all who want to understand the nature of modern science) is the problem of observations. We might like to think that observations are neutral and pure, and that they are the same for everyone. However, a moments thought will dispel such a naïve notion. As Chalmers puts it:

*“What an observer sees, that is, the visual experience that an observer has when viewing an object, depends in part on his past experience, his knowledge and his expectations.”*⁷⁴

70 A. F. Chalmers. What is this thing called Science? P14.

71 A. F. Chalmers. What is this thing called Science? P15.

72 A. F. Chalmers. What is this thing called Science? P18.

73 Genesis 8:22; Acts 17:31.

74 A. F. Chalmers. What is this thing called Science? P25.

We cannot help but use our understanding (such as it may be) to guide us in what we see. In other words, information from reality does not come to us without our processing it in some way. The physical situation under scrutiny may be unique and it may impinge information onto our retinas in a precisely defined way, but how we experience this in our conscious minds depends upon our own view point or world view:

“What is uniquely given by the physical situation is the image on the retina of an observer, but an observer does not have direct perceptual contact with that image. ... while the images on our retinas form part of the cause of what we see, another very important part of the cause is constituted by the inner state of our minds or brains, which will clearly depend on our cultural upbringing, our knowledge, our expectations, etc. and will not be determined solely by the physical properties of our eyes and the scene observed.”⁷⁵

Thus it turns out that observations of the world are always made *“in the language of some theory, however vague.”*⁷⁶ As a single example take the apparently neutral phrase (that is, neutral from a modern perspective): “consider the natural world.” The term “natural world” is not neutral but loaded with meaning. It entails the notion of an autonomous system of physical entities such as land masses, mountains, habitats and so on, within which are to be found ecological systems of physical living things. From the Christian point of view we might like to substitute the phrase “natural world,” with the word “creation” to show that all that we see is governed by the One who made it all. Even such a phrase as: “our atmosphere is made up of 20% oxygen gas” is not simply a bare statement of fact. This is because the data is offered in the context of an understanding of the terms “atmosphere,” “oxygen” and “gas,” all of which are theoretical concepts.

Now since observations are never given to us in a pure form and are always embedded within some form of theory, it follows that observations themselves may be false. Observation statements are in fact fallible. This may seem to be an overstatement of the case. Are we never to trust what we observe? We shall come to this from a Christian perspective later on. For now it is important to recognise that the secular man cannot be certain that what he sees is not biased or false. Chalmers adduces a number of historical examples, of which one will suffice to make the point here. In a well-known experiment a number of subjects were asked to identify playing cards when shown them for a few seconds. After accomplishing this task for a while, some cards were introduced which had been altered slightly, for example a red ace of spades or a black four of diamonds. Subjects invariably reported what they thought (a black ace of spades and a red four of

75 A. F. Chalmers. What is this thing called Science? P27.

76 A. F. Chalmers. What is this thing called Science? P28,29.

diamonds) rather than what they actually saw (a red ace of spades and a black four of diamonds).⁷⁷ Examples of this kind abound also in the long history of science.⁷⁸ Observations then are never made without some prior thought. Observations are *theory-laden*. This is as a consequence of the fact that we are unified beings. Our sense apparatus is connected intricately with our minds and hearts. If we operated within a God-given system there would be nothing wrong with this, but for the secularist it is a problem. He wants to establish his theory on the basis of observations. But he is hampered by the fact that the observations are embedded within some form of theory. Where then does he get justification for what he sees and thinks? For the Christian all is settled. God has revealed the frame and form of how we should engage with this world.

Thus since we cannot assert that observations come before theory, and since observations themselves are theory-dependent, the naïve inductivist has no basis upon which to build his scientific edifice. His wish that theory is grounded on a solid basis of factual evidence is, in fact, groundless. As Chalmers puts it:

“Science does not start with observation statements because theory of some kind precedes all observation statements, and observation statements do not constitute a firm basis on which scientific knowledge can be founded because they are fallible.”⁷⁹

Deduction.

If induction is not a valid process of working for modern science, what of deduction? Deductive reasoning starts with a statement, or premise, which is known to be true. A second statement which is related to, or consequential from, the first must also be known to be true. From these truths a conclusion can be drawn which, if consistent with the original statements, must itself be true as well. Deductive reasoning is often called “top-down” logic. As an example consider the following.

- All humans die.
- I am a human.
- I will certainly die.

The truth or otherwise of such reasoning depends on the truth of the first two statements. If the statements are true then the conclusion is definitely true as well. Inductive reasoning works in the

77 A. F. Chalmers. What is this thing called Science? P25.

78 For more on this see works by any historian of science.

79 A. F. Chalmers. What is this thing called Science? P32.

opposite direction to deductive reasoning, and so is often known as “bottom-up” logic. Now the important issue with deduction, is being certain that the initial statements are in fact true. On what basis can the starting premises be established as true? Although deduction is on a more secure footing with regard to the conclusive part of the process in comparison with induction, we are, of course, in need of some standard by which we can establish the truth of the starting premises. Here again the Christian is on much firmer ground, for the revealed will of God in Scripture is, of course, fully true. But the secular man has no external standard by which to state firm premises.

Inference to the best explanation.

Given the above problems for induction and deduction many scientists resort to a modified form of both which is sometimes referred to as “inference to the best explanation.” Philosophically speaking the form of logic is known by the term *abduction*. Consider the following example:

- The ground outside my house is wet.
- Wetness is caused by rain.
- It must have rained.

The problem with such a form of reasoning is that the conclusion is by no means certain. Taking the example above, this is because there are many other ways in which the ground could have become wet. It might have been caused by flooding, by a burst water main, by spillage, by a hosepipe, by a lawn sprinkler, or by some other means. In order to establish the cause of the wetness we would have to eliminate all of these other alternatives.

In the origins debate, the facts that we observe in the present can have a range of possible explanations, and the only way to come to firm conclusions (from a secular point of view) is to eliminate the alternatives. The process we have described as “inference to the best explanation,” entails choosing the *best* explanation to include all the available data. Often, however, the choice is not based upon any firm grounding, but is biased by the one making the choice. After all, what constitutes the “best explanation”? If I am a convinced atheist then any supernatural explanation is immediately ruled out by my bias. Furthermore, key to a discussion about the origin of life is the notion of having all the data at our disposal. But this raises other problems. What constitutes true data? To the Christian, what God has said in the Bible is data of prime and supreme importance. In contrast, scientific “data” is often not simply data at all, but conclusions based on assumptions. The

various dating techniques and the concept of the expansion of the universe are typical examples.⁸⁰ Thus abduction, like induction and deduction, is fraught with problems for the secularist. The Christian who has as foundation and framework Christ (the Rock) and the Scriptures (the Truth), is able to progress in a much surer way. For the Christian the essential paradigm or “theory of everything” is settled, and seeking the “best explanation” in any particular instance will be governed by the already revealed truth given by God.

Popper's falsificationism.

From an historical perspective the failure of induction was followed by the work of Karl Popper and his view known as *falsificationism*. After Popper came those advocating a more holistic view of how science operates, amongst whom we must mention Imre Lakatos and Thomas Kuhn.

Popper's theory of how science works is one which is adopted by many modern scientists. In actual fact it appears that this general assent to his view is also not with wholehearted approval!⁸¹ Falsificationism states that the only thing you can do is to disprove (falsify) a theory.⁸² For something to be classed as a theory it must be falsifiable. In other words:

“An hypothesis is falsifiable if there exists a logically possible observation statement or set of observation statements that are inconsistent with it, that is, which, if established as true, would falsify the hypothesis.”⁸³

Thus the aim of a good scientist is to construct his (or her) theory in such a way that it could be, tested by further observations, and that, it makes predictions about the situation in view which also can be tested. It will be seen from this that the nature of knowledge to which the falsificationist aspires is always, by nature, tentative. The falsificationist is averse to any dogmatism for: *“if a theory is to have informative content, it must run the risk of being falsified.”⁸⁴* Religious explanations are discounted because they are dogmatic and because they “explain” different phenomena such as disasters as both judgements and punishments, or, as things sent to try us.

80 Radiometric dating is a procedure which measures the mass of radioisotopes in a sample. Based on the idea of radioactive half lives, the “dates” are derived by making assumptions about the original conditions of the sample, and the processes the sample has undergone over time.

The idea of the expansion of the universe is based on an interpretation of spectral data. The assumption made is that the effect of “red shift” in spectral information is caused by the doppler effect only, even though it is well known that there are other causes for red shift.

81 Space will not permit a justification for this assertion but any reading of modern science works will serve to show that scientists really do believe their theories are true despite conflicting evidence.

82 A. F. Chalmers. What is this thing called Science? P45,60,61.

83 A. F. Chalmers. What is this thing called Science? P40.

84 A. F. Chalmers. What is this thing called Science? P41,42.

Popper's own assessment of his view is worth considering at this point. Chalmers quotes him from a work entitled: *Conjectures and Refutations*:

*"I can therefore gladly admit that falsificationists like myself much prefer an attempt to solve an interesting problem by a bold conjecture, **even (and especially) if it soon turns out to be false**, to any recital of a sequence of irrelevant truisms. We prefer this because we believe that this is the way in which we can learn from our mistakes; and that in finding that our conjecture was false we shall have learnt much about the truth, and shall have got nearer the truth."*⁸⁵

Discounting any "sequence of irrelevant truisms," or dogmatic statements, Popper is happy to walk with a blind and stumbling gait! It is one thing to learn from one's mistakes when you know that there is someone on hand to correct you, (like a father who is teaching his child to ride a bike, for example), but where in the world does the falsificationist get the information to know he has made a mistake? If a theory is falsified what have you learnt about truth? Nothing! All you have come to is a knowledge that the idea you had been proceeding with is a dead end! Chalmers noted the irony of Popper's assertions and then goes on to show why falsificationism is a poor replacement for induction.⁸⁶ Since observation statements are connected to theory and are therefore theory-dependent, they are thus fallible and cannot be used to falsify a theory. As Chalmers puts it:

*"... if a universal statement or complex of universal statements constituting a theory or part of a theory clashes with some observation statement, it may be the observation statement that is at fault. Nothing in the logic of the situation requires that it should always be the theory that is rejected on the occasion of a clash with observation."*⁸⁷

Chalmers then referenced the theory of the universe given by Nicolaus Copernicus, which clashed with the naked-eye observations on the planet Venus known at the time. The theory was not rejected despite these observations offering a contradiction. Chalmers then adds:

"Science abounds with examples of the rejection of observation statements and the retention of the theories with which they clash. However securely based on observation a statement may seem to be, the possibility that new theoretical advances will reveal inadequacies in that statement cannot be ruled out."

85 **K. R. Popper.** *Conjectures and Refutations*. 1969. Routledge and Kegan Paul, London. P231. Words in bold originally emphasised in italics. See: **A. F. Chalmers.** *What is this thing called Science?* P43,44.

86 **A. F. Chalmers.** *What is this thing called Science?* P43,44.

87 **A. F. Chalmers.** *What is this thing called Science?* P60,61.

Consequently, straightforward, conclusive falsifications of theories are not achievable.”⁸⁸

Apparently Popper was aware of this general problem but his attempts to overcome it by making a distinction between private inner observations, and public observations was not at all convincing.⁸⁹

Thus falsificationism fails:

“But it is precisely the fact that observation statements are fallible, and their acceptance only tentative and open to revision, that undermines the falsificationist position. Theories cannot be conclusively falsified because the observation statements that form the basis for the falsification may themselves prove to be false in the light of later developments.”⁹⁰

We shall end this brief review of Popper's ideas with his own assessment of the nature of science:

“The empirical basis of objective science has thus nothing “absolute” about it. Science does not rest upon solid bedrock. The bold structure of its theories rises, as it were above a swamp. It is like a building erected on piles. The piles are driven down from above into the swamp, but not down to any natural or “given” base; and if we stop driving the piles deeper, it is not because we have reached firm ground. We simply stop when we are satisfied that the piles are firm enough to carry the structure. At least for the time being.”⁹¹

There is nothing absolute about science from a falsificationist point of view, and furthermore, the falsificationist attempt at approaching truth by removing false theories fails through its mistaken trust in the power of observations to falsify a theory.

Lakatos and Kuhn.

Having demolished inductivist and falsificationist views on how science works, Chalmers discusses structured whole-views of science from Lakatos and Kuhn. It turns out that these much more rounded view points fail too. Both demand an appeal to the history of science for justification.⁹² Chalmers points out that whilst Lakatos sought to separate out a presumed “*hard core*” which was not to be altered nor criticised, from a “*research programme*,” Kuhn viewed science as a series of revolutions each of which bore little resemblance to previous incarnations, and

88 A. F. Chalmers. What is this thing called Science? P60,61.

89 A. F. Chalmers. What is this thing called Science? P61,62.

90 A. F. Chalmers. What is this thing called Science? P63.

91 K. R. Popper. The Logic of Scientific Discovery. 1968. Hutchinson, London. P111. Quoted in: A. F. Chalmers. What is this thing called Science? P63.

92 A. F. Chalmers. What is this thing called Science? P89.

consisted of an overarching “*paradigm*,” or set of principles, within which “*normal science*” was allowed to operate.⁹³

Lakatos's account has been described scathingly as:

*“... a verbal ornament, as a memorial to happier times when it was still thought possible to run a complex and often catastrophic business like science by following a few simple and “rational” rules.”*⁹⁴

In contrast Kuhn's account has been rejected largely by modern scientists because of its relative and communal-focused nature. Although Kuhn believed that science progresses, he denied that it approached truth.⁹⁵ Chalmers summed up the contribution of these two philosophers as follows:

*“The discussion of this chapter so far might perhaps be summed up by noting that Lakatos aimed to give a rationalist account of science but failed, whilst Kuhn denied that he aimed to give a relativist account of science but gave one nevertheless.”*⁹⁶

Realism and instrumentalism.

Apart from the ideas discussed above, Chalmers also discusses realism and instrumentalism. The former is the view adopted by most modern scientists, although often with slight modifications. The latter view is not followed by many as it suffers from the problems encountered by falsificationism, because of its insistence on a clear demarcation between theory and observation. Chalmers favoured a form of realism he terms, “*unrepresentative realism*,” which avoids the charge of rank naïvety, or, in other words, “*it does not incorporate a correspondence theory of truth.*”⁹⁷ This view of realism attempts to cling to the naïve formulation – the world reveals truth to us as we investigate it by science – but rejects the simplistic idea that theories are truly representative of what is going on. To such as hold this view there is a real world and we can learn real things from it. However our knowledge is tentative because we cannot:

*“... assume that our theories describe entities in the world, such as wave functions or fields, in the way that our common sense ideas understand our language to describe cats and tables.”*⁹⁸

93 A. F. Chalmers. What is this thing called Science? P80,81,90f.

94 P. K. Feyerabend. Consolations for the Specialist. In Criticism and the Growth of Knowledge. Edited by Lakatos and Musgrave. P215. Quoted in: A. F. Chalmers. What is this thing called Science? P87

95 A. F. Chalmers. What is this thing called Science? P108.

96 A. F. Chalmers. What is this thing called Science? P109.

97 A. F. Chalmers. What is this thing called Science? P163.

98 A. F. Chalmers. What is this thing called Science? P163.

Instead we can only view theories in terms of their success in certain fruitful ways. They do not describe reality as it is:

“... because we do not have access to the world independently of our theories in a way that would enable us to assess the adequacy of those descriptions.”⁹⁹

Chalmers, then, is a tentative realist. He wants theories to be accepted as in some way telling us true information about the world, but not in any naïve way favoured by Newton and other early modern scientists who thought it a relatively simple matter to read the “book of nature,” as though one were simply picking up pebbles from a beach to examine them, or lifting the veil of nature to see what was underneath.¹⁰⁰

Chalmers' conclusions on modern science.

Having discussed the various options chosen by past philosophers to characterise modern science (at least in regard to its view on theory formation), Chalmers makes some rather important conclusions which we will now need to discuss.

First we must note that along with other writers, Chalmers has no time for the idea that science can be characterised by some unique method. He writes:

“As will by now be clear, my own view is that there is no timeless and universal conception of science or scientific method which can serve the purposes exemplified in the previous paragraph. We do not have the resources to arrive at and defend such notions. We cannot legitimately defend or reject items of knowledge because they do or do not conform to some ready-made criterion of scientificity.”¹⁰¹

But even more telling is Chalmers assessment of science itself as a distinct discipline. Listen to what he concludes on that subject as he pulls holes in the title for his own book!

“... I suggest that the question that constitutes the title of this book is a misleading and presumptuous one. It presumes that there is a single category “science,” and implies that various areas of knowledge, physics, biology, history, sociology and so on, either come under that category or do not. I do not know how such a general characterization of science can be established or defended. Philosophers do not have resources that enable them to legislate on the criteria that must be satisfied if an area of knowledge is to be deemed acceptable or “scientific.” ... From this point

99 A. F. Chalmers. What is this thing called Science? P163.

100 Both of these illustrations have been used by early modern scientists.

101 A. F. Chalmers. What is this thing called Science? P169.

of view we do not need a general category “science” with respect to which some area of knowledge can be acclaimed as science or denigrated as non-science.”¹⁰²

Remember that Chalmers was a physicist before he turned to philosophy. In this last quote he informs us that there is, in point of fact, no way we can say of a subject that it is, or that it is not, science. This, in turn, means that there is no real category called “science.” Such a statement fits in with the idea discussed earlier that there is no such thing as the method of science.

For Chalmers there is no means by which we can judge theories. There is no absolute standard by which we can make such judgements because there is no such thing as absolute truth:

“If we are to talk of ways in which theories are to be appraised or judged, then my position is relativist in the sense that I deny there is some absolute criterion with respect to which those judgements are to be made, in particular, there is no general category “science,” and no concept of truth which is up to the task of characterising science as a search for truth. Each area of knowledge is to be judged on its merits by investigating its aims and the extent to which it is able to fulfil them.”¹⁰³

Chalmers reinforces the notion that there is no such category as “science,” and he adds that since (in his estimation) there is no absolute truth, all we can do is to assess each subject area in a **relative way**. Chalmers' original aim, it appears, was to discredit the populist notion of science in society:

*“In retrospect, I suggest the most important function of my investigation is to combat what might be called the **ideology of science** as it functions in our society. This ideology involves the use of the dubious concept of science and the equally dubious concept of truth that is often associated with it, usually in the defence of conservative positions. ...¹⁰⁴*

Finally we discover that from the very outset of his book, Chalmers presents to us as a philosopher who can dogmatically claim that we cannot be dogmatic!

“Modern developments in the philosophy of science have pinpointed and stressed deep-seated difficulties associated with the idea that science rests on a sure foundation acquired through observation and experiment and with the idea that there is some kind of inference procedure that enables us to derive scientific theories from such a base in a reliable way. There is just no method that enables scientific theories to be proven true or even probably true. Later in the book, I will argue that attempts to give a simple and straightforward logical reconstruction of the “scientific

102 A. F. Chalmers. What is this thing called Science? P166.

103 A. F. Chalmers. What is this thing called Science? P166.

104 A. F. Chalmers. What is this thing called Science? P169.

method” encounter further difficulties when it is realised that there is no method that enables scientific theories to be conclusively disproved either.”¹⁰⁵

There is no way we can prove a theory, and there is no way we can disprove it either! This is the conclusion of Chalmers' work. To end this brief review we should note that Chalmers introduces his work with a very candid admission. This admission is the way of most philosophers who do not succumb to despair. He writes:

“While the theory of science that can be extracted from the latter portion of this book is intended to be an improvement on anything that has come before, it is certainly not problem-free. It might be said that the book proceeds according to the old adage, “We start off confused and end up confused on a higher level.””¹⁰⁶

Confused or what? To be fair I do applaud such honesty. Man simply cannot discover as Solomon once wrote, whilst he operates *“under the sun.”*¹⁰⁷ Oh that these thoughts expressed by Chalmers would lead people like him and those who read his work to seek the Lord!

(v) Goals.

To what purpose do modern scientists engage in their research? Why do so many spend large amounts of time devising machines and bending their brain cells in the pursuit of scientific investigations? What motivates mankind the world over to allow governments to spend large sums of money in the pursuit of such endeavours? It is often claimed that modern science is the pursuit of answers to the general problems of life, the cure of cancer, the betterment of society, the relief of poverty, and the moulding of the planet to ensure the well-being of man. When pressed for a reason to grant funds to a project, it is normal to find scientists emphasising the benefits to mankind. Much genetic research is promoted in this way as the means by which conditions such a cystic fibrosis or Parkinson's disease may be cured. However the main motivation behind modern science is not so altruistic. Geneticists may say that their aim is to cure genetic diseases to gain the grants they need, but really the motive is simply to know and explore. At heart what drives man towards the scientific quest is a desire to know. To discover. We have already noted that historians of science point out that man is by nature a curious being. He has an *“innate curiosity about the world,”* and *“an unquenchable and irresistible thirst of the soul that demands an explanation of the world.”*¹⁰⁸ When

105 A. F. Chalmers. What is this thing called Science? Pxvi.

106 A. F. Chalmers. What is this thing called Science? Pxix.

107 Ecclesiastes 8:16,17.

108 Colin Ronan. The Cambridge Illustrated History of the World's Science. P8. Charles Singer. A Short History of Scientific Ideas to 1900. P1,288.

we consider what scientists really have to say, we learn that their motive is much more the pursuit of an answer to life, or a quest of discovery.

The Greek philosopher Epicurus in a letter to Herodotus made the following comment with regard to the purpose of scientific enquiry:

*“... to arrive at accurate knowledge of the cause of things of most moment is the business of natural science”*¹⁰⁹

Writing in 1928 the Oxford chemist Alexander Smith Russell stated that:

*“The aim of Natural Science is to describe the phenomena of the external world and in the wide sense to understand it.”*¹¹⁰

The historian of science Charles Singer concurred with this assessment writing in 1959 that the aim of science is to make the world *intelligible*:

*“I take this occasion to call to mind that science, the great aim of which is to make the world intelligible, or at least describable, has by its very success been riven into many departments.”*¹¹¹

Just two years later the physicist Erwin Schrödinger made this assessment of the purpose of science:

*“I do not think I am prejudiced against the importance that science has from the purely human point of view. I had expressed by the original title of these lectures, and I have explained in the introductory passages, that I consider science an integrating part of our endeavour to answer the one great philosophical question which embraces all others, the one that Plotinus expressed by his brief: ... - who are we? And more than that: I consider this not only one of the tasks, but the task, of science, the only one that really counts.”*¹¹²

Schrödinger points us to the great human quest for meaning, so that the question: “*who are we?*” becomes the single most important task of modern science. Eleven years later (1972) the philosopher of science Karl Popper described what he believed to be the task of modern science:

109 Epicurus in a letter to Herodotus. See <http://www.epicurus.net/en/herodotus.html> See also: https://en.wikisource.org/wiki/Letter_to_Herodotus

110 **Alexander Smith Russell**. The dynamic of science. Part of chapter 1 of Adventure: the faith of science and the science of faith. 1928. MacMillan. P4.

111 **Charles Singer**. A Short History of Scientific Ideas to 1900. Pvi.

112 **Erwin Schrödinger**. Science and Humanism. (Physics in our time). 1961. Cambridge University Press. P51.

*"What we attempt in science is to describe and (as far as possible) explain reality."*¹¹³

Towards the end of the 1980s the theoretical physicist Stephen Hawking wrote in much the same way. In a Newsweek Magazine article published in 1988, the famed scientist declared:

*"My goal is a complete understanding of the universe why it is as it is and why it exists at all."*¹¹⁴

In his best-seller, *A Brief History of Time*, he makes much the same claim. In the early part of this book he outlines the goal of science:

*"The eventual goal of science is to provide a single theory that describes the whole universe."*¹¹⁵

Later on in the book this aspiration is defined in more expansive words similar to those of Schrödinger and the Hellenistic philosopher Plotinus:

*"A complete, consistent, unified theory is only the first step; our goal is a complete understanding of the events around us, and of our own existence."*¹¹⁶

Thus modern science, according to all of these writers, aims at seeking the essential understanding of the universe as a whole and in its various parts. It attempts to answer the question of whom mankind is, and to make the world completely intelligible. This is no mean task! And yet the Lord in His grace and mercy has already given us the answer!

Modern science is thus characterised by an all-encompassing aim, to discover the truth. Now I am sure that many scientists will not endorse fully what the representatives I have selected here, have said. However these folk are by no means the fringe of the modern science world. If we accept at face value what they have said, we cannot be accused of overstating the case by claiming that science seeks to uncover truth and to find the answer to life, the universe and everything. Is this the only way of knowing? It would be foolish if any scientist made the claim that their method was exclusive, but in practice this is what modern science does lay claim to. As soon as the voice of

113 **K. R. Popper.** Objective Knowledge. 1972. Oxford University Press. P40. Quoted in: **A. F. Chalmers.** What is this thing called Science? P159.

114 **Stephen Hawking.** Reading God's Mind. Newsweek Magazine. June 13th 1988. P39.

115 **Stephen Hawking.** A Brief History of Time. (From the Big Bang to Black Holes). 1988. Bantam press, London. P10.

116 **Stephen Hawking.** A Brief History of Time. P169.

faith is raised, objections come thick and fast. In claiming to be the seeker after truth, modern science brooks no rivals. Such an aim and goal must be set alongside the requirement that God demands of His creatures. What does God require? He requires of us that we look to Him exclusively, and that we chart our course according to His lead.¹¹⁷

(vi) Human.

One of the features of modern science which has forced its way into our understanding since the early twentieth century, is the idea that it is a very human affair. It was once considered that science operated almost as a machine. If the investigator asked the right questions, dug with the right tools, and then sifted the material gained with the right type of thinking, the outcome was assured results and conclusions. But as H. K. Schilling has observed the truth is rather different:

“Far from being machine-like, science is a characteristically human enterprise that is intensely personal, as well as social and communal, with all the strengths and weaknesses this implies.”¹¹⁸

As we have already noted, earlier accounts of the nature of science always took a wholly objective viewpoint, but several factors have forced modern scientists to acknowledge the human angle. To start with, it has become increasingly clear that the investigator himself is a part of the experiments he is performing, and as such influences their outcome. On a simplistic level it should be obvious that the world view of the scientist will direct his gaze in one way or another. We do not look at the universe dispassionately, but with eyes focused on something we hope to uncover. Those who use metal detectors on beaches are hoping to find a hoard left by former bathers, they are not blindly looking for the unexpected. Sometimes the unexpected does make itself known, but an investigator using a metal detector does not go just anywhere. He will travel to places where he hopes for a successful outcome. His investigation is governed by his own personal hopes. In the same way scientists do not seek for answers dispassionately, but have in view the kind of things they expect to see. However, the fact that the scientist is directly involved in part of the experiment he performs, came to sharp focus in the early twentieth century with the development of quantum mechanics. In an internet-based physics magazine published in 2015, the writer of an article on quantum mechanics asked the following question:

117 See Deuteronomy 10:12f; Micah 6:8; Matthew 22:37-40.

118 H. K. Schilling. Science and Religion. P34.

“Does a massive quantum particle – such as an atom – in a double-slit experiment behave differently depending on when it is observed?”¹¹⁹

The article goes on to describe a thought experiment devised by physicist John Wheeler in 1978, which has since been performed in recent years by a number of researchers. The results demonstrated the fact that observation choice affected the results:

John Wheeler’s famous “delayed choice” Gedankenexperiment asked this question in 1978, and the answer has now been experimentally realized with massive particles for the first time. The result demonstrates that it does not make sense to decide whether a massive particle can be described by its wave or particle behaviour until a measurement has been made. ... Indeed, the results of both Truscott and Aspect’s experiments shows that a particle’s wave or particle nature is most likely undefined until a measurement is made.”¹²⁰

Now of course this seemingly only applies directly to quantum effects, but the idea that the observer stands independent of the observations he (or she) is making cannot now be taken for granted. We are a part of the very thing we seek to study.

Thomas Kuhn and the scientific community.

The human status of modern science was given a firm philosophical footing through the work of Thomas Kuhn and, specifically, through his book, ***The Structure of Scientific Revolutions***, first issued in 1962.¹²¹ We have already looked at Kuhn's philosophy of science and noted its relativism. Here I want to outline his ideas a little more to show the essential nature of modern science as a very human affair.

Kuhn's view of modern science centres around communities or powerful individuals with the ability to outline a new paradigm, or system of understanding of the natural world. From time to time there is a revolution in thinking and a new system or paradigm is suggested. When the dust has settled the community of scientists engage in “*normal science*” which sits under the governance of the new prevailing paradigm. The history of science does not then describe a series of changes of a progressive nature such that the science of the new age stands above but connected to that of the former age. Instead there is a break. The new paradigm is distinct and separate from the old. The

119 Do atoms going through a double slit ‘know’ if they are being observed? 26th May 2015. Physics World. IOP publishing. <https://physicsworld.com/a/do-atoms-going-through-a-double-slit-know-if-they-are-being-observed/>

120 Do atoms going through a double slit ‘know’ if they are being observed? 26th May 2015. Physics World. IOP publishing. <https://physicsworld.com/a/do-atoms-going-through-a-double-slit-know-if-they-are-being-observed/>

121 **Thomas Kuhn.** *The Structure of Scientific Revolutions.* 1962. The University of Chicago Press.

changes amounts to a “*Gestalt Switch*” and has been likened to a religious conversion.¹²² Paradigms are “*incommensurable*,” that is, they have no common standard and the one cannot be judged by the other.¹²³ Kuhn describes the relationship between paradigm and community later in his work. He writes:

*“A paradigm is what the members of a scientific community share, **and**, conversely, a scientific community consists of men who share a paradigm. Not all circularities are vicious ... but this one is a source of real difficulties.”*¹²⁴

Thus to understand modern science according to Thomas Kuhn we need to examine the personalities and the community of scientists.

Fraud and deception.

Apart from the discovery we noted earlier that we are always subjective and can never examine things in a dispassionate or objective way, we have come to realise that modern science is more human than perhaps we would care to admit. The public perception of science is that it seeks truth. Clever people with erudite methods and sophisticated equipment ask questions, do research, and come up with **truthful** answers. The reality is very different. In recent years there has been a frank acknowledgement that there are many fake or false findings within the literature. This statement is by no means hyperbolic. There has always been fraud in science, but in recent years the level of false and fake research appears to have reached unacceptable proportions.

In a *New Scientist* article published in 1987, it was reported that 32% of scientists questioned said that they suspected a colleague in their field of falsifying data. Just over half of these took action concerning the fraud. The same percentage of respondents suspected a colleague of plagiarism.¹²⁵ Five years later in the same journal another writer stated that:

*“A survey carried out by the American Association for the Advancement of Science (AAAS) indicates that scientific misconduct may be more pervasive than most would care to admit.”*¹²⁶

122 **Thomas Kuhn.** The Structure of Scientific Revolutions. 50th Anniversary edition with an introductory essay by Ian Hacking. 2012. The University of Chicago Press. P118,120.

123 **Thomas Kuhn.** The Structure of Scientific Revolutions. 50th Anniversary edition. P149.

124 **Thomas Kuhn.** The Structure of Scientific Revolutions. 50th Anniversary edition. P175.

125 **June Price Tangney.** Fraud will out – or will it? *New Scientist*.. 6th August 1987. P62-63.

126 **Roger Lewin.** Pressure to publish leads to increase in fraud. *New Scientist*. 4th April 1992. <https://www.newscientist.com/article/mg13418151-000-pressure-to-publish-leads-to-increase-in-fraud/>

During the course of my research in this area I came across a website dedicated to reporting on the retraction of research papers, which began around 2009.¹²⁷ At the end of 2019 the website **Retraction Watch** reported, (for the tenth year in a row), on the number of scientific papers which had to be withdrawn (retracted) because of fraud and false information. There were 1,433 retractions that year alone.¹²⁸ Although this only accounts for a very small percentage of papers submitted, it has been observed that retractions are on the increase.¹²⁹ Is this because scientists are becoming more unscrupulous? Or is it rather that fraudsters are being found out more efficiently?

In a *Nature* article on fraud in science, the authors outline the seriousness of the situation and asserted that the actual practice of science, and the relentless press to publish seems to encourage fraud:

*“Very often, if we look into these seemingly isolated cases of research misconduct further, structures can be identified in scientific practice, which benefit such misconduct if not promote it.”*¹³⁰

It is generally thought that perhaps the greatest area of fraud occurs in the biological sciences. This may or may not be true. It may just be that discovery and reporting of false evidence is easier in biology. In 2011 one researcher looked at 788 papers retracted on the **PubMed** database between 2000 and 2010. He concluded that:

*“The results suggest that papers retracted because of data fabrication or falsification represent a calculated effort to deceive. It is inferred that such behaviour is neither naïve, feckless nor inadvertent.”*¹³¹

In a second paper it was discovered that fraud was on the increase. He stated that: *“Levels of misconduct appear to be higher than in the past.”*¹³² From this research on paper retractions amongst the medical fraternity, it appears that retractions for fraud increased by 7 times from 2000

127 www.retractionwatch.com.

128 See: <https://www.the-scientist.com/news-opinion/the-top-retractions-of-2019-66852>

129 According to one article in Science magazine, the rise has been 10-fold in the ten years up to 2018. See: Jeffrey Brainard & Jia You. What a massive database of retracted papers reveals about science publishing's 'death penalty'. October 25th 2018. Science. <https://www.sciencemag.org/news/2018/10/what-massive-database-retracted-papers-reveals-about-science-publishing-s-death-penalty>

130 M. Müller, B. Landsberg & J. Reid. Fraud in science: a plea for a new culture in research. *Eur J Clin Nutr* 68, 411–415 (2014). <https://doi.org/10.1038/ejcn.2014.17>. <https://www.nature.com/articles/ejcn201417>

131 R. Grant Steen. Retractions in the scientific literature: do authors deliberately commit research fraud? *Journal of Medical Ethics*. Vol. 37. No. 2. Feb. 2011. P113-117.

132 R. Grant Steen. Retractions in the scientific literature: is the incidence of research fraud increasing? P249-253.

to 2010 whilst retractions for error barely altered. It also turns out that most fraud consisted of outright data fabrication.

Maybe the reader will recall the South Korean cloning expert, Hwang Woo-Suk, who was given a two year suspended jail sentence for falsifying data on cloning and stem cell research, and for embezzling research funds to the tune of just over \$700,000?¹³³ This was a notable and high profile case which made headline news all over the world. There have been other catastrophic falls from grace through the years but the widespread nature of fraud is far deeper than perhaps imagined.

“When people talk about flaws in science, they're often focusing on medical and life sciences, as Horton is. But that might simply be because these fields are furthest along in auditing their own problems. Many of the structural problems in medical science could well apply to other fields, too. That science can fail, however, shouldn't come as a surprise to anyone. It's a human construct, after all. And if we simply accepted that science often works imperfectly, we'd be better off. We'd stop considering science a collection of immutable facts.”¹³⁴

The pristine image of science as a seeker of truth is shaken at times by the revelation of fraudsters like Hwang Woo-Suk, but the possibility that science does not have a few “bad apples,” but is actually rotten to the core has received serious consideration in recent years. For example, one researcher in this area, Daniele Fanelli, writing in 2009 suggested that:

“Increasing evidence, however, suggests that known frauds are just the “tip of the iceberg,” and that many cases are never discovered.”¹³⁵

In a meta-analysis of surveys asking scientists about misconduct, Fanelli found that:

“... on average, about 2% of scientists admitted to have fabricated, falsified or modified data or results at least once –a serious form of misconduct by any standard– and up to one third admitted a variety of other questionable research practices including “dropping data points based on a gut feeling,” and “changing the design, methodology or results of a study in response to pressures from a funding source.” In surveys asking about the behaviour of colleagues, fabrication,

133 **Choe Sang-Hun.** Disgraced Cloning Expert Convicted in South Korea. 26th October 2009. New York Times http://www.nytimes.com/2009/10/27/world/asia/27clone.html?_r=0

134 **Julia Belluz & Steven Hoffman.** Science is often flawed. It's time we embraced that. 13th May 2015. Vox. <http://www.vox.com/2015/5/13/8591837/how-science-is-broken>

135 **Daniele Fanelli.** How Many Scientists Fabricate and Falsify Research? A Systematic Review and Meta-Analysis of Survey Data. PLOS. May 29th 2009. <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0005738>

falsification and modification had been observed, on average, by over 14% of respondents, and other questionable practices by up to 72%.¹³⁶

Fanelli's conclusion does not sit well with the pristine image that modern science likes to cultivate:

“However, it is likely that, if on average 2% of scientists admit to have falsified research at least once and up to 34% admit other questionable research practices, the actual frequencies of misconduct could be higher than this.”¹³⁷

The medical professor John Ioannidis wrote an article for *Scientific American* in 2011 in which he stated:

“False positives and exaggerated results in peer-reviewed scientific studies have reached epidemic proportions in recent years. The problem is rampant in economics, the social sciences and even the natural sciences, but it is particularly egregious in biomedicine.”¹³⁸

That the situation is very bad within medical research is also shown by the following. A reporter for the *Times* writing in late 2015 stated:

“The scientific community faced claims of widespread fraud yesterday following claims that many research papers contain errors or inconsistencies that are never corrected. Scientific journals, universities and research institutes, funding bodies and scientists were accused of colluding in malpractice or misconduct by refusing to amend or retract research in which errors emerged. As many as one in 20 papers on biomedical science were said to contain errors or falsifications.

*The claims were published in **Times Higher Education** magazine, which reported that it had been passed a dossier on fraud in the biomedical research sector and a separate assessment by a scientist commenting on the claims.”¹³⁹*

The information on fraud was of such a serious nature that at the time a government minister was being informed. The findings were discussed in the *Times Higher Education Supplement* in several articles published in 2015 and 2016:

136 **Daniele Fanelli.** How Many Scientists Fabricate and Falsify Research?

137 **Daniele Fanelli.** How Many Scientists Fabricate and Falsify Research?

138 **John P. A. Ioannidis.** An Epidemic of False Claims. Competition and conflicts of interest distort too many medical findings. *Scientific American*. June 1st 2011. <http://www.scientificamerican.com/article/an-epidemic-of-false-claims/>

139 **Greg Hurst.** ‘Fraud’ row over scientists who fail to correct errors. The Times. December 4th 2015. <http://www.thetimes.co.uk/tto/science/article4631798.ece> <https://www.thetimes.co.uk/article/fraud-row-over-scientists-who-fail-to-correct-errors-3wj3v062j>

“A secret dossier that warns that fraud in biomedical research is even more prolific than feared is being considered by Jo Johnson, the universities and sciences minister.”¹⁴⁰

*In recent years prominent scandals over research fraud and irreproducible results have shaken trust in science.*¹⁴¹

“Recent scientific scandals have prompted a surge of interest from criminologists into the “occupational crime” that occurs in universities. Normally concerned with more visible problems such as theft and violence, criminologists are beginning to look systematically at the pressures that nudge academics towards scientific misconduct, according to a researcher whose analysis has painted a depressing picture of academic honesty in Europe.”¹⁴²

That such statements are not merely the scribblings of fanatical reporters or of journalistic scientists, but from key science personnel, can be shown in the following extract which comes from the medic Richard Horton (FRCP, FmedSci), the editor-in-chief of one of the most prestigious medical journals, *The Lancet*:

“A lot of what is published is incorrect.” I’m not allowed to say who made this remark because we were asked to observe Chatham House rules. We were also asked not to take photographs of slides. Those who worked for government agencies pleaded that their comments especially remain unquoted, since the forthcoming UK election meant they were living in “purdah”—a chilling state where severe restrictions on freedom of speech are placed on anyone on the government’s payroll. Why the paranoid concern for secrecy and non-attribution? Because this symposium—on the reproducibility and reliability of biomedical research, held at the Wellcome Trust in London last week—touched on one of the most sensitive issues in science today: the idea that something has gone fundamentally wrong with one of our greatest human creations.

The case against science is straightforward: much of the scientific literature, perhaps half, may simply be untrue. Afflicted by studies with small sample sizes, tiny effects, invalid exploratory analyses, and flagrant conflicts of interest, together with an obsession for pursuing fashionable trends of dubious importance, science has taken a turn towards darkness. As one participant put it, “poor methods get results.”¹⁴³

140 **David Matthews.** Secret dossier on research fraud suggests government concern over science. Senior figures in UK science fear that culture leading to research misconduct has not been changed. Times Higher Education Supplement. December 3rd 2015. <https://www.timeshighereducation.com/news/secret-dossier-research-fraud-suggests-government-concern-over-science>

141 **David Matthews.** ‘Overflow’ of new research ‘erodes trust between scientists.’ Peer review system ‘lacks capacity’ to deal with ‘flood’ of new papers, meaning some could be unjustly dismissed. Times Higher Education Supplement. September 24th 2015. <https://www.timeshighereducation.com/news/overflow-of-new-research-erodes-trust-between-scientists>

142 **David Matthews.** Criminologists scrutinise academia in wake of scientific scandals. Scientific misconduct increasingly studied as example of ‘occupational crime’, researcher says. Times Higher Education Supplement. April 1st 2016. <https://www.timeshighereducation.com/news/criminologists-scrutinise-academia-in-wake-of-scientific-scandals>

143 **Richard Horton.** Offline: What is medicine’s 5 sigma? The Lancet. Volume 385, No. 9976, p1380, 11th April

The situation is more than worrying in medical and biological research but other forms of scientific research are not immune. A professor of chemistry at the University of Liverpool, Mathias Brust had this to say:

“The list of cases where either bad science or simply fraud has been uncovered and dealt with is long.”¹⁴⁴

It is now possible for graduate students to do a PhD in the area of fraud in science and the literature on this subject is rising rapidly.¹⁴⁵

What are we to make of such a situation? Well I think such information forces us to recognise that modern scientists are no better nor worse than humans in any given profession. We like to think that car salesmen are notoriously underhand and politicians far worse. But in truth all professions, and all sectors of society, are comprised of humans exhibiting the full panoply of weaknesses and sinful inclinations that characterise fallen man.

Elite communities – the rise of the priesthood of science.

From the late seventeenth century, the way that modern science would be practised began to see a dramatic change. The development of science in the Scientific Revolution began with the work of disparate individuals whose circumstances allowed them to focus their efforts on investigating the universe. But then came the rise of special societies, that is, elite communities comprising only those who were deemed worthy to enter their hallowed halls:

“..... trying to answer the question 'What is science?' by looking at science as a process of thinking about nature, of talking about nature, and of interrogating and using nature. That is, we shall describe science as an intellectual, a social, and a

2015. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(15\)60696-1/fulltext?rss%3Dyes](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(15)60696-1/fulltext?rss%3Dyes)

144 **Mathias Brust** (professor of chemistry at the University of Liverpool). Safeguarding science against falsehood demands debate. 14th February 2013. Chemistry World. <http://www.rsc.org/chemistryworld/2013/02/debate-science-literature-false-fraud-error>

145 The following is a random selection of titles I considered when doing this research:

Mary Frank Fox. Scientific Misconduct and Editorial and Peer Review Processes. *Journal of Higher Education*, Vol. 65, No. 3, May-June 1994.

Mary Frank Fox & John M. Braxton. Misconduct and Social Control in Science: Issues, Problems, Solutions. *Journal of Higher Education*, Vol. 65, No. 3, May-June 1994.

Nicholas H. Steneck. Research Universities and Scientific Misconduct: History, Policies, and the Future. *Journal of Higher Education*, Vol. 65, No. 3, May-June 1994.

Edward J. Hackett. A Social Control Perspective on Scientific Misconduct. *Journal of Higher Education*, Vol. 65, No. 3, May-June 1994.

Robert L. Park. *Voodoo Science: The Road from Foolishness to Fraud*. 2000. Oxford University Press.

Adil E. Shamoo; David B. Resnik. *Responsible Conduct of Research*. 2003. Oxford University Press.

David Goodstein. *On Fact and Fraud: Cautionary Tales from the Front Lines of Science*. 2010. Princeton University Press.

practical activity. The intellectual and practical aspects of science have a very long history indeed, but the growth of scientific community is a more recent phenomenon which characterises modern science, and began with the scientific societies and academies of the mid-seventeenth century - such as the Royal Society in London, and the Academy of Sciences in Paris."¹⁴⁶

In future years, the pursuit of science by an individual would be affected by acceptance or rejection by the community of science. At first the early modern scientists who had the personal means to indulge their pursuits, could publish and disperse their work themselves. The success of these early workers depended on their effort alone. As time progressed other factors would come into play. To be accepted by the community your work would need the approbation of the learned society which had arisen around the particular field of study you were pursuing. Publication of work could still be done privately, but to really achieve success the best course was to have your work accepted by the growing body of learned journals. These were overseen by the respected amongst the elite of the community of modern scientists. By the time we reach the twentieth century the community of modern science had begun to take on the form of a religion with its own priesthood.

Such an assertion is not one that I have simply imagined. The connection between how modern science operates in our day with the functioning of the medieval church has been a subject of considerable discussion. Modern science has indeed taken over where the medieval church left off. No longer are the public expected to be subservient to the wishes of the clergy. Instead there is a new priesthood, but one that dispenses truth without compassion. The entomologist Jeffrey A. Lockwood wrote the following:

*"The essence of the modern problem is that the scientist has claimed the role of a priest, having unique access to truth and power, without accepting the obligations of a minister, having the responsibilities for justice and compassion."*¹⁴⁷

*"I've been admitted to the priesthood of science, although I risk excommunication."*¹⁴⁸

Although by no means advocating a Christian position, the psychiatrist Scott Peck in his work with patients over several years also came to understand that modern science is essentially a religion. He writes:

146 **David Knight.** The Nature of Science. (The History of Science in Western Culture since 1600). 1976. Andre Deutsch. P11,12.

147 **Jeffrey A. Lockwood.** Confessions of a Deserter. From: Grasshopper Dreaming: Reflections on Killing and Loving. 2002. Skinner House Books, Boston. P128.

148 **Jeffrey A. Lockwood.** Confessions of a Deserter. P129.

“Another reason that scientists are so prone to throw the baby out with the bath water is that science itself, as I have suggested, is a religion. The neophyte scientist, recently come or converted to the world view of science, can be every bit as fanatical as a Christian crusader or a soldier of Allah. This is particularly the case when we have come to science from a culture and home in which belief in God is firmly associated with ignorance, superstition, rigidity and hypocrisy. Then we have emotional as well as intellectual motives to smash the idols of primitive faith. A mark of maturity in scientists, however, is their awareness that science may be as subject to dogmatism as any other religion.”¹⁴⁹

Turning from a medical man to a former editor of the well-respected popular science journal, the *New Scientist*, we discover a similar view expressed. This time the writer likens modern science to a notoriously vigilant and pernicious arm of the Roman Catholic church that sought doctrinal conformity, namely, the Spanish Inquisition!

"The scientific establishment bears a grisly resemblance to the Spanish Inquisition. Either you accept the rules and attitudes and beliefs promulgated by the 'papacy' (for which read, perhaps, the Royal Society or the Royal College of Physicians), or face a dreadful retribution. We will not actually burn you at the stake, because that sanction, unhappily, is now no longer available under our milksop laws. But we will make damned sure that you are a dead duck in our trade.”¹⁵⁰

Unless you dot the i's and cross the t's with regard to the modern view you will be ostracised and banished to the wilderness!

When we come to look specifically at the theory of evolution, the notion of it as a religion with a priesthood which bars the way to any who dissent from the stated belief is even more pronounced. The Encyclopaedia Britannica entry on evolution of the universe states that:

"Evolution is sometimes the key mythological element in a philosophy that functions as a virtual religion"¹⁵¹

A Princeton professor of physics, Louis T. More, writing in 1925 stated unequivocally that evolution is an idea grounded in faith akin to those of religion:

149 **Scott M. Peck.** [Psychiatrist and Medical Director of New Milford Hospital Mental Health Clinic, Connecticut, USA]. *The Road Less Travelled: A new Psychology of Love, Traditional Values and Spiritual Growth.* 1978. Arrow Books, London. P233.

150 **Donald Gould.** [Former editor of *New Scientist*]. Letting poetry loose in the laboratory. *New Scientist*. 29th August 1992. P51.

151 **E. Harrison.** *Origin and Evolution of the Universe.* Encyclopaedia Britannica: Macropaedia. 1974. P1007.

*"The more one studies palaeontology, the more certain one becomes that evolution is based on faith alone; exactly the same sort of faith which it is necessary to have when one encounters the great mysteries of religion."*¹⁵²

Over 50 years later another English physicist, H. J. Lipson, observed that evolution was effectively a religion and, even though he does not care for it, argued in favour of a theory based on creation:

*"In fact, evolution became in a sense a scientific religion; almost all scientists accepted it and many are prepared to 'bend' their observations to fit in with it. If living matter is not, then, caused by the interplay of atoms, natural forces and radiation, how has it come into being? There is another theory, now quite out of favour, which is based upon the ideas of Lamarck: that if an organism needs an improvement it will develop it, and transmit it to its progeny. I think, however, that we must go further than this and admit that the only acceptable explanation is creation. I know that this is anathema to physicists, as indeed it is to me, but we must not reject a theory that we do not like if the experimental evidence supports it."*¹⁵³

In a public lecture one Dutch professor, (Arie van den Beukel), made the following assessment of how modern science operates in our time.

*"I rubbed my eyes in amazement. We are back in the days of Galileo, I thought, when a totalitarian Church prescribed to scientists what could be said and what not. Only the roles seem to have been reversed. Theologians keep their mouth shut by their own free will, scared to death to utter anything that could possibly displease scientists. Ironically enough, science does not forbid at all anybody to walk on the water or to rise from the dead. The situation is perhaps well summarized by the philosopher Paul Feyerabend, who wrote: 'Science is the most aggressive religious dogmatic institution of our time.'"*¹⁵⁴

This same Dutchman argued in his lecture that modern science effectively usurped the place of God, and so needs to be taught a valuable lesson in humility!

"If it is true, and I think it is, that science played an important part in destroying the relation between modern man and God by taking God's place itself, then a scientist who tries to be a believer at the same time, has something to do. It is his duty to demonstrate that this is a blind road. That the roused expectations on salvation by science are false. That they are based on arrogance. He must not belittle science, but

152 **Louis T. More**. [Professor of Physics, University of Cincinnati, USA]. *The Dogma of Evolution*. 1925. Princeton University Press: Princeton NJ. Second Printing. P160.

153 **H. J. Lipson**. [Professor of physics, University of Manchester, UK]. *A physicist looks at evolution*. Physics Bulletin. 1980. Volume 31. P 138.

154 Lecture given at Dayton University by Professor Emeritus **Arie van den Beukel**, Delft University, The Netherlands "Salvation through science?" See: <http://www.ideacenter.org/contentmgr/showdetails.php/id/744> This professor has also written a book entitled: *The Physicists and God: The New Priests of Religion?* Published in 1995.

show to science its due place: the position of servant of mankind instead of its idol."¹⁵⁵

Finally, to further demonstrate the religious nature of modern science with its appointed priesthood, consider the work of one ousted and sidelined astronomer by the name of Halton Arp. This astronomer repeatedly made observations in the night skies that raised serious problems for the idea of an expanding universe. At first his findings were chalked up to mere coincidences, but after making many more, the scientific establishment effectively pushed Arp to the fringes. He ended up publishing his results in a book because the journals refused to take his work. Here is how he describes the nature of science as he saw it:

"Big Science as the Medieval Church.

This is far from the first time this parallel has been noted. The church, still in Galileo's time, was the ultimate authority on most important matters. The church hierarchy was handsomely supported by princes and working people, and the life style of the cardinals depended on having people believe that their pronouncements were important and profound. Due to a complex of political, economic and internal events, the church gradually lost power to those who protested.

After the ideals of the enlightenment and the heady rise of astronomy and physics, however, we have the present day situation where all authority on natural law has passed to science. In return for important and profound pronouncements on the nature of the universe the academics are supported with high salaries, expensive facilities, travel, prestige and life time security. They also bestow the power of this institution onto successors of their own choosing."¹⁵⁶

Elitism and professionalism.

In light of the fact that modern science is a very human enterprise that operates through learned societies that have gatekeepers overseeing whom may be allowed in, it is necessary to single out the fact that it is inherently elitist. Modern scientists are professionals. To gain entrance into the hallowed halls you must jump through certain hoops. In short, you must gain a good degree, earn a PhD, get your research papers published, go to the right conferences, and network with other fellows. Those who exist on the outside of this environment do not get to pronounce with any due authority on the wisdom or outcome of modern science. On top of this, owing to the high level of mathematical content in most modern science, and due to the fact that the extent of research in any given area is so deep, the results of what modern science may say are way beyond the everyday man. This fact was one I wrestled with in my early days because I felt that for modern

155 Lecture given at Dayton University by Professor Emeritus Arie van den Beukel, Delft University, The Netherlands "Salvation through science?" See: <http://www.ideacenter.org/contentmgr/showdetails.php/id/744>

156 **Halton Arp.** Seeing Red: Redshifts, Cosmology and Academic Science. 1998. Apeiron, Montreal. P259.

science to offer mankind any help or hope it ought to be accessible to all. The fact that it isn't accessible to all goes a long way to inform us that it therefore has little real value and in many ways its shows close relationship to ancient gnosticism.

In the nineteenth century one of the features of modern science was the “demonstration.” Michael Faraday is a case in point. He used to show the public the details of his research into electricity at the *Royal Institution* in a series of presentations over Christmas.¹⁵⁷ Such a public showing was born out of the fact that as modern science grew, it was meant to be something that all could agree to and confirm, because it dealt with the reality we all share. In like manner, the Christian who follows Christ and walks in His ways can be tested (to see whether he is in the faith) by an appeal to whether their lives conform to what is plainly revealed in Scripture. The Scriptures, therefore, are the *public* standard by which everything may be tested. If it doesn't have a Biblical basis, and it doesn't conform to Scriptural truth, then it isn't Christian.

Modern science appeals not to Scripture but to creation (or nature as they will insist on having it). Apart from the problem of hermeneutics, or of how we understand what creation tells us, there is also the problem of access. The tools that are used to access creation, which were at one time the basic tools we all possess (eyes, ears, etc.), have now become so sophisticated that only the elite get to see what is going on. We hear of the results from such massive experiments as, for example, the Large Hadron Collider, but who but the elite scientists get to actually see or observe these results?¹⁵⁸ They are not *public* in any real sense of that term. Modern science has long since departed from being a truly public enterprise. Where once it was shown in demonstration, now it is conducted behind closed doors and reported on in the select journals only the few get to read and understand. The same elitist nature can be levelled at theories. These are now so complex and require an extensive knowledge of mathematics that only a very few clever people can grasp them. The sophisticated equipment and the esoteric mathematics that shield modern science from the public almost render modern science as a form of gnosticism.¹⁵⁹

(vii) “Nature.”

In the earlier section on history we had cause to mention Ian Barbour's description of how views of the universe have changed through the ages.¹⁶⁰ In our time, because of the widespread

157 These Christmas Lectures still continue today, but even though they include experimental demonstrations they are more often than not an outlet for propaganda to reinforce the current evolutionary paradigm.

158 Other highly sophisticated and expensive equipment could be named! I used electron microscopes which occupied a sizeable room requiring liquid nitrogen to cool the magnets for my PhD in the early 1980s and these have become much more sophisticated since then.

159 Gnosticism was a religious movement with secret knowledge that only the initiated could receive.

160 **Ian. G. Barbour.** *Issues in Science and Religion.* P18,26,35,58,86.

acceptance of an evolutionary paradigm, the world generally views the universe in terms of “*nature as dynamic process.*”¹⁶¹ Although the term “nature” has seen various guises throughout the eras, depending on the prevailing understanding of modern science, the concept really began to take centre stage amongst English speaking peoples through the works of the ancient Greek philosophers revived during the scientific revolution of the seventeenth century.

Early Greek thinkers held that *natural* events, that is, those things that operated within the world, should be understood as being part of an eternal, blind and undirected force which acted by chance.¹⁶² Through the influence of such Greek thought, early modern scientists (natural philosophers) of the seventeenth century began to view nature as “*an autonomous entity,*” which was “*to be examined and explained on its own terms.*”¹⁶³ As a consequence of this shift in understanding “*the locus of authority within the natural sciences was thus located within the saeculum – the world of nature – rather than the world of revelation or faith.*”¹⁶⁴ The idea of nature as a “*machine*” arose in the 1630s and was promoted and spread by natural philosophers such as Rene Descartes and Pierre Gassendi together with the Greek notion of atomism.¹⁶⁵ This reliance on nature as autonomous and capable of explanations from within its own reference frame, was thus to become increasingly accepted by the end of the seventeenth century. Nature was now to be described in mechanical terms, and this paradigm would dominate thinking for a further two hundred years.¹⁶⁶ In the words of A. McGrath: “*the world could explain its properties with reference to itself, rather than require the invocation of God,*” so that by the time of Newton as the eighteenth century dawned and progressed, “*God may well have created the world,*” but “*there was no further need for divine involvement in its government or explanation.*”¹⁶⁷ These changes in how God and the world were being perceived by natural philosophy signal the beginnings of deism, the idea that God is merely the originator of the universe and that He has left it to its own devices. Deism emphasises God's transcendence and minimises His immanence.

Robert Boyle.

It is at this point, during the second half of the seventeenth century when modern science begins to develop with increasing speed, that we get a lone voice of dissent in the writings of the

161 Ian. G. Barbour. Issues in Science and Religion. P86.

162 Alister E. McGrath. A Scientific Theology. Volume 1, Nature. 2001. T & T Clark Ltd, Edinburgh. P91.

163 Alister E. McGrath. A Scientific Theology. Volume 1, Nature. P100.

164 Alister E. McGrath. A Scientific Theology. Volume 1, Nature. P100. The term “saeculum” signifies a generation.

165 Alister E. McGrath. A Scientific Theology. Volume 1, Nature. P107.

166 Alister E. McGrath. A Scientific Theology. Volume 1, Nature. P109.

167 Alister E. McGrath. A Scientific Theology. Volume 1, Nature. P100.

“father of chemistry,” the Irishman Robert Boyle. In 1686 Boyle published a work that had been several years in the making, with the aptly named title: *A Free Enquiry Into the Vulgarly Received Notion of Nature*. In this work Boyle sought to challenge the growing idea of an autonomous entity referred to as “nature” which was usurping the place of God.

Boyle begins his treatise by stating his main concern with the new rising view of nature as an autonomous entity. He notes that it would not just be detrimental to the “glory of God,” but would, in fact, stifle true research into God's creation. I have quoted Boyle at length below to show how he worked these thoughts out:

*“I have sometimes seriously question'd, whether the vulgar notion of nature, has not been both injurious to the glory God, and a great impediment to the solid and useful discovery of his works. For, it seems to detract from the honour of the great author and governor of the world; that men should ascribe most of the admirable things to be met with in it, not to him, but to a certain nature, which themselves do not well know what to make of. 'Tis true, many confess that this nature is a thing of his establishing, and subordinate to him; but tho' they own it, when they are ask'd the question, yet there are several, who seldom or never regarded any higher cause. And whoever takes notice of their way of ascribing things to nature, may easily discern, that, whatever their words sometimes are, the agency of God is little in their thoughts. Doubtless, it shews the wisdom of God, to have so fram'd things at first, that there can seldom or never need any extraordinary interposition of his power; or the employing, from time to time, an intelligent overseer; to regulate, assist, and control the motions of matter.”*¹⁶⁸

Where men attribute the great workings within nature to nature herself, does not the glory which is due to God get deflected away from Him? Even if some view autonomous nature as being that which God has created, the focus on nature stops men from thinking in higher terms, and “*the agency of God is little in their thoughts.*” What, I wonder, does Boyle imply by this term “agency”? It is very tempting to suggest that he has the Lord Jesus Christ, the agent of creation in view. Paul's writings give us clear indication that all creation was not just brought about by and through Christ, but was created for Him as well.¹⁶⁹ He who does not view Christ in some way within what he studies of the world is looking amiss.

Boyle next expresses his own view of creation. Aristotle's view of an eternal world would clearly lead to a denial of God's “production” of the world, and would also end up denying Him

168 **Robert Boyle.** *A Free Enquiry into the Vulgar Notion of Nature.* In *The Philosophical Works of the Honourable Robert Boyle Esq.* Ed. Peter Shaw. London 1725. P106,107.

169 See, for example, Colossians 1:15-18.

“the government” of the world “by ascribing the admirable works of the divine Being to what he calls nature.”¹⁷⁰ Boyle dissents from this atheistic position by declaring:

“But my opinion hinders me not at all from acknowledging God to be the author of the universe, and the continual preserver and upholder of it (which is much more than the peripatetic hypothesis allows) for those things which the school-philosophers ascribe to the agency of nature, interposing upon emergencies, I ascribe to the wisdom of God.”¹⁷¹

Boyle then turns his attention to Scripture. If the new notion of an autonomous nature were true, surely it ought to be found in God's book? However he asserts that not only is the concept not found amongst the writings of Moses in his account of creation, but “such a Being” (i.e. autonomous nature) was not spoken of until “the Israelites were overrun, and corrupted by idolatrous nations.”

“As for revelation, it countenances no such notion as that vulgarly receiv'd of nature: the word is not once mention'd in scripture; no, not by Moses in his account of creation. And, indeed, till the Israelites were overrun, and corrupted by idolatrous nations, there was, for many ages, a deep silence as to such a Being.”¹⁷²

Reference by Boyle to the “idolatrous nations” and their viewpoints forces us to see this new development in understanding God's creation as itself an offshoot of idolatry. As he continues Boyle suggests alternative terms for “nature” in different settings. In place of the word “nature” used for creation observed, Boyle suggests we use the term “God.”¹⁷³

Boyle acknowledges that there were many who adopted the new terminology who, nevertheless, were true Christians. To these he desires to suggest that adopting the new view, what he refers to as “the vulgar notion of nature,” is, in point of fact, “dangerous to religion, in general, and, consequently, to the Christian.”¹⁷⁴ He continues his denunciation of the new view of creation with some particularly stirring words:

“For this erroneous conceit defrauds the true God of several acts of veneration and gratitude, that are due to him from men, upon account of the visible world; and diverts them to that imaginary being they call nature, which has no title to them: for, whilst nature is suppos'd to be an intelligent thing, that wisely and kindly administers all that is done among bodies 'tis no wonder that the generality of men should admire and praise her, for the wonderful and useful things they observe in the world.

170 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P107.

171 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P107.

172 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P108.

173 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P110.

174 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P118.

*And, in effect, tho' nature, in our perfect sense of the word, be never found in the sacred writings; yet, nothing is more frequently met with in the books of philosophers, than nature and her effects. And, whatever has been said by some, in excuse of Aristotle, yet the generality of the Peripatetics, from whom the vulgar notion of nature is chiefly received, make the world eternal; and refer all the transactions among the bodies it contains, to what they call nature. Whence 'twill not be difficult to perceive, that, if they do not quite exclude God; yet, as they leave him no interest in the first formation of the universe, so they leave him but very little in the administration of the parts it consists of, especially in such as are sublunary. **Instead, therefore, of the true God, they have substituted, for us, a kind of goddess, with the title of nature; upon whom they look as the immediate agent and director in all excellent productions, and ascribe to her the praise and glory of them.***

This great error, in a point of such importance, seems to undermine the foundation of religion. ...

In short, as nature is so frequently recurr'd to, and so magnify'd in the writings of philosophers, that the excessive veneration men have for her, caused some (as the Epicureans) to deny God; so, 'tis to be fear'd that it makes many forget him. And, perhaps, a suspicious person would add, that, were it not for other principles, this erroneous idea of nature would, too often, have a strong tendency to shake, if not to subvert, the very foundations of all religion; by misleading those who are inclined to be its enemies, from overlooking the necessity of a God, to the denial of his existence."¹⁷⁵

Take a moment to consider some of the things Boyle says here. The new notion of nature is an “erroneous conceit,” and “a great error,” which “defrauds the true God” of His deserved “veneration,” subverts “the very foundations of all religion,” and, moreover, “diverts” mankind to an “imaginary being” which does them no good.¹⁷⁶ One part of the above lengthy quote has been highlighted because it bears further consideration. By adopting this new idea concerning God's creation, these natural philosophers have exchanged God for “a kind of goddess” termed “nature,” and have given to her “praise and glory” which ought to be given to God. It is difficult not to be reminded of Paul's words in Romans:

20 For since the creation of the world His invisible *attributes* are clearly seen, being understood by the things that are made, *even* His eternal power and Godhead, so that they are without excuse, **21** because, although they knew God, they did not glorify *Him* as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened. **22** Professing to be wise, they became fools, **23** and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things.¹⁷⁷

175 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P118,119.

176 **Robert Boyle.** A Free Enquiry into the Vulgar Notion of Nature. P118,119.

177 Romans 1:20-23.

Sad to say that in our day this worship of creation is not difficult to show from the writings and statements of many modern scientists. The astrophysicist Brian Cox suggests that we owe our very lives to gravity and stardust!

“From the smallest mote to the largest star we owe our existence to gravity which has sculpted who we are.”¹⁷⁸

“Going back 13.3 billion years, there were no stars, planets or galaxies, just clouds of hot matter gravity hadn't clumped into stars. But ancient light reveals some regions of space were denser than others and acted as seeds for galaxies to form. We owe our existence to this. This light is called the cosmic microwave background. When emitted from the hot gases of the early universe, it would have been visible to our eyes.”¹⁷⁹

The naturalist and doyen of the BBC, David Attenborough, made a similar worshipful statement but this time pointing his viewers to earlier creatures supposed to be our ancestors:

“We owe our existence to the first creature that walked out of the oceans.”¹⁸⁰

There are many other examples of scientists and science-writers who offer worship and veneration to creation, (or some aspect of creation), with no thought at all of the living God.¹⁸¹ Boyle's warning has gone repeatedly unheard.

(viii) Limitations.

Perhaps one of the most startling things to find out about modern science is that it is very limited both in nature and also in application. I discovered this whilst doing postdoctoral research. It dawned upon me that any given project or research question was only ever partially resolved or answered. However what all the research brought up alongside the “answers” were yet more questions. This state of affairs maybe a happy one for research scientists who love nothing better than to engage in a new project, but for me it was wholly unsatisfying. I felt very much like Solomon who wrote:

178 Trailer advertising the 20th March 2011 (Sunday) episode by **Brian Cox** on the universe.

179 <http://www.thesun.co.uk/sol/homepage/features/3428212/Lights-fantastic-trip-back-in-time.html>

180 The following quote comes from an article on Attenborough: “wildly alive... we owe our existence to those ice-dwelling extremophiles... they hung on for 100 million years...”

<http://www.telegraph.co.uk/culture/tvandradio/8090747/David-Attenborough-in-the-beginning.html>

David Attenborough: in the beginning. For his new TV series, First Life, Sir David Attenborough returns to the subject that first fired his imagination as a boy: fossils. By Rebecca Tyrrel 9:00AM BST 29 Oct 2010

181 For a selection see Appendix 2.

16 When I applied my heart to know wisdom and to see the business that is done on earth, even though one sees no sleep day or night, **17** then I saw all the work of God, that a man cannot find out the work that is done under the sun. For though a man labours to discover *it*, yet he will not find *it*; moreover, though a wise *man* attempts to know *it*, he will not be able to find *it*.¹⁸²

The limitation of science can be demonstrated further by a consideration of the nature of man. We only have five senses or portals by which we can access and detect what is real.¹⁸³ This is how the physicist James Jeans views man and his connection with reality:

*“We each live our mental life in a prison-house from which there is no escape. It is our body; and its only communication with the outer world is through our sense-organs – eyes, ears, etc. These form windows through which we can look out on to the outer world and acquire knowledge of it. A man lacking all five senses could know nothing of this outer world, because he would have no means of contact with it; the whole content of his mind would be an expansion of what had been in it at birth.”*¹⁸⁴

These senses are not limitless. We can only see the visible part of the electromagnetic spectrum and hear in a limited sound range. Further it is the height of folly to assume that reality only comprises of that for which we have sensory apparatus. In the diagram of figure 3, I have tried to illustrate this by showing five other undetectable parts to reality (labelled A to E). What these may be is, of course, impossible to say. We cannot even say that they may exist and there may well be many others besides.¹⁸⁵ Apart from the fact that our sensory apparatus is limited we have the added problem of the connection between what is actually out there, (in reality), and what we actually perceive in our minds. I have tried to illustrate this factor in the diagram of figure 4 by showing the sensory apparatus represented by a cup-like image separated from our minds by a filter (the red box) which represents our world view. We do not, therefore, receive reality's information without some form of internal processing having taken place.

In our discussion of accessing reality by means of the five senses, we note further that this limits modern science to a description of the **physical** world. The physicist Arthur Eddington gave succinct expression to this idea by noting that physical knowledge only forms a part of what may be known:

182 Ecclesiastes 8:16,17.

183 I am aware that modern thought suggests that there are more than five senses and include the sense of balance and other perceptions, but the fact is we have only five pieces of sensory apparatus or detectors. Other senses are dependent upon these five detectors.

184 **James Jeans**. Physics and Philosophy. 1942. Cambridge University Press. P6.

185 Science fiction makes great use of this by inventing extra senses for imagined alien species.

“To a wider synthesis of knowledge, of which physical knowledge is only a part, we may perhaps correlate a “world” of which the physical universe is only a partial aspect. But at this stage of our inquiry we limit the discussion to physical knowledge, and therefore to a physical universe from which, by definition, all characteristics which are not the subject of physical knowledge are excluded.”¹⁸⁶

There may be other realities but physics only deals with “*observational knowledge*.”¹⁸⁷ Suggesting that modern science relies only on observations, means that it is a limited pursuit.¹⁸⁸ This physical observational data is also subjective because it is *selected*:

“It is to such subjectively-selected knowledge, and to the universe which it is formulated to describe, that the generalisations of physics – the so-called laws of nature – apply.”¹⁸⁹

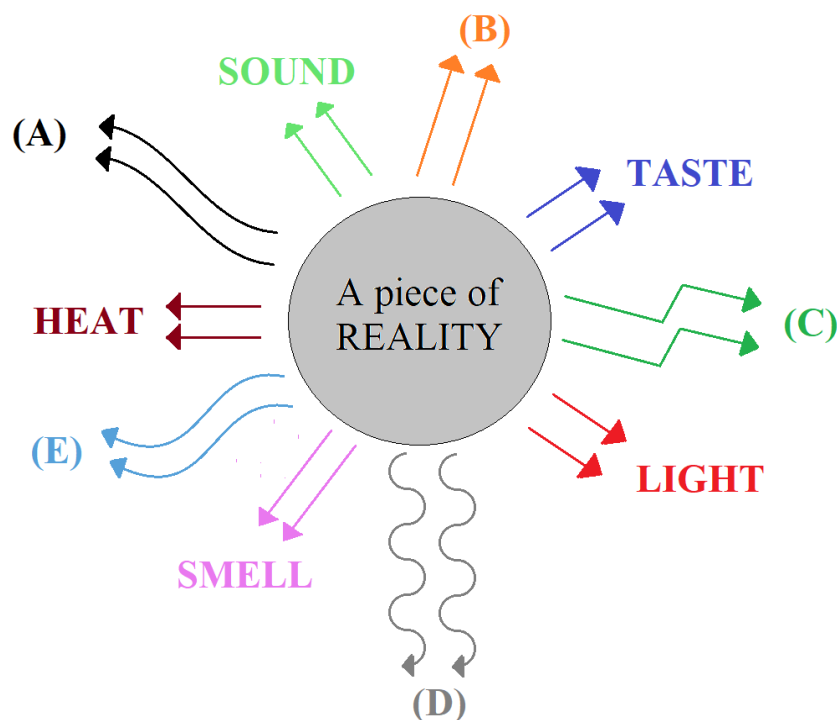


Figure 3.

Now from a Christian point of view we must recognise that the “invisible” part of creation does not just refer to aspects of the physical world we as humans are not able to see.¹⁹⁰ There are, of course, spiritual beings in existence and operation, which the modern world is wholly ignorant of, to its great detriment.

One other way in which modern science is limited arises because of our inability to think outside of

experience, to think truly *outside of the box*. When we attempt to make explanations we are limited by the use of analogy or models. This problem was nicely illustrated by the English physicist James Jeans in his book, *Physics and Philosophy*, when he discussed the nature of atomic theory.

186 Arthur Eddington. The Philosophy of Physical Science. 1949. Cambridge University Press. P10.

187 Arthur Eddington. The Philosophy of Physical Science. P10.

188 Arthur Eddington. The Philosophy of Physical Science. P17.

189 Arthur Eddington. The Philosophy of Physical Science. P17.

190 Colossians 1:16.

*“For suppose – to imagine a simple although not very likely possibility – that it had been found that the pattern of events could be fully explained by assuming that matter consisted of hard spherical atoms, and that each of these behaved like a minute billiard-ball. At first this may look like a perfect mechanical explanation, but we soon find that it has only introduced us to a vicious circle; **it first explains billiard-balls in terms of atoms, and then proceeds to explain atoms in terms of billiard-balls**, so that we have not advanced a step towards a true understanding of the ultimate nature of either billiard-balls or atoms. All mechanical explanations are open to a similar criticism, since all are of the form ‘A is like B, and B is like A’. Nothing is gained by saying that the loom of nature works like our muscles if we cannot explain how our muscles work. We come, then, to the position that nothing but a mechanical explanation can be satisfying to our minds, and that such an explanation would be valueless if we attained it. We see that we can never understand the true nature of reality.”¹⁹¹*

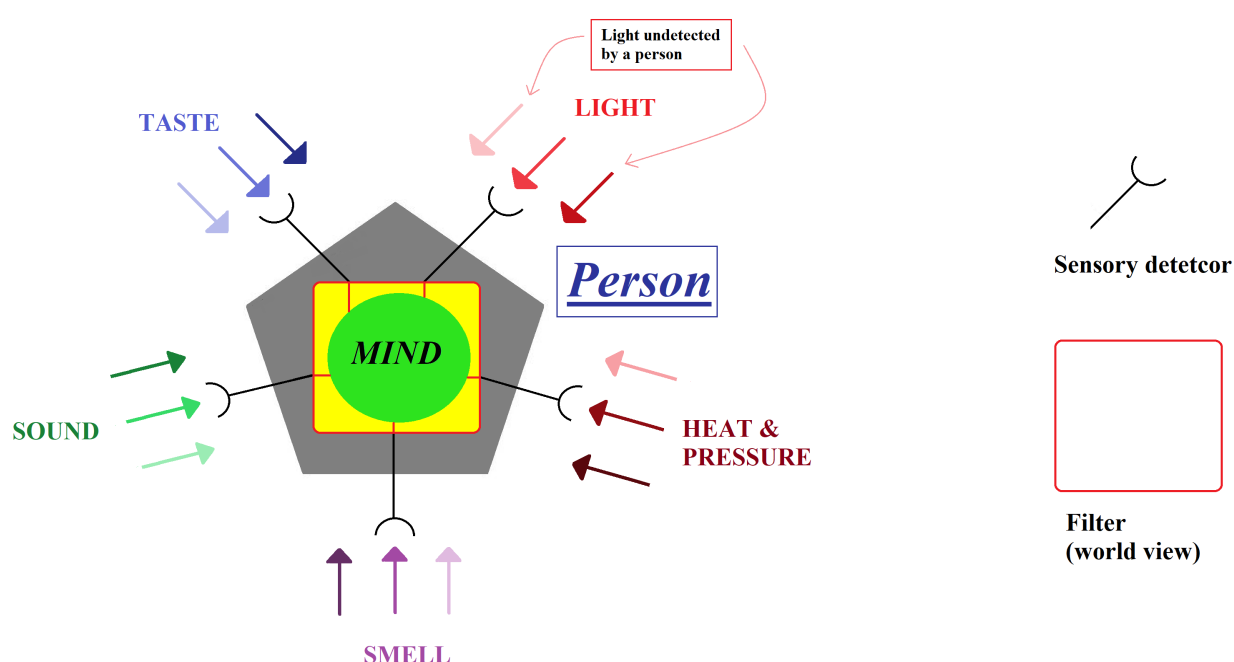


Figure 4.

Jeans is highlighting the problem we have that our minds and conceptions are always bounded by experience. We cannot escape the prison of our sense-bound bodies to step outside of reality to look into it objectively.¹⁹² The only way we can formulate some description of reality is by use of mathematics as James Jeans describes:

“In these and similar ways, the progress of science has itself shown that there can be no pictorial representation of the workings of nature of a kind which would be

191 James Jeans. Physics and Philosophy. P15.

192 James Jeans. Physics and Philosophy. P6,8.

intelligible to our limited minds. The study of physics has driven us to the positivist conception of physics. We can never understand what events are, but must limit ourselves to describing the pattern of events in mathematical terms; no other aim is possible – at least until man becomes endowed with more senses than he at present possesses. Physicists who are trying to understand nature may work in many different fields and by many different methods; one may dig, one may sow, one may reap. But the final harvest will always be a sheaf of mathematical formulae. These will never describe nature itself, but only our observations on nature. Our studies can never put us into contact with reality; we can never penetrate beyond the impressions that reality implants on our minds.”¹⁹³

But is a mathematical description of the universe sufficient? Not many amongst us would grasp the significance of such a mathematically formulated explanation. However aside from this problem that modern science appeals only to an elite, the presentation of modern science's quest in terms of a mathematical formulae is hardly a “eureka” moment. I am reminded of the work of Douglas Adams in his *Hitch-hiker's Guide to the Galaxy* book in which he describes a superior race seeking to find the answer to the ultimate question of life, the universe, and everything. After running their super-computer “Deep Thought” for seven and a half million years, the answer turned out to be “42!” Hawking and others have spent their energies in the quest for a Theory Of Everything to explain the universe entirely, but this mathematical equation cannot give rise to such things as personality or beauty and so on. In this way, knowing that ultimately modern science pushes us to a mathematical outcome only serves to demonstrate its severe limits.

(ix) Faith.

Apart from modern science showing severe limitations borne out of the fact that it is engaged in by humans whom themselves are very limited, modern science is also to be characterised as an endeavour based on faith. This fact is not one often admitted. People like to set modern science as rational, in opposition to Christianity which is by faith. However the two are not so different when analysed properly. This is because they are both human affairs. The Christian faith is, of course, based upon revelation – the Bible – for which we have **proof** in the form of Christ and His ministry, and the witness of the prophets and those who follow the Lord.¹⁹⁴ It is a reasoned and rational faith. Modern science is the effort of the human intellect and reason, to be sure, but it is also an enterprise that begins with faith. To make things more palatable for modern ears modern scientists prefer to speak of assumptions or presuppositions. But whatever term is used, that modern

¹⁹³ **James Jeans.** Physics and Philosophy. P15.

¹⁹⁴ See Acts 1:3.

science begins with faith-based assumptions is not readily acknowledged by most, but it is not difficult to establish.

In former times, certainly during the scientific revolution before the rise of the scepticism of John Locke and David Hume, modern science was perceived as simply reading the book of nature, or of collecting the data as given from the hand of God in creation. Isaac Newton is reported to have made the following comment about how he saw the process of his enquiries, according to Werner Heisenberg:

*“I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the seashore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, while the great ocean of undiscovered truth lay all undiscovered before me.”*¹⁹⁵

But as late as the second half of the nineteenth century, T. H. Huxley, (Darwin's Bulldog), is still advocating this naïve view of being able to discover facts pristine from nature:

*“Sit down before fact as a little child, be prepared to give up every pre-conceived notion, follow humbly wherever and to whatever abysses Nature leads, or you shall learn nothing.”*¹⁹⁶

We learnt earlier that facts are bound to theory. As one writer puts it:

*“.... everything we call “factual” “truthful” or “proven” has its foundation in unproven belief. We call these presuppositions.”*¹⁹⁷

So it is imperative that we begin by recognising our “*presuppositions*,” or those things we assume and take for granted. It follows from this, that the way in which we engage with modern science will depend on not just what we believe in a general sense, but how we view God in particular. As philosopher at Oxford University Michael B. Foster has expressed it:

*“The method of natural science depends upon the presuppositions which are held about nature, and the presuppositions about nature in turn upon the doctrine of God.”*¹⁹⁸

195 Quoted in: **Werner Heisenberg**. The Physicist's Conception of Nature. 1958. Hutchinson Scientific and Technical. P9. See also: **Gale Christianson**. In the Presence of the Creator. 1984. The Free Press (MacMillan). P574.

196 From: **T. H. Huxley**. Life and Letters of Thomas Henry Huxley. Volume 1. Quote taken from: **R. A. Gregory**. Discovery. (Or the Spirit and Service of Science). 1916. MacMillan and Co. P45. See also: **T. Hawthorne**. Windows on Science and Faith. 1986. IVP. Leicester. P15.

197 **James E. Nelson**. Reason/Faith. 1990. Perspectives on Science and Christian Faith. Journal of the American Scientific Affiliation. Volume 42. Number 4. P250-252.

198 **M. B. Foster**. The Christian Doctrine of Creation and the Rise of Modern Natural Science. Philosophical

It will therefore be necessary to consider what modern science says about God and what it holds as true concerning creation (nature). Professor A. J. Carlson, a Swedish American physiologist, defined the scientific method in the following terms:

“What is the method of science? In essence it is this – the rejection in toto of all non-observational and non-experimental authority in the field of experience When no evidence is produced other than personal dicta, past and present “revelations” in dreams or the “voice of God” the scientist can pay no attention whatsoever.”¹⁹⁹

Carlson was a humanist and so might be expected to take an avowed anti-supernatural stance, but his assumptions are still held valid by modern science today. Modern science, we have seen, is not really characterised by the nature of its enquiry (the so-called method of science) but by the fact that it enquires into *nature*. Now this term “nature” is defined as that which is accessible to the human (physical) senses alone, and so therefore we must eliminate all reference to the supernatural. These are assumptions. To limit modern science to the physical world and to assert that only sense-data may be accepted are pre-determined positions, and so are matters of faith.

Contrary to Newton, it is not possible simply to pick up the pebbles of fact from the beach of existence and simply read their meaning. Unless we have some prior world view or understanding of the world, we cannot make sense of what we observe. Rocks, pebbles, dials, meters, reactions, fossils, and whatever other forms of evidence you may care to add to that list, do not speak. We must put words into their *mouths*.

A thought experiment.

In order to grasp the difference between a humanist appreciation of modern science and the investigation of the world around us, and the Christian view point, we need to engage in a brief “thought experiment.” Imagine that you are in a very dark room with no knowledge of either the contents of the room nor of its location and context. It is, in fact, so dark that you cannot see your hand in front of your face. Let us suppose that you were anaesthetised and placed there whilst unconscious. Now you wake up and find that you are sitting on a stool. The stool is fixed to the ground. What do you do? Well assuming you do not panic and become immediately afraid, you begin to apply your senses to your situation. Assuming that you have all of your faculties, (you can see, taste, touch, hear and smell), you attempt to take stock of your situation. Your sense of touch

Journal: Mind. Volume 43. Number 172. 1934. P446-469. P465.

199 A. J. Carlson. Science and The Supernatural, Science. 73. 1931. P217-225. (Also in Scientific Monthly. 59. 1944. P85-95).

tells you that you are seated on a stool but it is very dark so your eyes are not much use to you. You make a decision to explore the room. Without too much thought you rise from the stool and take several paces from it but then you stop in a slight panic. You realise that the room is very much bigger than you thought whilst seated, so you hurriedly re-trace your steps to the stool, which is the only thing you are reasonably certain of. It takes rather more time to re-locate the stool than you imagined it would and this causes you to fret and to re-adjust your thinking. You recognise that exploration must be done with more care and precision. The questions tumble in on you as you sit on the stool. Where am I? What is this place? How did I arrive here? What is my predicament? Why am I here? There are no immediate answers forthcoming but your mind begins to suggest numerous possibilities. Is this some huge warehouse? Am I here for some sinister reason? Do I have unknown enemies? Is this some weird human experiment? And so you attempt a more rigorous approach to finding out some answers. You begin your quest by carefully rising from the stool and attempt to walk a set number of paces forward, after which you return back to the stool to ensure you know from where you began. Next you become more adventurous and decide to take the same set number of paces forward then an equal number to your left. You do this in the hope of finding something other than the stool. Again you carefully retrace your steps to the stool where you are comfortable with the only sure knowledge you have. Then you venture further afield by unravelling the woollen jumper you have and tying the yarn to the immovable stool. Still there is nothing else in the room.

Well we could enlarge on this story but enough has been outlined to demonstrate that the plight of mankind on this earth is not that different. A man is born into the world having parents (or guardians) and a particular set of surroundings. There are various influences which bear upon him and he is taught by direct and indirect means. It appears from this set of initial conditions that the entrance of this man into the world is by chance, and his departure from it will be without meaning or significance. Our man is informed that the universe (the darkened room) is vast beyond comprehension. It is so large that any prospect of reaching its outer extremities is laughable to say the least. It is as though this man is seated on a “stool” in a darkened room. Of course each person born into this world has a different “stool” and a different set of circumstances. However each is like the man in the darkened room. Each may be filled with the speculations of those who have gone before them, and yet none of these can offer any certainty at all. If there were any certainty the fruit and outcome of such would be stupendous. To have absolute certainty demands justification. And that requires a knowledge of the universe from some source which is beyond or outside the universe. The man on the stool in the darkened room may have been relieved if he had heard a voice

from beyond it reassuring him that everything was fine. Anyone who was outside the darkened room could, of course, convey definite information about the room to the prisoner.

Humanism's fruitless quest.

Now humanism, and modern science as its handmaid, would have us believe that there is no absolute certainty to be had anywhere. They tell us that the only thing we can do is to tentatively move forward a few paces to explore this unknown universe. The forward steps are steps into the unknown. We may make some discoveries (perhaps there is a piece of rope on the floor or a discarded object of some kind) but our only certainty is our starting place (the stool). To venture out we need to have some idea of what we imagine is out there. This means we begin with uncertainty and venture on the basis of faith. We make some assumptions. It is rather like building a bridge from one edge of a gorge by laying planks out and then moving out on to these and laying more planks and so on, out into the unknown in the hope of reaching the other side. The trouble is that we do not know where the other side is, or if there is another side existing at all! The situation is hopeless. All prospect of coming to any eternal lasting answers is simply out of the question. And yet the world of modern science and humanism in particular will tell you that the project of discovery is our only hope. We cannot rely on anything else and we must muster the courage to venture forth with confidence. Humanists rely only on their powers of imagination and ingenuity.

The grand alternative.

There is, of course, an alternative to the scenario I have painted here. If we accept as true that God is the Creator and that He not only governs all things in sovereign rule, but that He has also come in the person of His Son – the God-man – in order to make known His will and purpose, then we can have definite absolute knowledge. We are on the stool in a darkened room and we hear the Lord calling from outside saying such things as:

28 Come to Me, all *you* who labour and are heavy laden, and I will give you rest. **29** Take My yoke upon you and learn from Me, for I am gentle and lowly in heart, and you will find rest for your souls. **30** For My yoke *is* easy and My burden is light.²⁰⁰

There are, therefore, two competing views of how to advance in knowledge. One says we need an outside source to tell us where we are, the significance of our lot, and where we have come from and will eventually end up. This is the Christian position which relies on revelation – words from

200 Matthew 11:28-30.

God. The humanists and materialists reject this idea and suggest that all that exists is the universe and there is no beyond or outside the box. These folk suggest that the only way is to grasp the quest for exploration and build on what others have done before. One problem with this idea is that man is a very selfish and jealous creature. Rather than build on what went before there is an innate tendency to throw over prior work and start from new vantage points, with new endeavours. It is as though the work of the ones building a bridge from one gorge into the unknown is suddenly destroyed and another venture is begun elsewhere.

All based on faith.

Now given these two polar opposites, which we can refer to as, “revelation” (the Christian position), and “discovery” (the humanist view), we can demonstrate that both begin and rest on some form of belief. In the Christian picture of reality we must accept that God is, and that He has chosen to reveal to man all that man needs. The coming of Christ, foretold since the beginning of time, and His work on the cross is a demonstration of the reality of this great gospel of God.²⁰¹ But for modern science there must be a belief that it is in fact possible to launch out into the unknown and that our senses are sufficient for what we encounter. What happens within modern science is that the assumptions are not often stated and eventually become taken for granted or simply presumed true.

Now that modern science does in fact rest upon a set of beliefs can be easily shown with reference to various writers throughout the last hundred years. Writing in the first half of the twentieth century on the history of science, the British chemical physiologist and philosopher, A. D. Ritchie noted that science must **begin** with an act of faith:

*“The sciences based on observation presuppose an act of faith; that truths can be found if they are sought for hard enough and persistently enough and that all partial truths fit together to make a wider truth. This is an act of faith, not a discovery from experience, because it is a necessary condition for seeking experience.”*²⁰²

This same theme is also promoted by physicist Arthur Eddington, whose observations of a solar eclipse in 1919 provided support for Einstein's general theory of relativity:

201 Romans 5:8.

202 A. D. Ritchie. *Studies in the History and Methods of the Sciences*. 1960. Edinburgh University Press. P43. See also: A. D. Ritchie. *Civilisation, Science and Religion*. 1945. Pelican Books.

*“In the age of reason, faith yet remains supreme; for reason is one of the articles of faith.”*²⁰³

Towards the end of the twentieth century, the physicist-cum-Anglican priest John Polkinghorne uses the same terminology that A. D. Ritchie employed:

*“An act of faith is necessary for the scientist: a commitment to the metaphysical belief that the world is intelligible and open to our rational exploration.”*²⁰⁴

However, if we want to give real weight to the notion that modern science truly rests on belief, we can do no better perhaps than consider what one of the greatest modern scientists had to say on the matter. In a book written in conjunction with Polish physicist Leopold Infeld, Albert Einstein made the following bold statement:

*“We want the observed facts to follow logically from our concept of reality. Without the belief that it is possible to grasp the reality with our theoretical constructions, without the belief in the inner harmony of our world, there could be no science. This belief is and always will remain the fundamental motive for all scientific creation. Throughout all our efforts, in every dramatic struggle between old and new views, we recognise the eternal longing for understanding, the ever-firm belief in the harmony of our world, continually strengthened by the increasing obstacles to comprehension.”*²⁰⁵

Einstein and Infeld identify two key beliefs which they describe here as *“the fundamental motive for all scientific creations.”*²⁰⁶ First there is the belief that scientists can actually devise theoretical constructs that *“grasp the reality.”* In other words the universe is comprehensible to humankind. But why should this be the case? Why is it possible for humans to make any sense of their surroundings? Humanists have no answer to this conundrum except to say that such is how it is. For the Christian, however, the world is largely comprehensible because God created both it and us to dwell in it. True comprehension, however, is only had by those who view it as God intended, as the book of Ecclesiastes makes abundantly clear.

Einstein and Infeld's second basic belief for science is that the universe is harmonious. In other words it is not capricious or variable, but remains constant over long periods of time. What is observed in one part will not be contravened in another. Or, we might like to say, the world is

203 **Arthur Eddington.** The Philosophy of Physical Science. P222.

204 **John Polkinghorne.** Reason and Reality. 1991. SPCK. P49.

205 **Albert Einstein and Leopold Infeld.** The Evolution of Physics. 1938. Cambridge University Press. P312,313.

206 **Albert Einstein and Leopold Infeld.** The Evolution of Physics. P312.

ordered and regular. But why is this the case? Again the humanist has no answer. The fact that humanity fits within a regular and ordered creation is a great puzzle to humanists. But for the Christian the regularity of the world comes from the very nature of an ordered and good God. We need to add that here that the doctrine of creation must always be supplemented by the doctrine of the fall of man and the curse on creation subjecting it to futility. What we observe today is not the “good” creation that God made to begin with, but one subjected to a curse for the purpose of bringing mankind back into relationship with God.²⁰⁷ Thus, according to Einstein and Infeld, there can be no science at all unless we have the belief that it is possible to comprehend the universe and that the universe itself is comprehensible.

Arthur Smethurst, yet another scientist-cum-theologian, offers a helpful synopsis of the way in which modern science rests on belief. Using the quote of Einstein and Infeld we offered earlier as his starting point, Smethurst identified three main assumptions that undergird all of science. First there must be a “*belief in the orderliness of the universe.*”²⁰⁸ The world is fundamentally ordered and displays rationality and an element of design. If it were not the case how could the scientist trust his experiments? If the world varied and changed arbitrarily then there would be no point in doing repeated experiments. Smethurst put it like this:

*“To attempt to look for rational, intelligible design in a pile of bricks scattered at random by an idiot, is just a waste of time and energy; but to attempt to discover fundamental design and principles in a work of architecture or engineering that has been planned and thought out by a rational mind is quite clearly a sensible procedure. Thus the scientist, in attempting to apply general principles to the world of nature, is in fact, whether he recognises it or not, assuming that the world displays orderliness, consistency, regularity and rationality.”*²⁰⁹

The English mathematician and philosopher, Alfred North Whitehead made a similar assertion, (which Smethurst acknowledges in his work):

*“There can be no living science unless there is a widespread instinctive conviction in the existence of an Order of Things, and, in particular, of an Order of Nature.”*²¹⁰

207 See: Genesis 1-3; Isaiah 24; Romans 8.

208 **Arthur F. Smethurst.** modern science and Christian Beliefs. 1956. James Nisbet and Co. London. P5.

209 **Arthur F. Smethurst.** modern science and Christian Beliefs. P6.

210 **A. N. Whitehead.** Science and the Modern World. 1926. Cambridge University Press. P4,5. Quoted in: **Arthur F. Smethurst.** modern science and Christian Beliefs. P5.

Putting the case rather more succinctly, but at the same time leading us to consider the need if not for a **Creator** then certainly for a **Law-giver**, Smethurst references two philosophers in a footnote who state that:

“If nature is not subject to law, then the whole of science is a fruitless proceeding.”²¹¹

So then we cannot do any science unless first we **believe** that the universe is ordered. We have already pointed out that the humanist has no basis for holding such a belief, but for the Christian it is a perfectly reasonable one since the ordered and good God created all things.

Smethurst then adds a second basic belief for modern science, namely, the “*belief in the principle of causality or intelligibility in the natural world.*”²¹² Smethurst is quick to note the problem of causality in light of the developing idea of quantum mechanics, but argues that even with such an idea, asking how things are connected and caused is the very essence of the modern scientist. Einstein and Infeld referred to it as an “*inner harmony*,” suggesting the idea of interconnectedness.²¹³ The world is the way it is, according to modern science, because of some form of causality and interconnectedness. We only ask the question, “why did that happen?”, if we believe that we can unravel and tease out the series of events that gave rise to the event we are viewing. This article of faith is really saying not just that the world is ordered and follows laws, but that it is also amenable to being investigated and studied. Smethurst also uses the term “*intelligibility*” in case the concept of causality is to be found wanting. This is similar to Einstein and Infeld's statement that reality can be grasped by theoretical constructions. The world is intelligible. It is not just ordered, it is also comprehensible, or able to be understood. We usually think in terms of cause-and-effect, but if quantum mechanics means some adjustment is required, we still believe that the universe is understandable and interconnected.²¹⁴

The third basic belief according to Smethurst is a “*belief in the reliability of human reason.*”²¹⁵ The world may be ordered, and it may be capable of being understood, but that is not quite enough, for we need to believe further that we can, as Einstein and Infeld pointed out, “*grasp the reality*” with our theories. Thus we must also believe that we ourselves have the requisite apparatus to make sense of what there is in the world. We must believe in the reliability of human reason. As Smethurst puts it:

211 **J. W. Friend** and **J. Feibleman**. What Science Really Means. 1937. Allen & Unwin. P95. Quoted in: **Arthur F. Smethurst**. modern science and Christian Beliefs. P6.

212 **Arthur F. Smethurst**. modern science and Christian Beliefs. P8.

213 **Albert Einstein** and **Leopold Infeld**. The Evolution of Physics. 1938. Cambridge University Press. P312.

214 **Arthur F. Smethurst**. modern science and Christian Beliefs. P8-11.

215 **Arthur F. Smethurst**. modern science and Christian Beliefs. P11.

“We must have some degree of faith in our capacity to distinguish truth from error and to make theoretical constructions which bear some measure of relationship to reality.”²¹⁶

These three beliefs then are the creed of science. We summarise them below, following Smethurst:

1. The belief that the universe is ordered and regular, not capricious and varied.
2. The belief that the universe is harmonious, intelligible and that events happen for a reason (cause-and-effect).
3. The belief that the human mind is equipped to comprehend what the universe is really like.

So then without a **belief** that the world is ordered, without the **belief** that the world is accessible to enquiry, and without the **belief** that we ourselves can make sense of what we experience there can be no science.

Modern science rests squarely on a belief system, but the modern scientist (both the humanist and the materialist) has no basis for advancing these beliefs. Mankind has not always believed these things, so why does the modern scientist rest his efforts on these grounds? The Christian can defend these grounds (or ones like them) on the basis of the doctrine of God. M. B. Foster argued as we noted earlier that the way we do science depends upon how we view the universe, and that in turn depends upon how we view God.²¹⁷ If we take God out of the picture, the humanist and materialist has no ground left to him. However if we understand whom God is (because He has revealed Himself through Scripture and through His Only Son), we can grasp reality with confidence. God is first Creator and so all is ordered and regular, having been designed with plan and purpose. God is also Sustainer, keeping all things in their place for Christ is the One in whom all things consist and all things are upheld by His word of power.²¹⁸ The transcendent God is also the immanent God. Not just through the fact of the incarnation, but from the beginning through to the end, God is intimately involved in His creation. Then also we note that the Christian may have confidence that there is something called “absolute truth” and that it is accessible to us, on the basis that we are made in the image of God who is described repeatedly as the truth.²¹⁹ We have minds that (constitutionally) are capable of making rational reasoned choices and of making

216 **Arthur F. Smethurst.** modern science and Christian Beliefs. P11.

217 **M. B. Foster.** The Christian Doctrine of Creation and the Rise of Modern Natural Science. P465.

218 Colossians 1:17; Hebrews 1:3.

219 Genesis 1:26,27; Deuteronomy 32:4; Psalm 31:5; 57:3; Isaiah 65:16; John 8:45; 14:6; 16:7; 17:17; 18:37.

distinctions and exercising discernment. We can distinguish truth from error. Modern science has no such confidence, and to pursue its course it must resort to a different set of tactics. Earlier I mentioned that in recent times modern science has been likened to a medieval priesthood. Such a reference highlights the need for a community of faith and for discipline. I have also noted that the deification of “nature” has led to a form of worship. This religious aspect of modern science is displayed with clarity by the man who coined the phrase “survival of the fittest,” Herbert Spencer:

*“Devotion to science is a tacit worship – a tacit recognition of worth in the things studied; and by implication in their cause. It is not a mere lip-homage, but a homage expressed in actions – not a mere professed respect, but a respect proved by the sacrifice of time, thought, and labour.”*²²⁰

Consider this! A scientist devoting time, effort, labour to his research is carrying out an act of worship! But to whom? It will be to that concept of whatever he or she thinks is the great cause of all that there is. Modern science worships the creation – that much is so clear! What of a Christian? The task for the Christian in exploring the universe is to start first with God. From this vantage point research and discovery begins guided by His loving hand. How different the outlook and the fruits!

Historical science.

It is important to conclude this section on belief and assumption with a note on the historical sciences. Many make a distinction between observational science, the science that includes experiments and observations done today, with historical science which looks at times in the distant past where events under scrutiny occurred but once or, at best, infrequently. The professor of the history and philosophy of science David Knight notes that modern science is centred on experiments and observations. This is how we tend to think of science.

*“Science is a practical activity not only insofar as its results may be turned to use, but also because it depends for the most part upon observations and experiments.”*²²¹

But, of course, the history of science, shows us that modern science has embraced the subject of the origin of the universe, at least since the late eighteenth century, if not before that. So a justification for historical science, that study which involves the very distant past and studies singular events,

220 **Herbert Spencer.** From Spencer's essay of 1859: What Knowledge Is Of Most Worth? Quoted in: **R. A. Gregory.** Discovery. (The Spirit and Service of Science). P40.

221 **David Knight.** The Nature of Science. P24.

must be forthcoming. The renowned palaeontologist Stephen Jay Gould, recognised that cosmology, geology and biological evolution must employ the “tools of history”:

*“How should scientists operate when they must try to explain the results of history, those inordinately complex events that can occur but once in detailed glory? Many large domains of nature – cosmology, geology, and evolution among them – must be studied with the tools of history. The appropriate methods focus on narrative, not experiment as usually conceived.”*²²²

Experiment is not the meat-and-drink of the historical sciences, so they must resort to the methods of the historian. Now Gould attempts to make a justification based on a skewed view of observational science. He suggests that since no one actually “sees” electrons or gravity and so on, the fact that we cannot observe the events of the distant past ought to be no obstacle:

*“But historical science is not worse, more restricted, or less capable of achieving firm conclusions because experiment, prediction, and subsumption under invariant laws of nature do not represent its usual working methods. The sciences of history use a different mode of explanation, rooted in the comparative and observational richness of our data. We cannot see a past event directly, but science is usually based on inference, not unvarnished observation (you don’t see electrons, gravity, or black holes either).”*²²³

To declare that science is based not on observation but on inference is a sleight of hand. We may not see electrons, but we can use them in experiments which we can repeat as often as we want. The significance of these entities and the meaning of observational science is open to debate, but it surely stands way above the historical in status and respect. The effects of electrons can be observed and any inferences drawn from them are subject to scrutiny by others who can repeat whatever experiments we may have performed.

Gould then diverts the attention away from observation and experiment towards what he calls “testability.” In using such a term it would appear that Gould is following Popper's falsificationist views.

“The firm requirement for all science – whether stereotypical or historical – lies in secure testability, not direct observation. We must be able to determine whether our hypotheses are definitely wrong or probably correct (we leave assertions of certainty to preachers and politicians). History’s richness drives us to different methods of testing, but testability is our criterion as well. We work with our strength of rich and

222 Stephen Jay Gould. Wonderful Life.1990. Hutchison Radius. P277.

223 Stephen Jay Gould. Wonderful Life. P279.

diverse data recording the consequences of past events; we do not bewail our inability to see the past directly. We search for repeated pattern, shown by evidence so abundant and so diverse that no other co-ordinating interpretation could stand, even though any item, taken separately, would not provide conclusive proof."²²⁴

Gould's attempt to justify historical science on the basis of history runs into the problems that history faces, namely, the fact that it is constantly facing the charge of being subjective, and the fact that it is piecemeal. History relies on documents. The problem with history is that the documents we have left are always piecemeal and fragmentary. Added to this fragmentary nature of the evidence, we need also to understand that for any given event in the past the writers of the time will have an angle or a bias. Take, for example, a war. The victors get to describe the event in full, but they (of course) are not going to give their enemies much promotion! I often lament the fact that British history before Christ has been lost to us having been decimated by the invasion of Julius Caesar. The medieval period is also one which shows huge selectivity. This brief discussion of the problems of history should give us great cause for concern when we look at historical science. However, when we come to the historical sciences (palaeontology, cosmology, geology) we need to remember that they ***do not actually have any documents*** with which we can wrestle! All they have is aspects of the created order such as starlight, fossils and rocks. None of these speak, but must be made to speak by the scientist. The stars, the rocks and the fossils do not give us an unbiased report of their history. The history must be read ***into*** the data. This is a serious problem. However when we view such endeavours in the light of God's word we find not just a few discrepancies here and there, but a completely different account. Whose should we follow? Should we follow God and what He declares through His word? Or should we follow the data of science as depicted and invented by man?

224 Stephen Jay Gould. Wonderful Life. P282.

Chapter 2: What is evolution?

(Evolution defined and examined briefly).

Evolution considered.

Rather than provide a definition of evolution borne from years of teaching and examining, I have opted to provide definitions culled from four different sources. The first comes from the Oxford Dictionary:

*“The process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth.”*²²⁵

This definition is very basic but it tells us the general idea entailed in the concept. All life shares a common ancestor. Darwin used the phrase: “descent with modifications” by which he meant the change from one form to another over long ages by natural selection. These features appear in our second definition which comes from the University of Berkeley website:

*“Biological evolution, simply put, is descent with modification. This definition encompasses small-scale evolution (changes in gene — or more precisely and technically, allele — frequency in a population from one generation to the next) and large-scale evolution (the descent of different species from a common ancestor over many generations). ... The central idea of biological evolution is that all life on Earth shares a common ancestor ... Through the process of descent with modification, the common ancestor of life on Earth gave rise to the fantastic diversity that we see documented in the fossil record and around us today. Evolution means that we're all distant cousins: humans and oak trees, hummingbirds and whales.”*²²⁶

Our third definition comes from the Society for the Study of Evolution's website. This group comprises a distinguished body of biologists who are concerned to develop research and interest in evolution. Their definition is, needless to say, emphatic!

““Evolution” refers both to a set of scientific facts and to a theory explaining such facts. “Evolution” refers to the scientific fact that biological organisms have changed through time, and that all life, including humanity, has descended with modification from common ancestors. Evolution is as well documented as are other

225 <https://en.oxforddictionaries.com/definition/evolution>

226 https://evolution.berkeley.edu/evolibrary/article/evo_02

currently accepted scientific facts. The theory of evolution is a comprehensive and well-established scientific explanation, based on natural processes, of the fact of biological evolution."²²⁷

The final definition comes from a PhD thesis aimed at investigating whether biological evolution was understood and taught well in a university setting.

*"At the most basic level, biological evolution is a type of change over time. But that is far too simple a description. As time passes, many things change. In biological evolution change over time is better called —descent with modification. Basically, biological evolution proposes that all life on Earth shares a common ancestry, and that traits we see in populations of organisms can be inherited by future generations. It is this common ancestry, with the possibility that heritable traits can be modified that has led to the enormous diversity of life on Earth."*²²⁸

I thought it important to establish some form of definition from reputable sites which give us the main ideas without being overly technical. From these statements the following main ideas seem to be important.

1. The idea that all of life seen today has arisen from a common ancestor.
2. The idea that descent with modification has required vast time spans.
3. The idea that modification occurs at the genetic level.

One feature that is not included within the above definition, but which nevertheless is vitally important, is the supposed transformation from simple chemicals to an organised system which has the quality we call *life*. This step up is an enormous one and is sometimes termed "abiogenesis." Although not usually discussed by evolutionary biologists, it is an immense problem for the whole concept of evolution.

The big idea.

Now the biological description of evolution following Darwin and others that we have just defined, must be set within the overall context of the modern ideas about origins. These include the idea that the universe formed through a "big bang," and that galaxies, stars and planets have all evolved through vast ages. The physical theory of how the universe formed and has come to its

227 <http://www.evolutionofsociety.org/content/education/statement-on-evolution.html>

228 **Justin William Rice.** PhD thesis. Understanding and acceptance of biological evolution and the nature of science: Studies on university faculty. Iowa State University. 2012. <https://lib.dr.iastate.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=3712&context=etd>

present state is almost a statement of faith in today's world. Ernst Mayr, the well known evolutionary biologist, made such a point in a *Scientific American* publication:

*“Man's world view today is dominated by the knowledge that the universe, the stars, the earth and all living things have evolved through a long history that was not foreordained or programmed, a history of continual, gradual change shaped by more or less directional natural processes consistent with the laws of physics. Cosmic evolution and biological evolution have that much in common.”*²²⁹

Then alongside this is the geological view-point, which describes how our planet has changed over these (supposed) vast ages. All three forms of evolution, the biological, the geological and the cosmological are entrenched in the National Curriculum requirements for teaching science in schools in the UK. To summarise these ideas we have the following:

Physics & the Big Bang:

The idea that the universe started out as an infinitesimally small infinitely dense point of space-time-energy which suddenly arose and then expanded in a burst of energy and radiation spreading out both space and matter. Stars formed through the attractive force of gravity and, as formed, are balanced out by nuclear forces. As stars formed, dust, debris and particles swirling around the newly formed star aggregated to form the planets that would orbit the star.

Chemistry (geology) & Uniformitarianism:

The earth in its earliest days was a hot-bed of volcanic activity spewing out gases and water vapour. The surface of the earth has never been stable but continually on the move. These movements are extremely slow and gradual. The various cycles operating according to natural 'scientific' law, (water cycle, carbon cycle, nitrogen cycle etc.), combined with the slowly dissipating energy from the planet's formation, produce the surface of the world as we know it today. Rain, weathering, floods, and other natural events operate together in a slow and gradual symphony to carve out imperceptibly the surface features we dwell on.

Biology & Natural selection:

All living organisms share a common ancestor. The origin of the first unit of life is unknown but once life got a foothold, selective pressures acted upon any population of life to favour some to reproduce and survive whilst others less-well adapted died out. The gradual changes in characteristics that may be seen over several generations are multiplied dramatically to form new features when greater time-spans are viewed. Such a process is usually supplemented by assuming that genetic mutations (caused by radiation or chemical interference) are sufficient to introduce novel features.

229 Ernst Mayr. Evolution. Chapter 1. PP3-11. Evolution. *Scientific American*. W. H. Freeman and Company. 1978. P3.

These summaries are not comprehensive but they do (I believe) faithfully reflect the general consensus of modern science concerning how all things have come to be. It will be seen that there are several important ideas inherent in all three aspects of what we may call “*general evolution*.” First you will note that *vast amounts of time* are required for all these processes to occur. In an article for *Scientific American* on Darwin, Loren C. Eiseley, an American natural science writer and philosopher wrote the following:

*“Without Lyell's gift of time in immense quantities, Darwin would not have been able to devise the theory of natural selection.”*²³⁰

The universe according to modern science is about 15 billion years old, and the earth is about 4.6 billion years old. Such statements are in flat contradiction to the Scriptures as we shall show later on. However, it is important to consider how the idea of vast ages for the universe came about historically. In the late seventeenth and early eighteenth century it was the geologists who argued for long ages. James Hutton and Charles Lyell, who championed Hutton's work, are often remembered as the fathers of modern geology. The reader should be aware that there were, in point of fact, a great many geologists contemporary with Hutton and Lyell who dissented from these long ages, but these “Scriptural Geologists” have been largely ignored by modern science and history.²³¹ The provision of long ages for the earth and its history was an essential pre-cursor to the acceptance of Darwin's theory of natural selection. Without vast ages, it is impossible to conceive of any scenario wherein Darwin's ideas would have been accepted. In terms of the age of the universe, this had to await the discovery of radioactivity and the advent of nuclear physics which would not come until the end of the nineteenth and the beginning of the twentieth century. It is not, therefore, that modern science has *observed* the vast age of the universe, and this has lead to the idea of uniformitarian geology followed by natural selection as logical consequences. Rather, disaffected gentlemen scientists who disliked the Scriptural framework suggested that the rocks *spoke* of vast ages, and this beginning dissent fuelled the birth of biological evolution and so on.

A second feature contained within all three aspects is the idea that only *natural law* is allowed to operate. The use of any term or phrase is loaded with bias, but I have chosen the phrase “natural law,” carefully to reflect what I believe is the view of most modern scientists.²³² I could

230 **Loren C. Eiseley.** Darwin. February 1956. Evolution and the Fossil record. *Scientific American*. W, H, Freeman and Company. P9-17. P10.

231 See: **T. J. Mortensen.** British Scriptural Geologists in the first half of the nineteenth century. PhD Thesis. September 1996. Coventry University & Wycliffe Hall, Oxford. **T. J. Mortenson.** The Great Turning Point: The Church's Catastrophic Mistake on Geology—Before Darwin. 2004. Green Forest, AR: Master Books.

232 The phrase: “laws of nature” is synonymous.

have used the phrase: “laws of science,” but if I had chosen this it might have been objected that we could argue that these are changing with culture. Whose “science” are we talking about? Medieval science? Seventeenth century science? Or modern science? For modern science the universe is governed by laws. These are “discovered” by science as more and more research is done. There is, however, no explanation from modern science as to why the universe is pervaded and governed by such regularities. Where do laws come from if not from a Law-giver?

A third feature is the idea of increase in complexity. This is clearly seen in the biological version where we progress from simple gases (methane, ammonia, water, and so on), to single cells, through to the vast array of disparate creatures we observe today. No one will deny that a ladybird is vastly more complex than an amoeba. However the idea of increasing complexity is also prevalent in both physical expressions of evolution. With regard to the big bang idea there is also the idea of moving from nothing to everything. Arguments abound in the (scientific) literature concerning what happened (supposedly) before the big bang. Some say that there was nothing at all and that a fluctuation within *nothing* arose with an equal amount of positive and negative 'existence' so that the overall balance would still be zero. We could put it like this:

$$0 = -1 + 1$$

One part of this fluctuation gave rise to the expansion of the universe and the other part ²³³ Another idea is that the beginning was not actually a singularity or a point in space-time, but was, rather, curved. This removes the notion of a beginning because it is held (by some) that the universe oscillates back and forth, expanding outwards to some point and then collapsing back to a small point, only to expand again and so on. Then there are those who favour the idea of multiverses! But whatever view may be taken there is inherent in all the idea of increase in complexity. The systems of galaxies and stars with orbiting solar systems we observe today is vastly more organised than an infinitesimally small infinitely dense point of matter-energy-space.

We thus have three features common to what we have called *general evolution*:

- Vast amounts of time are required.
- Only the laws of nature operate.
- There is an increase in order and complexity.

²³³ How could we ever possibly know?

Thus modern science believes that all the complex and ordered things we know of and observe today have come about over a vastly long period of time exclusively through the laws of nature. This is the big idea.

Natural Selection – an introduction.

Having considered the broad overview and definition of evolution, we need to focus our attention on the biological aspects from Darwin and the ages following him. Although Darwin was not the first to advance the idea of evolution, he was the first to use the phrase “*natural selection*.” In the 5th edition of the *Origin of Species* released in 1869, Darwin understood this phrase to mean: “*better designed for an immediate local environment.*”²³⁴ We must note in passing that such language of design is often mistakenly used by those writing on evolution. They do not really mean to indicate any purpose, intent or design at all, but they cannot really help this given what they are dealing with, namely, God's creation!²³⁵ Darwin, of course, was speaking of species that fit their environment and surroundings well, and who were able to survive such conditions long enough to reproduce and pass on their characteristics to the next generation. Darwin did not begin by describing the idea of natural selection, but discusses artificial selection, (selective breeding), the process by which a **human** agent chooses individuals of a species with certain desired characteristics to breed with. Horse race trainers, farmers, and dog breeders follow this procedure. Horses are selected on the basis of their performance in races. Some are bred for stamina and others for strength, but whatever the case a **human** agent does the selecting. In natural selection, there is no agent who does the selection. The selection is passive, so that it is usually assumed that the “laws

234 See, for example: **Stephen Jay Gould**. *Ever Since Darwin: Reflections on Natural History*. W. W. Norton and Company. 1975. P45.

235 Here are just two examples:

[1] “*The more one studies living beings the more one is impressed by the wonderfully effective adjustment of their multifarious body structures and functions to their varying ways of life. From the simplest to the most complex, all organisms are constructed to function efficiently in the environments in which they live. The body of a green plant can build itself from food consisting merely of water, certain gases in the air and some mineral salts taken from the soil. A fish is a highly efficient machine for exploiting the organic food resources of water, and a bird is built to get the most from its air environment. The human body is a complex, finely coordinated machine of marvellously precise engineering ..*”

Theodosius Dobzhansky. *The Genetic Basis of Evolution*. January 1950. Chapter 2. P19-27. *Evolution and the Fossil record*. **Scientific American**. W, H, Freeman and Company. P19.

[2] “*Organisms fit remarkably well into the external world in which they live. They have morphologies, physiologies and behaviours that appear to have been carefully and artfully designed to enable each organism to appropriate the world around it for its own life.*

It was the marvellous fit of organisms to the environment, much more than the great diversity of forms, that was the chief evidence of a Supreme Designer. Darwin realized that if a naturalistic theory of evolution was to be successful, it would have to explain the apparent perfection of organisms and not simply their variation.”

Richard C. Lewontin. *Adaptation*. Chapter 9. P115-125. *Evolution*. **Scientific American**. W, H, Freeman and Company. P115.

of nature” are such as enact the selection.²³⁶ But where do these come from?

In this introductory discussion concerning natural selection we can see at least two major concerns. First modern science posits the idea of “nature” as an independent operator, and it does so without any causal explanation. We see this clearly in Darwin's use of the term “*natural* selection.” But can “nature” act like a human agent and effect a selection as a horse breeder might do? Where did “nature” and the “laws of nature” originate or come from? Peruse any major natural history documentary and you will find a regular appeal to “nature,” and “the laws of nature” as the commander-in-chief of all things. As a consequence of such use, many who write on living things end up by personalising nature. You sometimes hear statements like: “nature in *her* wisdom ...,” or “*mother* nature has ensured ..” and so on. I am sure that those who use such phrases do not think in terms of “nature” being personal, but it is very difficult to avoid such language, because what is being discussed is the origin of *animate* matter, or that which possess life, and life can only originate from life.²³⁷

A significant number who concern themselves with the living world will also present as atheists. In their denial of any supernatural being, they have substituted their own version of “God,” namely, “nature” and the “laws of nature,” which are assumed as the fundamental basis for all existence. Such people like to challenge those who believe in God with the retort: “who made God?” Such a question betrays both an ignorance and an unwillingness to think properly. The concept of “God” is beyond matter-energy-space and so on. It is a fundamentally basic belief, just as “nature,” or the universe is to an atheist.

If we move to consider the above discussion from a purely Christian point of view we are faced with a problem. As Christians we ought never to speak of “nature,” but should refer to all things as “creation.” What we view all around us has come from the very hand of God. The Scriptures teach us in no uncertain terms that creation is that which operates under the express command of God.²³⁸ In the modern world, God has been utterly banished in thought, and we are forced to imagine “nature” operating by the laws that science has *discovered*. Such a scenario is problematic because the concept of “law” demands some form of Judge or Law-giver. Modern science has yet to deal with this problem, but for the Christian there is no problem at all.

The second concern is that modern science expects us to understand complex things like animals and mankind from a simplistic conception. In making this statement I do not mean to say

236 Sometimes called the “laws of science.”

237 In 1855 **Rudolph Virchow** proposed the idea that “cells only arise from other cells.” This is not a new idea because the Bible declares that God alone is the source of life.

238 Psalm 104; Matthew 10:29.

that modern science is simplistic. What I am intending to point out is that modern science refers only to one form of “thing” in its discussions to attempt to explain all things. To illustrate what I mean, consider the nature of man. What is man? How we answer this question depends upon our starting point. Do we accept God and His revelation, or do we start from the position modern science operates under, namely, that everything is matter/energy and so on? From a Christian point of view man has a physical basis, and a spiritual one. From a modern science view point man is only composed of matter-energy. This general conflict of ideas yields a particularly important skirmish when we consider the nature of personality and consciousness. Modern science struggles to understand both of these things. No amount of MRI scans or theorising can come up with a sound view of the nature of personality and consciousness. Further, modern science has no understanding of where such things originate. How can chemistry and physics formulate anything which satisfies us concerning personality and consciousness? Where, in a modern science world view, does personality and consciousness originate from? The idea that it *emerges* from physical and chemical interactions cannot really be sustained at all. But for the Christian, there is no struggle at all, for our essential being has its origin in the three united persons of God (i.e. the trinity). Human personality is created by God who describes Himself as “*I am.*”²³⁹ We are therefore contingent beings, that is, we are dependent, and our utter dependency rests in God (even if we do not acknowledge Him). We exist because of God. God does not exist in the same sense as us because He is “*I am,*” the eternal self-existent Being and the source of all life.

Natural selection and its main elements.

Having considered natural selection in general, we must now look at it in some detail. Exactly what is entailed in this fundamental idea to modern biology? Essentially there are four features contained within the idea of natural selection.²⁴⁰ Broadly speaking these essential features are as follows:

- Variation.
- Selective pressures (environmental, biotic factors).
- Inheritance (through reproduction).
- Reproduction & population growth.

²³⁹ Exodus 3:14.

²⁴⁰ Sometimes writers speak of three features, and sometimes there is confusion about the various ideas contained within the concept of natural selection.

Variation.

First, for any evolution to occur there must be **variation** within a population. Individuals will exhibit differences across all the traits and characteristics that the species may possess. For example some may have longer legs or stronger muscles. Others may have keener eyesight or hearing. And yet others may have better skin colouring (camouflage) or more efficient insulation. At this juncture we need to ask: where has this variation come from? It is clear that there are variations amongst creatures that are all of the same species but why? Amongst those species which reproduce sexually, variation comes about through the process of procreation where traits and characteristics (which we now know come from genes) are inherited from both parents.

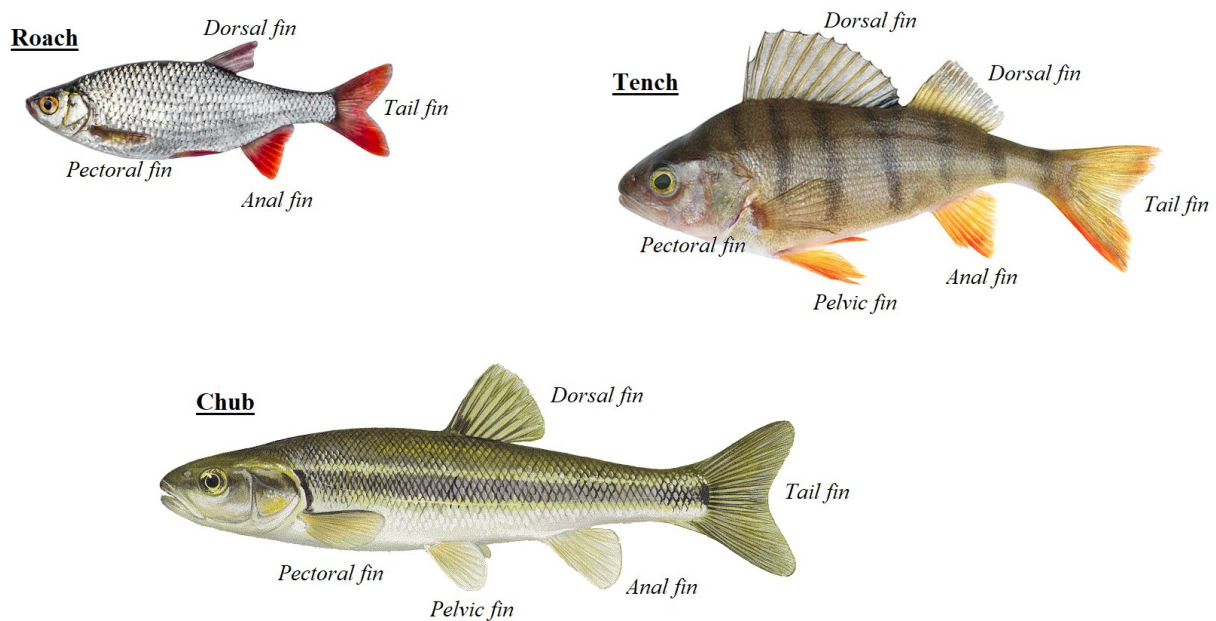


Figure 5.

In asexual species there is nowhere near the same level of variation although there is some. Now in Darwin's time it was thought that this variation was continuous. That is, it was assumed that a spectrum of differences encompassing the two extremes existed for each separate trait or characteristic. For example, there might be individuals with the longest legs of all, then individuals with *slightly less long* legs, then others with slightly shorter and so on until we reach individuals with the shortest legs. The same situation was envisaged for all the various traits a species may have. We now understand that variation is genetic in origin, but Darwin was unaware of this.

Differences between individuals are in fact more discrete than continuous. Perhaps the most obvious example of discrete change is to be found in eye colour. We do not find a continuous

spectrum of colours, but rather certain shades, (blue, green, hazel etc.). What causes the differences in eye colour or leg length and so on, are variants of the same gene called **alleles**. One species may have the alleles which produced blue eyes, and another may have different alleles which produce green eyes. There is only one *type* of gene (or, possibly, collection of genes), which expresses itself in terms of eye colour, but there are variants of this particular gene (i.e. different alleles). At this point we need to emphasise that all of the individuals within a given population of a species are genetically the same in **essence**. Thus variation within a population does not constitute variation in genetic material in an essential sense. Moving from one species to the next, (or, perhaps better, from one kind to another), entails a step-change in genetic make-up. The two distinct species (or kinds) may share very similar genetic material, but there are essential genetic differences between them too. For example, take the three fish species shown in figure 5 with their fin details listed in table 1. It is clear from the pictures that the Roach does not have any pelvic fins, whilst the Tench has two distinct dorsal fins. The genetic make-up of these three species would be very similar but there would be **extra genetic** material for the Tench and Chub compared to the Roach in order to produce their pelvic fins.

Table 1: The differences in fins for three species of fish.

Species	Dorsal fin	Tail fin	Anal fin	Pelvic fin	Pectoral fin
Roach	√	√	√	X	√
Tench	√√	√	√	√	√
Chub	√	√	√	√	√

Selection pressure.

The second feature entailed in natural selection is the idea of **selection pressure**. As we mentioned earlier, Darwin's suggestion of natural selection comes from a consideration of artificial selection (selective breeding). In the latter case a human agent enables the selection process for two mates to reproduce, but in the case of natural selection, there is no personal or intentional agent, and instead the various environmental and biotic factors that impinge on the population must be considered. In a *Scientific American* article, entitled: **15 Answers to Creationist Nonsense**, John Rennie, the former editor-in-chief of the magazine, in seeking to rebut the idea that evolution is mathematically impossible, gives us his view of what natural selection entails:

“... natural selection, the principal known mechanism of evolution, harnesses non-random change by preserving “desirable” (adaptive) features and eliminating

“undesirable” (non-adaptive) ones. As long as the forces of selection stay constant, natural selection can push evolution in one direction and produce sophisticated structures in surprisingly short times.”²⁴¹

Notice that natural selection is held to be the “*principal known mechanism of evolution*,” and that there are “*forces of selection*” which operate to effect change. Writers work especially hard to walk the tightrope so as to avoid any **personal** intention or the operation of **random** passive occurrence!

Imagine, for example, that the temperature drops rapidly for a sustained period of time. The animals with better fur covering are more likely to survive the harsh conditions, whilst those with poor fur are more likely to die out. Now this feature of natural selection is extensive, varied, but passive. What it amounts to, is an understanding of the way in which creation (or “nature”) bears upon a population. The various factors which might affect a population include the following:

- Temperature
- Climate conditions:
 - Humidity.
 - Rainfall.
 - Exposure to UV etc.
- Chemical environment:
 - pH.
 - Toxicity/reactivity.
- Water and nutrient availability.
- Predation.
- Space.
- Availability of mates.

These are the things scientists use to describe an environment. The list above is by no means exhaustive. Furthermore the combination of factors is well nigh impossible to predict. For example, if we limit discussion to temperature we may suggest a range which is suitable to enable living things to thrive. Outside of the extremes no life can exist. However temperature also affects other factors, such as the speed at which chemical reactions occur, the efficiency of any predator population, the amount of water available and so on. This means that the effects of both

²⁴¹ John Rennie. 15 Answers to Creationist Nonsense. *Scientific American*. July 1. 2002. <https://www.scientificamerican.com/article/15-answers-to-creationist/>

environmental and biotic factors *appears* to be random to the human observer, because of the complexity of their interactions. They are all (according to modern science) governed only by the laws of nature, but understanding how these interact is beyond human ingenuity. The various factors may follow the laws of nature, but in human perception there are too many variables operating in series and so what happens appears to be random.

Inheritance.

The third feature of natural selection is *inheritance*. For the beneficial or well-adapted trait to be actually selected, a new generation needs to arise, and this occurs by means of reproduction. Those animals which survive through any selection pressure, continue to breed and therefore carry on their specific traits to the next generation, leaving the 'weaker,' less well adapted, individuals to die out. In effect those less well adapted do not survive as long, and so are less likely to reproduce and pass on their traits. Put as a series of steps natural selection proceeds as follows:

- A population of a specific species, P_1 , exists at time T_1 .
- A specific selection pressure, SP, operates which acts upon the population P_1 .
- Pairs of individuals within P_1 reproduce to produce the next (second) generation P_2 .
- At the same time, 'weaker' individuals die out faster and reproduce less, whilst better adapted individuals survive longer to reproduce and produce more.
- The current (first) generation of P_1 eventually dies out. We have now reached T_2 .
- Fewer and fewer less adapted second generation individuals survive and the majority of second generation P_2 show the well adapted feature.
- The SP continues to act upon P_2 .
- Again the SP affects the 'weaker' individuals of the second generation (P_2), whilst the better adapted individuals continue to survive and reproduce.
- Now a third generation P_3 arises and its population consists almost entirely of those individuals that have the better adapted feature. This will be at T_3 .

Thus whilst the first generation may show a wide variation for a specific trait (for example, some with short fur, some with mid-range fur, and some with thick fur), by the time we reach the third generation those with the weaker expression of any given trait (short fur) may well have been

removed.²⁴² With regard to a specific characteristic, variation is thus diminished through time, and successive generations exhibit less and less variation than the original generation that spawned them. This is a very important point. Natural selection leads to a loss of information.

Now also buried within this feature of natural selection (inheritance) is an aspect which does not often get the attention it deserves. I refer the reader to the vexed issue of death. Without death no evolution is possible. One generation has great variation with respect to a particular characteristic. Certain better adapted individuals survive the environmental changes to pass on their traits or characteristics, whilst many others die out. The better adapted reproduce and pass on this adaptation to the next generation. Amongst the new generation there will be variation again, but those who have the adaptation in greater measure survive to reproduce the next generation and so on. Over many, many ages there is a visible change in form (so it is supposed) between the new nth generation and the first original one. But the new generation has '*evolved*' from the original through the *death* of many generations in between. Because it is such an important concept for all of us, we shall consider this hidden feature (death) in a later section.

Reproduction and population growth.

The last element of natural selection is the idea of *reproduction and population growth*. Populations grow and expand through reproduction, and different species have different rates of reproduction, and produce varying numbers of offspring per cycle. However the main point in this feature is the idea of time. Evolution is thought to progress incredibly slowly so that there is little change from one generation to the next. It therefore requires a great many generations, or, in other words, a vast amount of time, for significant alteration to become evident.

Some implications.

In considering evolution from the point of view of natural selection, it is essential to pay particular attention to three important implications. First, the variation in characteristics and the change in the environmental conditions that connect with those features is considered to be a *random* affair, even though it is thought to be governed by the laws of nature (or laws of science). In saying this scientists want really to assert that there is no purpose or plan, and there is no direction – it is all by chance, albeit governed by natural law.

Now most who favour evolution reject the notion of a *wholly* random element because

²⁴² The number of generations for which a particular form of any given characteristic is removed depends on a large number of factors such as: the length of a life span, the severity of environmental change, the disadvantage having this expression of the characteristic and so on.

random events tend towards degradation and chaos. If your boss dealt with your salary in a random manner you would soon protest! Randomly scattering information at people is bound to lead to chaos and so on. However those who advocate evolution are equally averse to accept any purpose whatsoever. But, if we move away from randomness we tend towards order and purpose. Notwithstanding these subtle distinctions, there is an in-built contradiction within the idea of evolution. On the one hand they do not want any intelligent agent, purposeful intent, or guided development, but on the other hand they cannot accept the alternative of random chance being the overlord, for they still want some creative or inventive process in order to generate novelty. What this amounts to in truth, is that those who opt for evolution effectively deify nature and its laws. It is these which govern the origin and evolution of life and so must themselves be ordered and have definiteness.

Second, the whole mechanism of evolution, which is (supposedly) a form of creation that generates new species, requires *death* as a component element. There can be no evolution without death. It is this feature which is so troubling and which we will consider later on. The third feature we need to highlight here, is that natural selection speaks about changes in characteristics or traits (long ears, better eyesight, longer legs, stronger muscles etc.), and it cannot be transferred easily to *genetic* considerations. Darwin's idea that there is a continuous spectrum of change from slight changes in shape or structure and function, to new structures forming does not take account of the discontinuous, discrete nature of genetics. In the fish example of figure 5 shown above, newly appearing structures (pelvic or dorsal fins) cannot come about without new genetic information and new material. What this means essentially is that natural selection is limited. It can change the shape or viability of existing structures, but it cannot introduce new ones.

Mutations and the place of genetics.

Darwin's idea of natural selection appears to suit most biologists as sufficient to explain both the notion that species appear designed for their environment, and the fact that we have a vast diversity of life forms throughout these various environments.²⁴³ Richard Dawkins is a fanatically keen promoter of natural selection, and in an article for a *New Scientist* publication he deals with the only two alternative ideas he could imagine to natural selection. These are “God,” and “Lamarckism.” Most of the article is about Lamarck's ideas of the inheritance of acquired

²⁴³ See, for example: **Brian Charlesworth**. Neodarwinism – the plain truth. Chapter 7. P23-26. Darwin up to Date. *New Scientist*. Edited by Jeremy Cherfas. IPC Magazines Ltd. 1983. P23. **Richard Dawkins**. The necessity of Darwinism. Chapter 19. P61-63. Darwin up to Date. *New Scientist*. Edited by Jeremy Cherfas. IPC Magazines Ltd. 1983. P63.

characteristics which modern biology has rejected. However, in dealing with God as an explanation he spends but a few lines:

“.. but as an explanation of organised complexity He [God] simply will not do. It is organised complexity we are trying to explain, so it is footling to invoke in explanation a being sufficiently organised and complex to create it.”²⁴⁴*

*[*footling: trivial and irritating.]*

I never cease to be amazed at what Dawkins can assert! Nevertheless there have been those amongst evolutionary biologists who have dissented. One such is Stephen Jay Gould who proposed the idea of punctuated equilibria to deal with the problem of the fossil record. Gould rightly observed that the fossil record did not show gradual change throughout earth history, but rather rapid bursts of change with long periods of stasis (no change).²⁴⁵ His idea was that evolution occurred rapidly in bursts and then a period of stasis prevailed for long ages (“*several million years*”).²⁴⁶ I mention this because it is not generally appreciated by the public that there is dissent within the halls of orthodox science, and it serves to show, at least, the fact that modern scientists are much less certain than they appear in the public domain.

Now although natural selection is generally accepted by all evolutionary biology, there has been great disquiet within the ranks that it could actually “do the job” that Darwin intended. Could natural selection alone give rise to the incredible diversity of living things all of which seem to be adapted to their environments? To some the answer was a clear no and so a new synthesis was born in the early part of the twentieth century. This new synthesis, often known as *neo-Darwinism*, essentially incorporated the growing new science of genetics with Darwin's view of natural selection. The essential difference in this new synthesis is that mutation at the genetic level is used as the mechanism to introduce variation and (it is supposed) new novel features.

So what is entailed in the idea of mutation? Modern biologists elucidate a variety of forms of mutation, but for our purposes the essential idea is that there is a change in the molecular structure of genetic material, (genes, DNA). These changes are thought to be caused by high energy electromagnetic waves, such as X-rays, or possibly by some strong chemical interactions. By such means the genetic code can be altered so that in the subsequent process of manufacturing new proteins, it is believed that such mutations will result in a new feature or trait being expressed. It is

244 **Richard Dawkins.** The necessity of Darwinism. P63.

245 I should make it clear that I do not accept the modern science view of earth history.

246 **Stephen Jay Gould.** Punctuated equilibrium – a different way of seeing. Chapter 8. PP28-30. Darwin up to Date. *New Scientist*. Edited by Jeremy Cherfas. IPC Magazines Ltd. 1983. P28.

important to add though, that for mutation to have any input to evolution, it must occur within the sex cells or the newly formed zygote after fertilisation. Mutation that happens elsewhere in somatic (body) cells does not lead to evolution but may result in disease (e.g. cancer).

Mutation: the facts.

Thus mutations of DNA in sex cells is the mechanism by which evolution is supposed to occur. We shall not describe here the different types of mutation that may occur in the DNA but will limit ourselves to certain well-known facts concerning mutations.

First mutations are very rare events.²⁴⁷ For a mutation to be 'effective' it must occur, as we have already noted, within sex cells. Mutations that occur in a newly fertilised egg at the zygote stage may also produce effects, but any mutational change of body cells after the early stages of development in the womb will not be inherited by subsequent generations. The change in genetic structure of a zygote or of a sex cell prior to fertilisation will have consequences for the growing foetus and for any offspring it may produce, but genetic changes in any body cells after the early stages of development will only affect the organism that suffers such changes.

It is not possible to be definitive about how often mutations within sex cells may occur but estimates range from one in 2,500 to one in 100,000 sex cells in any given generation.²⁴⁸ More recent estimates suggest that there are somewhere between 100 and 200, or around 130 mutations per generation in humans.²⁴⁹ That may seem like a scary number but it should be remembered that there are around 3 billion base pairs in human DNA, so that the mutation rate as a whole is of the order of 0.00000005 mutations per base pair, per generation. In truth certain less significant mutation types are much more likely to occur than others and, it would appear also, that certain sections of DNA suffer more mutation than others.²⁵⁰ Consequently, mutations are rare events.

A second thing to realise in connection with mutations is that the vast majority are deleterious or harmful. None are ever beneficial in the truest sense of that word, but some may be

247 **Theodosius Dobzhansky.** The Genetic Basis of Evolution. Chapter 2 of Evolution and the Fossil Record. A *Scientific American* publication. PP19-27. P21. [Originally published in *Scientific American* in January 1950].

248 **Theodosius Dobzhansky.** The Genetic Basis of Evolution. P20.

249 **Michael W. Nachman.** Haldane and the first estimates of the human mutation rate (A commentary on J. S. Haldane 1935 J. Genet. 31, 317-326; reprinted in this issue as a J. Genet. Classic, pages 235-244). Journal of Genetics, Vol. 83, No. 3, December 2004. PP231-233.

Laurence A. Moran, Professor Emeritus in the Department of Biochemistry at the University of Toronto. Human mutation rates – what's the right number? Friday, April 24, 2015. <https://sandwalk.blogspot.com/2015/04/human-mutation-rates-whats-right-number.html>

Elie Dolgin. Human mutation rate revealed. Next-generation sequencing provides the most accurate estimate to date. <https://www.nature.com/news/2009/090827/full/news.2009.864.html>

250 For an in-depth study on mutations and their effects see: **Bodie Hodge.** Are Mutations Part of the “Engine” of Evolution? By on February 18, 2010. <https://answersingenesis.org/genetics/mutations/are-mutations-part-of-the-engine-of-evolution/>

beneficial in certain peculiar circumstances. For example, a single change in one particular base pair on DNA causes a change in the protein made which forms the haemoglobin molecule. As a result of this single change, instead of the haemoglobin molecules being free flowing in red blood cells, they are clumped together causing the blood cells to distort into a sickle shape. Those who have this mutation suffer a variety of disorders resulting from the lack of oxygen carried by the sickle-shaped blood cells. Life expectancy for sickle-cell sufferers is around 40 years of age.²⁵¹ Yet a positive benefit for these poor folk is that they are resistant to malaria because the parasites that cause the disease are destroyed in the sickle-shaped blood cells. Now this fact is used by those who favour evolution to suggest that the mutation is therefore beneficial! Of course if the entire world is plagued by malaria and the only survivors are those who have sickle-cell disease, this would mean that the human population would eventually all be sickle-cell sufferers, but, with a greatly reduced life expectancy. A secondary outcome of such a scenario, of course, is that the human population would have lost the ability to make normal haemoglobin!

That mutations are nearly always harmful is something that biologists have known ever since the concept was first raised. Theodosius Dobzhansky writing in 1950, for example, stated that:

*“In all organisms the majority of mutations are more or less harmful.”*²⁵²

Dobzhansky's assessment is not entirely unbiased. He goes on to confess:

*“This may seem a very serious objection against the theory which regards them as the mainspring of evolution. If mutations produce incapacitating changes, how can adaptive evolution be compounded of them?”*²⁵³

Dobzhansky's solution is to suggest that a detrimental change by mutation may be an advantage if the environment changes sufficiently! Wrestling with this troubling state of affairs he writes:

*“Most mutants that arise in any species are, in effect, degenerative changes; but some, perhaps a small minority, may be beneficial in some environments.”*²⁵⁴

Notice the hesitancy in Dobzhansky's words in this last quote (“but some, perhaps ... may be beneficial”). Such vague and hesitant writing is popular amongst evolutionary writers. Francisco J.

251 <https://sicklecellanemianews.com/sickle-cell-anemia-prognosis/>
<https://www.healthline.com/health/sickle-cell-prognosis>

252 Theodosius Dobzhansky. The Genetic Basis of Evolution. P21.

253 Theodosius Dobzhansky. The Genetic Basis of Evolution. P21.

254 Theodosius Dobzhansky. The Genetic Basis of Evolution. P22.

Ayala, a former Dominican priest who became an evolutionary biologist, also agrees that mutations are not really beneficial. He gives us a helpful analogy to comprehend what is going on:

*“Mutations that give rise to substantial changes in the physical characteristics of the organism, however, are unlikely to be advantageous. Since a population is usually well adapted to its environment, major changes are usually maladaptive, just as a large random change in the construction of a clock (the removal of a spring or the addition of a gear) is not likely to improve its functioning.”*²⁵⁵

Changing a base pair by deleting it or by adding a different one is just the same as removing a spring or adding a gear to a clockwork timepiece and expecting it to become a digital watch!

Lynn Margulis, a professor of botany and biology, published a book in 2003 in collaboration with her journalist son Dorion Sagan which offered an alternative to the quickly waning idea that evolution progressed by means of inherited genetic mutations.²⁵⁶ In this work they point out in no uncertain terms that genetic mutations generally confer only disease, death and decay:

*“... 99.9 percent of the mutations are deleterious. ... [The] influence [of random mutations] was mainly by loss, alteration, and refinement. One mutation confers resistance to malaria but also makes happy blood cells into the deficient oxygen carriers of sickle cell anaemics. Another mutation converts a gorgeous newborn into a cystic fibrosis patient or a victim of early onset diabetes. ... mutation by itself usually generates sick or deficient life forms.”*²⁵⁷

Stephen C. Meyer, in reviewing the work of developmental biologists who study embryos, made the same assessment concerning the effect of mutations:

*“... developmental biologists such as Christiane Nüsslein-Volhard and Eric Wieschaus have also discovered that mutations that occur early in the developmental trajectory of an animal (from embryo to adult form) are inevitably fatal.”*²⁵⁸

255 **Francisco J. Ayala.** The Mechanism of Evolution. PP14-27. Chapter 2 in Evolution. A *Scientific American* publication. September 1978. P17.

256 Margulis was married to Carl Sagan the astronomer from 1957 to 1964. She was married a second time to Thomas N. Margulis but divorced in 1980. Her comments on being married after two failed marriages as reported in her obituary in the Washington Post is worth recording here: “I quit my job as a wife twice,” she once said about the difficulties of balancing science and domestic life. “It’s not humanly possible to be a good wife, a good mother and a first-class scientist. No one can do it — something has to go.” https://www.washingtonpost.com/local/obituaries/lynn-margulis-leading-evolutionary-biologist-dies-at-73/2011/11/26/gIQAQ5dezN_story.html

257 **Lynn Margulis and Dorion Sagan.** Acquiring Genomes: A Theory of the Origin of Species. Basic Books. 2003. P11,12,29,72.

258 **Stephen C. Meyer.** Neo-Darwinism and the Origin of Biological Form and Information. Chapter 2 (P105-137) in Theistic Evolution. Edited by J. P. Moreland, Stephen C. Myer, Christopher Shaw, Ann K. Gauger, and Wayne Grudem. Crossway, Illinois. 2017. P120..

This finding needs to be grasped hold of. In order for evolution to work we require mutations in the very earliest stages of life. However, if we get mutations at such an early stage they lead to the death of the individual. Thus far from being the engine which drives evolution, we find that mutations are, in fact, working against the idea of forming new species, of going from a low degree of complexity to a higher form.

However apart from their rarity and their degenerative influence, mutations can never really introduce new information, nor can they lead to evolutionary change. This might be thought of as a reactionary statement. Surely scientists have many examples? Well to test this we should look at the specifications and requirements for GCSE pupils in schools. If mutations are the means by which evolution introduces new novelty, then surely the examples given to prospective future biologists would be the best? It turns out that most GCSE specifications only use the example of antibiotic resistance in bacteria.²⁵⁹ Older specifications also cited the case of sickle cell anaemia, and this is reflected in the BBC information.²⁶⁰ We have already discussed this condition and it is beyond absurd to imagine that it confers any real benefits. It certainly does not introduce novelty or new structure, and I am certain that those who suffer from this disease do not consider themselves benefited. But what about the case of antibiotic resistance in bacteria? Well in this case, two things should be noted. First the change from normal to antibiotic resistance is trivial and can be accepted on the basis of normal natural selection. All we are dealing with is bacteria and no new species or novel structures have been created or observed. In fact a loss of information occurs. In some instances the bacteria become resistant to the antibiotic because they have lost that aspect or structure which the antibiotic targets and so are unaffected by it!²⁶¹ Second, the antibiotic resistant bacteria only thrive in certain conditions, that is, where all normal bacteria are being destroyed by the antibiotics. In normal circumstances the antibiotic resistant bacteria will die out – because they are the less well adapted.

That mutation does not really effect evolution is also something we can establish from the

259 See, for example: OCR GCSE 21st century science, Biology B. B6.1. Edexcel (Pearson) GCSE (9-1) Biology. 4.3. AQA GCSE Biology 8461. 4.6.3.4.

260 <https://www.bbc.co.uk/bitesize/guides/zhp4jxs/revision/3>

261 Antibiotics work in a variety of ways to kill off the bacteria by disrupting its normal life functions. Some work by attacking the cell membrane, others by disrupting protein synthesis. The rise in use of antibiotics has caused the increase in antibiotic resistant strains. Some antibiotics attack a specific protein and how it is formed in bacteria. Imagine if a mutation in one bacteria means that it no longer produces this protein. It will not be affected by the antibiotic and will therefore survive. However, it will not be as efficient or work as normal because of its lack of this one specific protein, but it does survive. As an analogy imagine a community living in a certain town. A powerful enemy comes and destroys the town only because they have access to a forge and can manufacture weapons. Another similar town notices this and so removes their forge and the blacksmith who works there. Because of this action the powerful enemy passes them by and leaves them alone. This community survives but it has lost the ability to forge metal and make useful implements as a result. This scenario features in 1Samuel 13:19f.

literature. Professor Lynn Margulis developed her alternative mechanism for evolution (symbiotic merger – rejected by many), precisely because the mechanism of mutation was such a failure.

*“Mutation accumulation does not lead to new species or even to new organs or new tissues. ... Even professional evolutionary biologists are hard put to find mutations, experimentally induced or spontaneous, that lead in a positive way to evolutionary change.”*²⁶²

Margulis highlights the research that has been done to investigate how mutation actually works. Fruit flies have been the creature of choice, but no new species has ever been observed despite countless experiments traversing numerous generations. Fruit flies stubbornly remain recognisable as fruit flies, despite deformities introduced by mutations. The idea of mutation leading to new species is a fantasy redolent of the comic book superheroes, as Margulis has noted:

“Development of superpowers through chemical- or radiation-mediated mutation – theoretically giving rise to new species – is a phenomenon found mostly in comic books. Mutations are defined as differences between parent and offspring that may be transferred genetically to the next generation of offspring. They are either spontaneous or induced by treatment. H. J. Muller, by exposing fruit flies to X rays, helped discover the chemical basis of mutation. Many others have applied mutagenic agents, either radiation or chemicals, to many kinds of organisms with success. Heritable changes are documented but all who have tried to mutate to form new species have failed. Cancer drugs are mutagenic but they never lead to the making of new species. Various kinds of DNA base-pair changes and chromosomal mutations sometimes generate small heritable changes.

*But mutation by itself usually generates sick or deficient life forms. ... New mutations generate variations in members of the same species but the accumulation of mutations has never been shown – in laboratory organisms or in the field – to lead to crossing of the species barrier.”*²⁶³

According to Margulis there is no evidence whatsoever in all of the literature which indicates that mutations lead to new structures or new species:

*“One mutation causes a flighty red-eyed fruit fly to fail to take wing. Never, however, did that one mutation make a wing, a fruit, a woody stem, or a claw appear. Mutations, in summary, tend to induce sickness, death, or deficiencies. No evidence in the vast literature of heredity change shows unambiguous evidence that random mutation itself, even with geographical isolation of populations, leads to speciation.”*²⁶⁴

262 **Lynn Margulis and Dorion Sagan.** Acquiring Genomes: A Theory of the Origin of Species. P11,12.

263 **Lynn Margulis and Dorion Sagan.** Acquiring Genomes: A Theory of the Origin of Species. P71,72.

264 **Lynn Margulis and Dorion Sagan.** Acquiring Genomes: A Theory of the Origin of Species. P29.

We noted earlier that for a mutation to be passed on to offspring, it must occur in sex cells or in the early stages of the embryo's development. And we further discovered that such mutations lead to the early death of the animal experiencing them.²⁶⁵ Stephen C. Meyer brings home the conundrum that evolutionary biology faces:

“The problem of “embryonic lethals” has created a dilemma for evolutionary theorists: the kind of mutations needed to generate new body plans – in particular, early-acting beneficial body-plan altering mutations – never occur. The kinds of mutations that do occur – late-acting mutations that affect small clusters of somatic cells – don't generate new body-plans. The kind of mutations we need in order to produce new body plans, we don't get. The kind we get, we don't need.

How then does the evolutionary process overcome this difficulty to produce major changes in animal form? Evolutionary biologists have not answered this question.”²⁶⁶

The stability of enzyme (proteins).

On an entirely different tack we must also reference the work of biochemists working on protein structures. We shall look at protein structures in more detail later on. However Douglas Axe, the director of the **Biologic Institute**, in seeking to manufacture proteins (specifically enzymes) discovered that there are an incredibly small number of polymer chains that can form into **functional** proteins. He writes:

“... based on my research, I claim that enzymes (the protein molecules that do life's chemistry) cannot be invented by any accidental evolutionary process. Life as we see it depends on highly proficient enzymes. All built within cells by linking many amino acids (typically hundreds) together in precise sequence. These special sequences enable the long chains of linked amino acids to fold up into complex, function-specific structures.”²⁶⁷

Stephen C. Meyer highlights Axe's work to show the sheer impossibility of the random formation by evolutionary means of a single enzyme made up of 150 amino acids:

“But how rare are protein folds? While working at Cambridge University from 1990-2003, molecular biologist Douglas Axe set out to answer this question using a sampling technique called “site directed mutagenesis.” His experiments revealed that, for every DNA sequence that generates a short functional protein fold of just

265 **Stephen C. Meyer.** Neo-Darwinism and the Origin of Biological Form and Information. P120..

266 **Stephen C. Meyer.** Neo-Darwinism and the Origin of Biological Form and Information. P120.

267 **Douglas Axe.** Three Good Reasons for People of Faith to Reject Darwin's Explanation of Life. Chapter 1 (P83-104) in Theistic Evolution. Edited by J. P. Moreland, Stephen C. Myer, Christopher Shaw, Ann K. Gauger, and Wayne Grudem. Crossway, Illinois. 2017. P84,85.

150 amino acids in length, there are ten to the seventy-seventh power non-functional combinations – ten to the seventy-seventh amino acid arrangements – that will not fold into a stable three-dimensional protein structure capable of performing a biological function.”²⁶⁸

Looked at another way, Axe's work shows the incredible sensitivity of enzymes. It is well known that enzymes only work in highly selective environments (i.e. at specific pH and temperature values). If the pH or temperature changes significantly the enzyme breaks down by losing its shape and therefore its function. So if there is only one sequence of amino acids which will fold to form a working enzyme out of 10^{77} possible sequences, what does this mean for mutations? The enzyme is constructed from a copy of the DNA with a precise sequence of base pairs. If one of the base pairs changes by mutation, the amino acid sequence of the constructed enzyme will be different and it will not fold correctly to form the working enzyme. Given that enzymes must be constructed with precision to enable the 3D structure of folds to form, it is the height of folly to suggest that such has come about through random trial and error over millions of years. Even the oft-repeated mantra that given enough time the seemingly impossible will become possible is forlorn and futile. Meyer notes that if we assume a three and a half billion year time-frame for life on earth, then there has only ever been ten to the fortieth individuals (10^{40}) in existence. If each of these has passed on a new gene sequence through mutation to its offspring every time it reproduces, this would lead to only 10^{40} opportunities for a new sequence to be trialled. This represents an incredibly small fraction ($10^{40}/10^{77}$ or $1/10^{37}$) of the amount required to have the one opportunity in 10^{77} .²⁶⁹ Meyer sums up the situation:

*“Thus, the mutation and selection mechanism does not have enough time in the entire [supposed] multibillion-year history of life on Earth to generate but a small fraction (one ten trillion, trillion, trillionth, to be precise) of the total number of possible nucleotide base or amino-acid sequences corresponding to a single functional gene or protein.”*²⁷⁰

Bear in mind that the above calculations are for just one enzyme (protein). Consider the number of different polymer molecules in a human body! One professor of biochemistry suggests that there are probably 20,000 different proteins in the human body.²⁷¹ This does not include the two other types of biopolymers: polysaccharides and lipids (fats). To suggest that all of these proteins came about

268 **Stephen C. Meyer.** Neo-Darwinism and the Origin of Biological Form and Information. P116.

269 **Stephen C. Meyer.** Neo-Darwinism and the Origin of Biological Form and Information. P117.

270 **Stephen C. Meyer.** Neo-Darwinism and the Origin of Biological Form and Information. P116.

271 <https://sandwalk.blogspot.com/2016/12/how-many-proteins-in-human-proteome.html>

through mutation and natural selection is laughable in the extreme.

Common sense tells us that you do not get something for nothing. It also tells us that in general, whatever effort we put into something we never get a 100% return. Energy is always wasted to some degree. And yet evolutionary biology wants us to believe that life began with chemicals and has progressed through countless stages to reach the complex forms that all humans (and other creatures besides) display today.

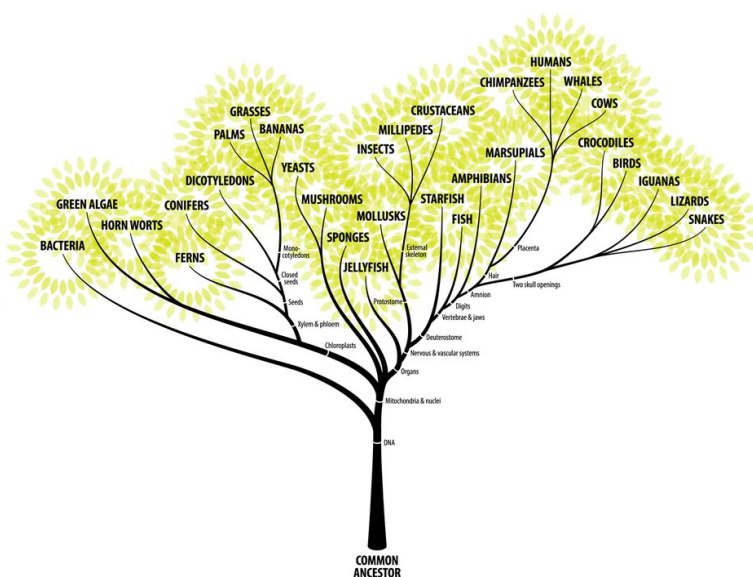
“As long as proponents of evolution continue to claim that genius wasn't needed for Earth to become populated with these remarkable living things we see around us, they set themselves up for refutation. We don't have to become technical experts in genetics or natural selection or anything else to know their claim is wrong. All we need to know is that for unintelligent causes to have imitated genius on such a vast scale would require a very large convergence of impossible coincidences, which is (of course) utterly impossible.”²⁷²

Natural selection and descent with modification.

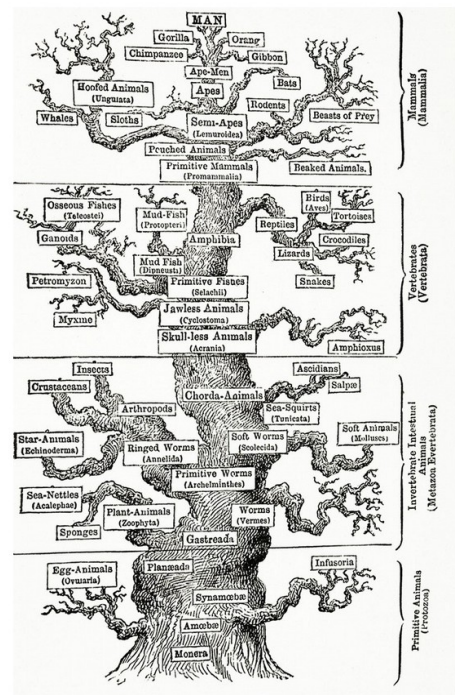
Darwin's idea of natural selection was devised to show how it could be thought that all creatures derived from a single ancestor. In modern text books this is depicted by what is known as “the tree of life” (figure 6). These have been constructed by looking at the similarities and differences of body plan and structure. Mammals form a distinct class because they all share common features such as possession of hair or fur, mammary glands in females, the suckling of young and so on. These are sometimes referred to as **morphological** trees, to indicate the idea that the relationships are derived from morphology or body structure. Thus Darwin, and all evolutionary biology since then, has thought of all life as being interconnected, and derived from a single source or ancestor, and that all life forms have arisen through the process of natural selection. Is such an idea plausible? To begin to answer such a question, we need to consider the type of reasoning that is employed. It must be understood that the argument of descent from a common ancestor is not arrived at either by deductive reasoning nor by inductive reasoning – the two main types of logical argument used in modern science – but by abduction. In connection with this idea of abduction, consider the example we noted in chapter 1:

- The ground outside my house is wet.
- Wetness is caused by rain.
- It must have rained.

272 **Douglas Axe.** Three Good Reasons for People of Faith to Reject Darwin's Explanation of Life. P98,99.



A modern example.



Haeckel's tree of life.

Figure 6.

We noted earlier that the problem with such a form of reasoning is that the conclusion is not at all certain because there are many other explanations for the two stated premises, (e.g. by flooding, by a burst water main, by spillage, by a hosepipe, by a lawn sprinkler and so on). Undaunted by this difficulty in philosophy scientists continue by speaking of an “inference to the best explanation.” However this idea raises serious problems. Who decides which is the “best explanation”? This will, of course, depend upon what you hold dear and sacrosanct. To the atheist, any concept involving the supernatural is automatically ruled out as not being the best! Some scientists opt for what they term the simplest or more economical explanation and for many the notion of God is far from that! However why should the best explanation be the simplest? Again the problem is that we need to start from an accepted standard, a given foundation. For the Christian this is Scripture – or what God has to say.

A second problem for the idea that all life is derived from a common ancestor comes from the prime evidence used for evolution, namely the fossil record. In Darwin's day the level of knowledge of the fossil record was poor, but since then the fossil record has been studied

extensively, and there is one fact which has been repeatedly confirmed which contradicts the notion of a single common ancestor. Darwin lamented the fact that he could show no *gradual* changes through time using selected creatures, but he hoped that (given further research) the pattern of change (which could be illustrated by the *imagined* tree of life) would be evident also in the fossil record. However it has been repeatedly demonstrated that there is an abruptness to the fossil record. The so-called “Cambrian explosion” is one such example, but there are many others besides.²⁷³ On top of this it is well known that the majority of fossil finds occur in mass burials or graveyards.²⁷⁴ In a monumental work on evolutionary theory, the palaeontologist Stephen Jay Gould, discusses the findings of many fellow palaeontologists. Gould describes their collective experience and concludes that there is no evidence for gradual and slow evolution within the fossil record. He writes:

*“The long-term stasis, following a geologically abrupt origin, of most fossil morphospecies, has always been recognized by professional palaeontologists.”*²⁷⁵

Gould uses many examples to establish his conclusion but we shall just look at the first and last of these. He begins with a palaeontologist from the first half of the twentieth century, H. F. Cleland, whom Gould describes as: “*a palaeontologist's palaeontologist,*” and thus someone clearly respected in the field. Cleland wrote of the famous Devonian Hamilton section in New York State in 1903:

“In a section such as that of the Hamiltonian formation at Cayuga Lake ... If the natura non facit saltum is granted, one should, with some confidence, expect to find many – at least some – evidence of evolution. A careful examination of the fossils of all the zones, from the lowest to the highest, failed to reveal any evolutionary changes ... The conclusion must be that ... the evolution of brachiopods, gastropods, and pelecypods either does not take place at all or takes place very seldom.”*²⁷⁶
**Nature does not make leaps.*

The same general story is repeated by many other palaeontologists, and then Gould concludes his discussion by appealing to George Gaylord Simpson, whom he describes as the “*most biologically astute palaeontologist of the 20th century*”:

“In what I regard as the most fascinating and revealing comment of all, George

273 The 'earliest' fossils known (according to evolutionary time tables) appear in Cambrian rocks. These fossils are of fully formed creatures showing no development or change in time.

274 A simple search online will show many examples of these.

275 **Stephen Jay Gould.** The Structure of Evolutionary Theory. Harvard University Press. 2002. P750.

276 **Stephen Jay Gould.** The Structure of Evolutionary Theory. P750.

Gaylord Simpson ... acknowledged the literal appearance of stasis and geologically abrupt origin as the outstanding general fact of the fossil record, and as a pattern that would "pose one of the most important theoretical problems in the whole history of life" if Darwin's argument for artifactual status failed."²⁷⁷

There are other features of the fossil record which cut against the general idea of biological evolution to be sure, such as the fact that fossilisation requires rapid burial, but the testimony from palaeontology we have considered here is that fossils do not show gradual change with time. Rather fossils appear abruptly, fully formed, and then show "stasis" or no change over time. Such a fact is also supported by the many examples of so-called "living fossils," that is fossils thought to be millions and millions of years old showing identical structure and form to examples living today.²⁷⁸

One final issue with the idea of a common ancestor comes from the study of genetics. Patterns in the supposed evolution of various lineages have traditionally been constructed on the basis of similarities in body features. As we noted earlier, mammals are considered a distinct class with various common features. One of these commonalities is their similarity in body structures. One of the examples which is used in biology lessons for teenagers studying at GCSE level, is the "pentadactyl limb," (figure 7). However when studies in genetics progressed, it became possible to consider the relationships between species *genetically*. If mammals shared very closely related structures and body plans, then their genetic make-up ought to be similar too. Surprisingly, though, it has become apparent that using genetic information results in very different relationships. The "tree of life" constructed by structural features and similarities in behaviour as traditionally pursued, is not the same as the "tree of life" constructed using genetic markers.

Writing against the notion of common descent, Casey Luskin, (an Earth scientist and a lawyer), comments:

"The basic problem is that one gene leads to one version of the "tree of life," but another gene leads to an entirely different tree. What seems to imply a close evolutionary relationship in one case (i.e. two similar genes), doesn't in another. To put it another way, biological similarity is constantly appearing in places where it wasn't predicted by common descent, leading to conflicts between phylogenetic trees."²⁷⁹ When two trees conflict, at least one must be wrong. And if one tree must be wrong (i.e., in one case genetic similarity was not a good indicator of an

277 **Stephen Jay Gould.** The Structure of Evolutionary Theory. P755.

278 The Coelacanth was long thought to be an extinct fish from 400 million years ago until a living form was discovered off the coast of Africa by fishermen in 1938. There is no difference at all between the fossil examples and the living forms. There are numerous other examples of "living fossils" showing the truth that the fossil record is, in fact, a record of stasis or no change.

279 The term "phylogenetic tree" is the technical term for "tree of life," showing the evolutionary relationships among various biological species or other entities

evolutionary relationship), how do we know that both aren't wrong (i.e., in both cases genetic similarity is not indicating an evolutionary relationship).”²⁸⁰

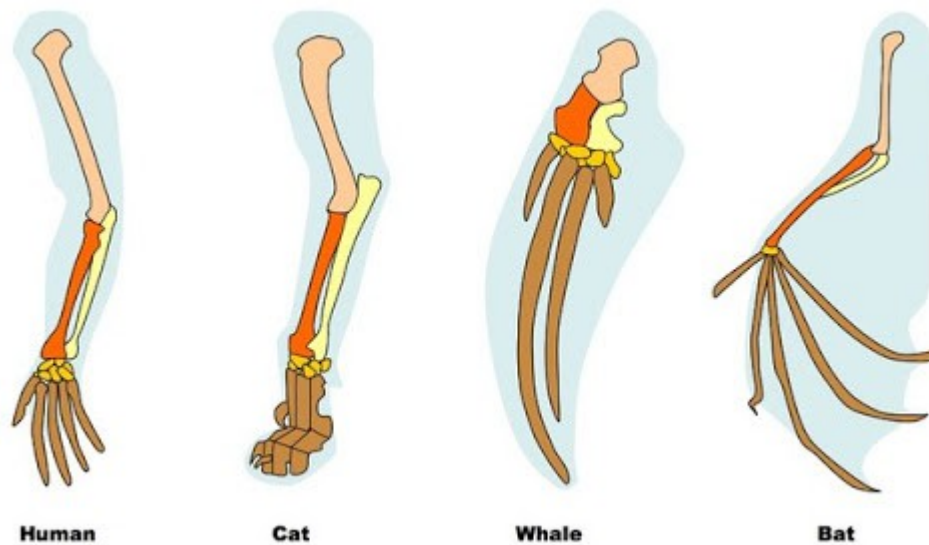


Figure 7.

It turns out, following Luskin, that within the technical literature there are numerous instances of “contradictory phylogenetic trees” across taxonomic groups. It is also clear that using different proteins as markers of similarity will yield very different phylogenetic trees. Such a situation is by no means piecemeal, for Luskin continues:

*“Perhaps the most candid admissions came in a 2009 article in New Scientist entitled “Why Darwin Was Wrong about the Tree of Life.” It quoted researcher Eric Baptiste admitting that “the holy grail was to build a tree of life,” but “today that project lies in tatters, torn to pieces by an onslaught of negative evidence.” According to the article, “[m]any biologists now argue that the tree concept is obsolete and needs to be discarded.”*²⁸¹

Not only do molecule-based phylogenetic trees conflict with one another, but also it turns out that they disagree with those drawn up from similarities in body structure (or morphology). Luskin notes:

²⁸⁰ **Casey Luskin.** Universal Common Descent: A Comprehensive Critique. Chapter 11 (P363-402) in Theistic Evolution. Edited by J. P. Moreland, Stephen C. Myer, Christopher Shaw, Ann K. Gauger, and Wayne Grudem. Crossway, Illinois. 2017. P380.

²⁸¹ **Casey Luskin.** Universal Common Descent: A Comprehensive Critique. P381.

“A review article in Nature titled “Bones, Molecules, or Both?” explained that “Evolutionary trees constructed by studying biological molecules often don't resemble those drawn up from morphology,” admitting that “Battles between molecules and morphology are being fought across the entire tree of life.””²⁸²

We are thus justified in stating that there is, in point of fact, no basis whatsoever for assuming that molecular similarities between creatures indicates relationship or ancestry. Luskin concludes:

“... conflicts between morphological and molecular trees challenge common ancestry.”²⁸³

What then of the idea of a **common ancestor**?

Natural selection embraces death.

From what we discussed earlier on, general evolution is essentially the idea that all things have originated from absolutely nothing at all, and that through a process of change over time, governed by natural law, the end result is the rich and varied complexity we know today. With respect to biological evolution, the starting point (conveniently) is the first bio-polymers capable of replication in a primordial soup of chemicals, which through a process of natural selection and chance mutations has resulted in successive increasing levels of organisation over vast aeons of time. Now if you read the definitions of evolution by natural selection noted earlier in conjunction with the idea of genetic mutations, you will perhaps not be aware that an essential ingredient of the theory is death itself. Have a glance at another typical definition:

“Natural selection is this differential success in reproduction, and its product is adaptation of organisms to their environment. Even if the advantages of some variations over others are slight, the favourable variations will accumulate in the population after many generations of being disproportionately perpetuated by natural selection.

Thus, natural selection occurs through an interaction between the environment and the variability inherent in any population. Variations arise by the chance mechanisms of mutation and genetic recombination, ... but natural selection is not a chance phenomenon. Environmental factors set definite criteria for reproductive success.”²⁸⁴

There is no explicit statement in this definition (or in any of the previous ones) to the effect that death is a cornerstone to evolution. Yet as you work out the implications of the idea, it soon

282 **Casey Luskin.** Universal Common Descent: A Comprehensive Critique. P230-233.

283 **Casey Luskin.** Universal Common Descent: A Comprehensive Critique. P384.

284 **Neil. A. Campbell.** Biology. Third edition. 1993. The Benjamin/Cummings Publishing Company, Inc. P 428.

becomes apparent that without death there can be no advance or increase in complexity. However in an article entitled *“Ashes to ashes, dust to dust”* for the *New York Times*, the atheistic biologist Olivia Judson wrote the following:

“We tend to think of death as the end of life — and indeed, for every individual, it is. But it is also essential for life. Without death, there would be no evolution (or at least, it would have to proceed rather differently from the way it does today). More important still, without death, there would be little life.

Death for one organism means life for another. This is obviously true for animals — they eat other organisms to live. Less obviously, it is also true for plants. Plants appear passive and pacific, standing there with leaves spread, collecting light from the sun. But appearances can be deceptive. Some plants have evolved to poison the ground to stop other plants growing near. Others evolve to grow fast, so they don’t risk living in someone else’s shade: if they fail to get enough light and space, they will die.”²⁸⁵

Hudson is clear that death is “essential for life.” Using a number of examples from the animal and plant kingdoms she demonstrates how death is a part of natural life. Death is natural and normal, in her view, even an essential feature for the generation of new life according to an evolutionary world view. This inescapable fact raises problems for the Christian. Death is not natural and was introduced as a result of sin.²⁸⁶

Natural selection as an approximation.

Many who accept a Biblical view of creation also accept natural selection as a part of what is often referred to as “observational science.” Such groups are keen to make an important distinction between science that can be repeated and observed today and tomorrow, from speculative science which involves the past (historical science), about which we have no definite knowledge. In short many creation-based ministries accept that natural selection is a good approximation to what occurs in time in our present age, assuming a secular view point for creation.²⁸⁷ Populations do change over time. But what is not accepted by these groups is the idea that such change is continuous and can produce new structures. The essential nature of the species under consideration never alters. Dogs may gain shorter fur, longer legs, and so on, but they always remain dogs!

285 **Olivia Judson.** “Ashes to ashes, dust to dust.” NY Times 11th October 2008. Judson is an evolutionary biologist who has written for a number of publications including Nature and was research fellow at Imperial College London when this article was published. <http://judson.blogs.nytimes.com/2006/06/26/ashes-to-ashes-dust-to-dust/>

286 Genesis 2:17; 3: 19; Romans 6:23.

287 In other words, leaving aside the fact that God is immanently involved in creation moment-by-moment down to the most basic root of all, we can use the idea of natural selection as an approximation.

Natural selection and sex.

One of the great problems for evolutionists is to come up with some explanation as to why there is such a thing as sex. Many organisms reproduce asexually. Bacteria, for example, grow by a cell division process called mitosis. Two new “daughter” cells are created from one original parent cell by this process, which requires the duplication of the genetic material. The two daughter cells are genetically identical to the original parent cell. The two newly made cells can then split and divide in the same way to form four more “daughter” cells. This duplication process continues and the bacterial colony grows.²⁸⁸

Male and female are not the same.

But a much larger group of creatures reproduce by means of sexual reproduction. In this instance whilst both sexes are considered as all part of one species, there are significant differences between the male and female forms. In the case of humans there are more differences than those which are obvious. For example, we find that men and women's brains are not the same. In 2019 one group of researchers using MRI and sophisticated computational techniques state:

“This study provides a new insight into the structure difference between men and women, which highlights the importance of considering sex as a biological variable in brain research.”²⁸⁹

Work undertaken showed that differences between male and female brains “*likely exist in the whole-brain range.*”²⁹⁰ The finding that there are structural differences across the whole brain between men and women features in their concluding statement:

“In summary, by using the designed 3D PCNN algorithm, we confirmed that the gender-related differences exist in the whole-brain FA images as well as in each specific brain regions. These gender-related brain structural differences might be related to gender differences in cognition, emotional control as well as neurological disorders.”²⁹¹

288 Many other species are asexual such as: planarians, annelid worms, sea stars, many fungi and many plants.

289 **Jiang Xin, Yaoxue Zhang, Yan Tang and Yuan Yang.** Brain Differences Between Men and Women: Evidence From Deep Learning. Original research: Front. Neurosci., 08 March 2019. <https://doi.org/10.3389/fnins.2019.00185>
<https://www.frontiersin.org/articles/10.3389/fnins.2019.00185/full>

See also: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6418873/>

290 **Jiang Xin, Yaoxue Zhang, Yan Tang and Yuan Yang.** Brain Differences Between Men and Women.

291 **Jiang Xin, Yaoxue Zhang, Yan Tang and Yuan Yang.** Brain Differences Between Men and Women.

Now it is necessary, at this stage, to report that findings such as these have been denied. Lise Eliot, writing a review of a book by Gina Rippon²⁹² about brain research in *Nature* made this comment:

*“Yet, as The Gendered Brain reveals, conclusive findings about sex-linked brain differences have failed to materialize. Beyond the “missing five ounces” of female brain — gloated about since the nineteenth century — modern neuroscientists have identified no decisive, category-defining differences between the brains of men and women.”*²⁹³

Of course the issue is fraught with emotional hype and bluster. Women have felt side-lined, exploited, and under appreciated, perhaps with some justification. Meanwhile, at this moment in time men are currently experiencing bad press! One wonders why the church has not taught clearly on the issue of man's created form? Now part of the issue is cultural, to be sure, but the research by Xin, Zhang, Tang and Yang is recent, and sought to overcome the conflicting studies of former work by using a more sophisticated 3D technique. Rob Pascale and Lou Primavera writing in *Psychology Today* in 2019 sought to review the current situation. After discussing a range of differences and studies they conclude:

*A reasonable conclusion is that it's both—there may be neurological differences, but there are also cultural influences. The percent of differences that are neurological vs. societal/cultural (i.e. nature vs. nurture) is anybody's guess at this point in time. This debate is likely to continue for quite some time. At least that gives researchers something to do.*²⁹⁴

However Rippon's book is controversial because neuroscience *in general* recognises that men and women's brains are definitely different. The evolutionary psychologist Diana Fleischman, from Portsmouth University, made it clear in an interview that Rippon's book is contrary to the mainstream findings of neuroscience.²⁹⁵ Apparently it is not that difficult to recognise a female from a male brain in autopsy.²⁹⁶ Rippon's work is vigorously contested by other neurobiologists. Larry

292 **Gina Rippon** is professor of cognitive neuroimaging at the Aston Brain Centre, Aston University, Birmingham.

293 **Lise Eliot**. Neurosexism: the myth that men and women have different brains. *Nature*. Review of: The Gendered Brain: The New Neuroscience That Shatters The Myth Of The Female Brain. *Gina Rippon*. The Bodley Head (2019). <https://www.nature.com/articles/d41586-019-00677-x>

294 **Rob Pascale** and **Lou Primavera**. Male and Female Brains. Are they wired differently? *Psychology Today*. Posted April 25th 2019. <https://www.psychologytoday.com/us/blog/so-happy-together/201904/male-and-female-brains>

295 <https://www.youtube.com/watch?v=tTEi2-FAEZE>

296 **Michael Price**. Study finds some significant differences in brains of men and women. *Science*. April 11th 2017. <https://www.sciencemag.org/news/2017/04/study-finds-some-significant-differences-brains-men-and-women>

Cahill, a professor of neurobiology, wrote the following in connection with Ripon's book in an online biology journal:

*“Turns out that yet another book, this one with a fawning review in Nature, claims to “shatter” myths about sex differences in the brain while in fact perpetuating the largest one. Editors at Nature decided to give this book their imprimatur. Ironically, within a couple of days of the Nature review being published came a news alert from the American Association for the Advancement of Science titled, “Researchers discover clues to brain differences between males and females,” and a new editorial in Lancet Neurology titled “A spotlight on sex differences in neurological disorders,” both of which contradict the book’s core thesis. So what in the name of good science is going on here?”*²⁹⁷

Cahill's area of expertise is listed as: *“Sex influences on the mammalian brain/body.”*²⁹⁸ He describes his research over the last 18 years:

*“For the first half of my career I, like most neuroscientists, assumed that biological sex does not matter for understanding any brain processes outside those directly related to reproduction. It turns out that this view is completely false. Sex influences of all sizes exist at all levels of mammalian brain function, necessarily including the human brain, all the way down to the genetic level. My work the past 18 years focused on understanding sex influences in the specific domain of emotional memory, and in changing all of research/medicine to start actively understanding, rather than denying, sex differences, especially since denying them disproportionately harms women.”*²⁹⁹

Cahill mentions an issue of a neuroscience internet journal published by Wiley in 2017 that is dedicated to work on sex differences. All 70 papers are available for public perusal.³⁰⁰ In one of these it is stated that:

*“A substantial number of studies provide evidence documenting a variety of sex differences in the brain.”*³⁰¹

A cursory glance at the titles shows clearly that these researchers understand that male and female brains are most definitely not the same!

297 **Larry Cahill.** Denying the Neuroscience of Sex Differences. *Quillette*. March 29th 2019. <https://quillette.com/2019/03/29/denying-the-neuroscience-of-sex-differences/>

298 https://www.faculty.uci.edu/profile.cfm?faculty_id=3276

299 https://www.faculty.uci.edu/profile.cfm?faculty_id=3276

300 <https://onlinelibrary.wiley.com/toc/10974547/2017/95/1-2>

301 **Anna Grabowska.** Sex on the brain: Are gender-dependent structural and functional differences associated with behavior? *Journal of Neuroscience Research*. 7th November 2016. <https://doi.org/10.1002/jnr.23953>
<https://onlinelibrary.wiley.com/doi/10.1002/jnr.23953>

Apart from the obvious sex differences between males and females there are other significant differences that modern science has uncovered. Many workers highlight the various behavioural differences between men and women, but the trouble with these is that there are no sharp or clear distinctions. For example, most men are better at spatial tasks and most women are better in observing detail, but this is not always true. Aside from these behavioural variations there are also specific *physiological* differences between the sexes. As a starter, there are significant differences between male and female skeletons. The female skeleton is generally smoother, more delicate and more curved. A female rib cage is more rounded and smaller and the pelvis is not as high as the male's. One of the most significant and notable differences between the sexes is that shown by the pelvis. It differs between males and females both in size and overall shape. In general, the bones of the male pelvis are thicker and heavier. The female pelvis is wider and more circular than the male allowing for childbirth. Males have stronger and denser bones, tendons and ligaments than females. Males have a more pronounced Adam's apple (thyroid cartilage) than females to accommodate larger vocal cords making deeper voices. Male teeth have more dentine whilst female teeth have more enamel.

Other differences are found in muscle mass, amount of fat, and skin response. Females have lower muscle mass than males, and males convert more of their caloric intake into muscle than females. Females tend to convert more than males into fat deposits. This means that males are generally stronger than females. Males have larger hearts and a higher red blood cell count than females. Males also have higher amounts of blood clotting factors. Females have a thicker layer of fat under the skin than males, and female skin can undergo vasoconstriction to a greater extent than male skin. Female skin can synthesize more vitamin D from sunlight than male skin.

Males and females differ in their ability to process alcohol in the liver, and this is due to differences in the enzyme responsible for its break down. In fact it is well known that male and female livers are very different with respect to many other metabolic pathways as well:

“Liver metabolism is markedly sex-dimorphic; accordingly, the prevalence of liver diseases is different between sexes. ... women are more resilient to some liver diseases than men, based on a more compensative NR network.”³⁰²

The underlying differences arise from a difference in gene expression:

302 **Gianpaolo Rando** and **Walter Wahl**. Sex differences in nuclear receptor-regulated liver metabolic pathways. *Biochimica et Biophysica Acta (BBA) – Molecular Basis of Disease*. Volume 1812, Issue 8. August 2011. P964-973. <https://doi.org/10.1016/j.bbadis.2010.12.023> <https://www.sciencedirect.com/science/article/pii/S09255443910003017>

*“One of the less evident physiological differences between males and females resides in the liver. Male and female livers express different subsets of genes, which affect the organ's ability to metabolize certain drugs and hormones. This in turn impacts numerous processes, such as reproduction. While the sexual dimorphism of the liver has been recognized for several decades, scientists are only recently beginning to uncover the genes involved.”*³⁰³

Some researchers lament the fact that although such differences between males and females have been known for quite some time, the treatment of disease in males and females has not taken these differences into account:

*“... the progress in the understanding of sex-specific physio-pathology is still negligible, in spite of the fact that in the last decade there has been a flowering of pharmacological and clinical demonstrations of the profound effects of sex on the response to drugs and disease susceptibility. Such a limited comprehension of the physiological and molecular nature of the differences between male and female biology is deplorable, particularly in the era of precision medicine, where the knowledge of the molecular bases of diseases is considered essential for the development of appropriate, preventive, and therapeutic strategies.”*³⁰⁴

And so males and females are different, but you did not really need me to tell you that! But do the differences between men and women mean one or other of the human species is less or more significant? Well an answer to that question requires some understanding of how humanity has come to be. That is why the debate over origins is so important. If we take an evolutionary view, we might consider one or other of the sexes to more or less developed. If, however, we ground our understanding of human existence in God and His word we discover an essential unity in being whilst a distinction in role and purpose, just as the three members of the holy trinity are all co-equal and are all God yet each has a distinct role or function.

So where did sex come from?

The great problem though for evolution is how to explain these differences. Stephen C. Stearns, a professor of ecology and evolutionary biology asks the question of how sex came about but he cannot supply us with any known answer:

“How did sex originate? The problem is to envision the series of intermediate steps required, first, to transform a bacterial cell into a eukaryotic cell with a nucleus,

303 Genetic Basis For Gender Differences In The Liver. *Science Daily*. October 17th 2003. <https://www.sciencedaily.com/releases/2003/10/031017072805.htm>

304 Sara Della Torre and Adriana Maggil. Sex Differences: A resultant of an Evolutionary Pressure? *Cell Metabolism Essay*. <http://dx.doi.org/10.1016/j.cmet.2017.01.006>. [https://www.cell.com/cell-metabolism/pdf/S1550-4131\(17\)30041-4.pdf](https://www.cell.com/cell-metabolism/pdf/S1550-4131(17)30041-4.pdf)

chromosomes, a spindle apparatus, and mitosis, then to transform mitosis into meiosis. No good overview is known to me."³⁰⁵

In the end Stearns admits a lack of knowledge and has to resort to making a guess, saying that it was probably introduced via some form of repair mechanism!

*"The study of the evolutionary maintenance of sex is currently a very active field. There are more hypotheses and models than evidence that is strong enough to exclude alternatives. We do not yet know what in general maintains mixis. * However, if one had to hazard a guess at this stage, one would say that mixis originated as a repair mechanism and is maintained by pervasive genotype by environment interactions for fitness. I let that statement stand as a challenge for further experimentation."*³⁰⁶

** An intermingling in reproduction.*

Stearns was writing in 1990, but a more recent assessment penned in 2016, comes from another biologist, Laurence D. Hurst, professor of evolutionary genetics at Bath University. Hurst made the following candid admission in response to the question why sex and sex differences exist:

*"Surprisingly, there's no single clear answer to this question. Indeed, to date, researchers have developed more than 20 different hypotheses."*³⁰⁷

Hurst is an evolutionary propagandist and his aim was to show that this is one area where scientists are making progress. However from an evolutionary perspective there is no known benefit to sexual reproduction. From 1990 to 2016, after 26 years of work, evolutionary scientists are none the wiser on sex and how it came to be!

From an evolutionary perspective sex is a tremendous problem. Asexual reproduction *seems* to be more effective in an evolutionary schema, because 100% of the genetic material is passed on to the next generation. David P. Barash, professor emeritus of psychology at the University of Washington, outlines to the students in his evolutionary biology course the problems and disadvantages that sex presents to an evolutionary world view:

305 **Stephen C. Stearns.** The evolutionary maintenance of sexual reproduction. The solutions proposed for a long-standing problem. *J. Genet.* Vol. 69, No. 1, April 1990. P1-10. <https://www.ias.ac.in/article/fulltext/jgen/069/01/0001-0010> P3.

306 **Stephen C. Stearns.** The evolutionary maintenance of sexual reproduction. P9.

307 **Laurence D. Hurst.** Why did sex evolve? Researchers edge closer to solving long standing mystery. The Conversation. February 29th 2016. <https://theconversation.com/why-did-sex-evolve-researchers-edge-closer-to-solving-longstanding-mystery-55407>

“The evolutionary quandary isn’t why so many organisms reproduce without sex, but why any use it. This is because the pay-offs of asexual baby-making are quite clear, while its male-and-female based alternative is loaded with liabilities.... Moreover, sex carries other costs. It requires a partner and finding one can be troublesome. ... a huge toll is often exacted upon males in particular because of male-male competition, ... the need to persuade a chosen member of the opposite sex [in] ... courtship displays... involve[s] expenditure of time and energy, while making the participants more detectable by potential predators. In their quest to be attractive to the opposite sex, male animals ... have ... elaborate secondary sexual characteristics, such as feathers, wattles, and bright colours, which typically exact a substantial metabolic toll. ... females are especially at risk of being physically injured by their male partners, who are frequently larger, more ardent, and not uncommonly disinclined to take no for an answer. ... In addition, there’s the risk of sexually transmitted diseases, a problem that is avoided altogether if ... one refrains from sex!”³⁰⁸

If evolution is all about passing on your genes then why opt for a system which transmits 50% rather than 100%? So why ever did such a system evolve? From an evolutionary world view sex and sexual differences are a bad deal:

“Some biologists, such as the notable theorist George C. Williams ... have glumly determined that evolutionarily speaking, because of all these downsides, sex is simply a bad deal, a biological trap into which our distant ancestors fell, and with which we are stuck.”³⁰⁹

But from the viewpoint of a Biblical world view, these differences are essential. Man was made male and female, and was created in the image of the triune God. Thus our creation reflects aspects of the trinity. The specific details of the creation of woman from man indicate further the close connection between the second person of the trinity, the Saviour Jesus Christ, and His church. These facts, which we shall elaborate on later, are the ground for our understanding of what it is to be human. Far from sex being a “*bad deal*,” the union of man and woman in marriage is meant to show forth the wonderful beauty of Christ's love for His church.

Natural selection and explanation.

Because natural selection has been suggested and promoted without reference to purpose or an end-goal (it is non-teleological), it suffers from another very severe limitation. The effort evolutionary biologists must go to, in order to avoid purpose or teleology is monumental. As a

308 **David P. Barash.** Evolution Is Really Not That Into Sex. Plants and animals have reproduced without sex for eons. So why did nature bother? May 16th 2019. *Nautilus*. <http://nautil.us/issue/72/quandary/evolution-is-really-not-that-into-sex>

309 **David P. Barash.** Evolution Is Really Not That Into Sex.

result the only type of explanation that is often offered is that which really ought to sit under the heading of “description.” Much of what you can read in the literature amounts to describing possible scenarios or likely stories of how things may have happened (“just-so” stories). These are not explanations but merely descriptions. Now this problem, to be fair, is not one limited to evolutionary biology. Because much of modern science rules out anything but matter and energy, it is limited to the mechanistic and materialistic. This means that what we end up with is merely descriptions of events or structures, which are “*explained*” by other materialistic or mechanistic events or structures. I think this problem can be best illustrated by a statement that the physicist James Jeans once made:

*“For suppose – to imagine a simple although not very likely possibility – that it had been found that the pattern of events could be fully explained by assuming that matter consisted of hard spherical atoms, and that each of these behaved like a minute billiard-ball. At first this may look like a perfect mechanical explanation, but we soon find that it has only introduced us to a vicious circle; **it first explains billiard-balls in terms of atoms, and then proceeds to explain atoms in terms of billiard-balls**, so that we have not advanced a step towards a true understanding of the ultimate nature of either billiard-balls or atoms. All mechanical explanations are open to a similar criticism, since all are of the form ‘A is like B, and B is like A’. Nothing is gained by saying that the loom of nature works like our muscles if we cannot explain how our muscles work. We come, then, to the position that nothing but a mechanical explanation can be satisfying to our minds, and that such an explanation would be valueless if we attained it. We see that we can never understand the true nature of reality.”*³¹⁰

To get a handle on a positive understanding of explanation, consider the following words found in John chapter 1 concerning Christ, and John chapter 17 uttered by Christ:

No one has seen God at any time. The only begotten Son, who is in the bosom of the Father, He has declared *Him*.³¹¹

6 I have manifested Your name to the men whom You have given Me out of the world. They were Yours, You gave them to Me, and they have kept Your word. **7** Now they have known that all things which You have given Me are from You. **8** For I have given to them the words which You have given Me; and they have received *them*, and have known surely that I came forth from You; and they have believed that You sent Me.³¹²

310 James Jeans. Physics and Philosophy. P15.

311 John 1:18.

312 John 17:6-8.

In the first statement, the word “*declared*” means to unfold the truth. In the second statement, where we hear the words of Christ, the word “*manifest*” means to make known. Our Lord makes it plain that He came to reveal the Father and His intentions to His disciples. These two statements show to us the nature of God in Christ as One who reveals. Left to themselves man has no understanding nor objective truth. He must rely only on what he can see, hear, taste, touch and smell. But since God has come down to man in the person of Christ, the God-man, we have now an objective angle on all that is. Christ stepped down from heaven's glory – that is beyond, or outside of all that is created – and manifested both Himself and the Father to His disciples.



The impossible triangle. Perth, Australia.

Figure 8.

To look at this another way consider the images shown in figure 8. Viewed at from different perspectives the same object gives a different image to us. We rarely trust to one witness with regard to an event because a single observer cannot comprehend the whole (object or event). Thus a multiple perspective approach gives us a fuller picture of things. Modern science, and particularly evolution, works on a linear and one-minded approach. But in order to consider the nature of humanity we ought really to approach the subject from many angles. But even these different perspectives all come from the human plane, and to really get a handle on things we need God's perspective.

Or to view this issue in yet another way, consider the mathematical incompleteness theorems developed by Kurt Gödel. Gödel pointed out that in order to know something fully you need to consider it from two ***completely different*** points of view. To be clear hear, the different perspectives shown in figure 8 are all of the same type, and would not constitute the two different points of view Gödel requires. Gödel's theorem is mathematical in form but has implications for all logic. A simple statement of the main theorem can be posed like this:

“Anything you can draw a circle around cannot explain itself without referring to something outside the circle – something you have to assume but cannot prove.”³¹³

From the point of view of modern science, the circle drawn encompasses all that there is (the universe). Hence in order to explain the universe we need something beyond the universe – an objective observer – to give us the right perspective. Gödel effectively put an end to the idea of an all-encompassing theory, a theory-of-everything. Effectively we need to start by making assumptions, (or we need to state some axioms with respect to mathematics), before we can then establish a theory or provide an explanation.

In order to explain things, then, you need two categories, or, two distinct reference points. This is why all systems which posit just one type of existence (like materialism and modern science based on materialism) always fail. As Jeans puts it, explaining a billiard ball by saying it is made up of tiny billiard balls gets us nowhere. But there is more to this concept of explanation which modern science, and natural selection as an example of modern science, also falls down on. In fact natural selection (and evolutionary biology in particular) fails in this way spectacularly. In order to show what I mean here we need to tell a story. Imagine there is a ruckus and fight in a school room amongst several boys and certain items on a table get broken in the process. The head master calls the boys to account and asks for an explanation. He gets each of them to state their case. Each, in turn, recounts the events as they saw them. After the head master hears all the accounts he says: “that is all very well boys but I asked for an explanation! Now tell me **why** this happened.” You see the boys simply told the head master what caused the items on the table to get broken. X swung a punch at Y, Y ducked and X knocked the table over smashing all the items that were on it. This is the cause-and-effect type of explanation, (which really amounts to a descriptive recounting of events), not a true ***explanation*** which informs us of why or, in other words, the reason or purpose for the events. The head master probes the boys further and discovers that Y taunted X about his poor exam results. Does this reach the explanation for the fight? Well no. The head master probes further and discovers further that X failed the exams because of a serious difficulty at home and was angered that Y had misread the whole situation. Y was jealous of X and so took the opportunity to taunt him. Well enough has been outlined to show that explanation – true explanation – requires not just a description of cause-and-effect type of explanations, but it must also give us reasons why things happen or why they exist. And yet natural selection refuses to offer this type of explanation. Natural selection operates as a blind chance mechanism, and there is no purpose or reason for it to conjure up one species or any other! Such is utterly unsatisfying. As humans we need explanations

313 See, for example: <https://www.perrymarshall.com/articles/religion/godels-incompleteness-theorem/>

which take the form of why things happen or why things are the way they are. Only by bringing God into the picture can we hope to come to a proper explanation.

Analogy.

Perhaps the most frequently used form of explanation is to appeal to analogy. We use expressions like: “it was like ...” to convey something we have experienced. In trying to explain to people what has happened or what something is, we home in on other things which are similar in nature. There is nothing wrong with identifying similarities between things because this helps in communication. However to get to the kernel of the truth, to get to the underlying reality or what is basic and fundamental to existence, analogy is a poor technique and tool. And yet we cannot escape this type of explanation. Attempting to describe and explain the fundamentals requires us to step outside of this existence in order to “see” things perfectly, and this is something we cannot do. Thus, for example, when Ezekiel tried to describe the vision of God that he was experiencing he used words such as “likeness” and “appearance” and pointed to everyday things to communicate his experience. At the end of his description he says this:

Like the appearance of a rainbow in a cloud on a rainy day, so was the appearance of the brightness all around it. This was the appearance of the likeness of the glory of the LORD.³¹⁴

Consequently you may assume that whether we take a Christian approach or a scientific one, we are all locked up into this problem of using analogy. If Ezekiel the prophet had to resort to such measures then we are all bound or limited to such a method, and we are unable, ultimately, to truly describe things as they really are. We do not seem to be able to see reality in any objective sense because we are a part of the reality we are looking at. Now this scenario may be true for Biblical knowledge as it is for modern science but *only to a degree*. The great advantage of the Biblical picture is that what we are given is **God's** perspective. Ezekiel may have been struggling to describe his experiences, but then Ezekiel was writing under divine guidance and inspiration. What he wrote for us was inspired, that is, it was God-breathed, so that the words we read in the book of Ezekiel are none other than the words from God, who is truly objective.³¹⁵ God is not bound by the limitations we experience, although in order to make sense to us He stoops to our level. God reveals to us from outside of creation and we can be sure that He gives us true and reliable data because of

314 Ezekiel 1:28.

315 The doctrine of the inspiration of Scripture can be studied with reference to 2Timothy 3:16 and 2Peter 1:21 amongst other Scriptures.

His perfect and good nature. Modern science knows nothing of such certainties. The Bible reveals God's word – His perspective – to us, but modern science is locked into the ever changing man-made and man-derived schemes and ideas. which come and go in endless cycles and waves.³¹⁶ The analogies and models that modern science uses are man-made and man-derived and end up leading us in endless circles yielding statements like, “billiard balls are made of small tiny atoms which are like billiard balls”!

316 The book of Ecclesiastes teaches this clearly, but see specifically Ecclesiastes chapter 1, 3 and 7:29, for example.

Chapter 3: Evolution and its problems.

(Abiogenesis, nano-machines, the three-fold problem, complex structures).

In this chapter we shall examine a range of issues which highlight some of the massive problems that evolution faces.

If we grant to those who favour evolution the existence of a simple single celled organism as the starting point, evolution proper describes how more complex organisms can form over vast ages of time through gradual changes by a combination of natural selection and mutations at the genetic level. The great diversity of life seen today is *believed* by evolutionists to have come about through such a process. Now I know that evolutionary biologists reject any direction or purpose in the idea of evolution, but the idea of increased order and complexity is, of necessity, an element in the theory. A single celled organism is far less complex than a human being. According to evolution, life began in primordial waters rich in certain organic molecules to form simple life-forms, but today we have a wide range of organisms which have come about (so it is supposed) through descent with modification, and the vast majority of these are far more complex than the supposed original life forms. These initial thoughts raise a number of questions.

To begin with we shall investigate how evolutionists describe the first stage in the process of biological evolution, that is the move to form bio-molecules (essential for life) from simple organic molecules. In the course of our discussions, we shall examine the impossibility of generating the simplest molecules through the supposed mechanisms of evolution, (time and natural selection), and we shall briefly review some literature on the subject of the the origin of life, (abiogenesis). Then further, we shall consider what precisely is entailed in the basic idea of moving from a simple organism (e.g. a simple single cell) to a more complex one (e.g. man). In this we shall encounter what I call the “three-fold problem of evolution,” namely, the need for material exchange, energy flow, and an increase in information. In the course of what we have to say we will criticise Richard Dawkins idea of “Mount Improbability.” Following this we shall examine various examples within the biological world that cry out for a Designer as explanation. These include a discussion of the bacterial flagellum, the human eye, and the human body. Finally we shall conclude with a look at the issue of probabilities and mathematics. Just how probable is it that evolution as described by modern science is likely?

The origin of life: from simple molecules to proteins.

The process is usually considered from the basic assumption that the early earth had an atmosphere composed of several gases, the most important of which are shown in molecular form in figure 9. These gases are considered to be the basic building blocks which formed the pre-cursors to life, that is, the long chain protein molecules made from amino acids strung together like beads on a chain.

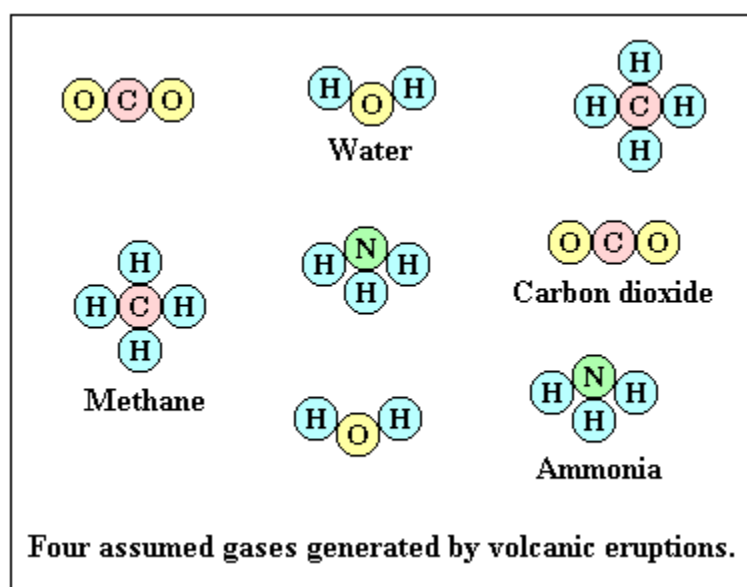


Figure 9.

There are 20 essential amino acids which go to make up the vast array of proteins in living things (see figure 10). It is to be understood that the elements that make up the four gases are all that is needed to make up the amino acids, namely, carbon, oxygen, hydrogen and nitrogen (compare figures 9 & 10).³¹⁷ We can then envisage that various combinations of the four gases could be used to make individual amino acids, just like selecting specific shaped lego bricks to build a house, for example.

Making an amino acid.

The simplest example in figure 10 is glycine with formula: $\text{NH}_2\text{CH}_2\text{COOH}$. To make this molecule we need a source of carbon (methane or carbon dioxide), a source of nitrogen (ammonia)

³¹⁷ In case the reader has forgotten their chemistry, C is the symbol for carbon, H is the symbol for hydrogen, N is the symbol for nitrogen and O is the symbol for oxygen. These elements can combine with one another in precise ratios. So water is made up of two parts of hydrogen to one part of oxygen, or two atoms of hydrogen to one atom of oxygen, hence the formula H_2O .

and some hydrogen (water, methane or ammonia). Thus there are several ways we might arrive at a molecule of glycine, simply by taking the various molecules of gas, breaking them down and making a molecule of glycine. In doing this we may not use all the available atoms. So that just as we might break down a collection of partially built lego bricks to make a larger structure, there may be bits left over. These 'leftovers' will be combined to form the normal molecules that we find occurring in creation.³¹⁸

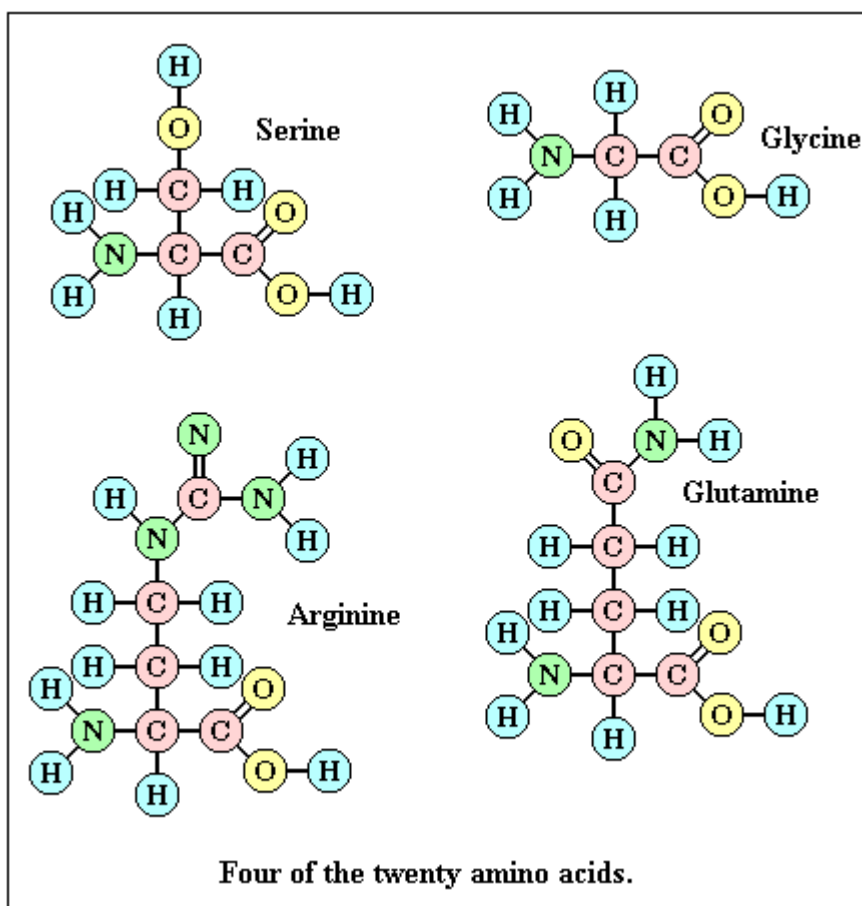
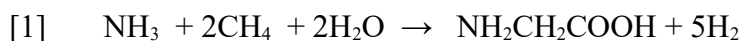


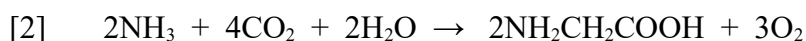
Figure 10.

So here are three possible ways of combining the four available gases to make glycine:

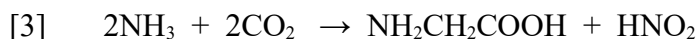


One molecule of ammonia reacts with two molecules of methane and two molecules of water to form one molecule of glycine and five molecules of hydrogen.

³¹⁸ I am using the term “creation” here in place of the more common “nature” because I want to give God the glory for His handiwork. The reader should understand that I intend the idea of all that is contained within the universe.



Two molecules of ammonia react with four molecules of carbon dioxide and two molecules of water to form two molecules of glycine and three molecules of oxygen.



Two molecules of ammonia react with 2 molecules of carbon dioxide to form one molecule of glycine and one molecule of nitrous acid.

Now these reactions are simply speculative. All we have done is to rearrange the various atoms from the gases to form glycine. In each case there are some leftover atoms which we have made into recognisable molecules (hydrogen, oxygen and nitrous acid).

By using what are known as “bond energies” we can calculate the overall energy needed or released to produce each reaction.³¹⁹ Calculations are shown in table 2 below. The positive values of energy for each of the three equations signals the amount of energy required to make each reaction proceed. It is important to recognise that this is the *exact* amount required in kJ (1000 Joules of energy) for each mole of substance. We have computed the energy required per molecule by dividing each value by Avogadro's constant (6.0221409×10^{23} per mole) shown in the last column. The point of doing this last calculation is to show that the energy values are precise. In laboratory conditions we cannot provide the precise amount of energy to each reacting molecule because they are so small and there are so many of them. Consequently we provide energy (in the form of heat, through catalysis and so on) which gives *at least* the required amount for the whole reacting mass. Since a reaction chamber or vessel will have a range of energies, (because you cannot ensure a uniform heat distribution throughout), some molecules will have more or less energy than required, and so will react in different ways producing unexpected by-products. If we could provide precisely the correct amount of energy for each molecule to form we would be enabled to produce exactly what we wanted.

From these three suggested reactions we find that we need to input quite a large amount of energy to get the reaction working. Furthermore each produces another product, (hydrogen, oxygen and nitrous acid). These other products may well have implications for other unexpected reactions! We have not considered, for example, the problem of heat and hydrogen! Hydrogen is a flammable gas and any heat available in the vicinity may be sufficient to ignite it! Nor have we considered the fact that heat and oxygen act to oxidise material, and the glycine we have (hypothetically) made

³¹⁹ These are known by chemists as “bond enthalpies” and are quoted in kJ/mol. Energy released by a reaction is known as “exothermic” and is assigned a negative value. Energy needed to make a reaction happen is called “endothermic” and is given a positive value.

may break down through oxidation. The last of the three possible reactions produces an acid and this may influence the stability of the glycine too.

Simply asserting that various volcanic gases could have combined in some hot place on some rock surface to produce amino acids like glycine does not take into account the difficulties encountered. Both the need of energy required, and the fact that other products may be formed which could affect the initial reaction, are not simply problems but are, in fact, detrimental to the proposed reaction suggested. This is made clear when we examine how glycine is normally made in in standard practice.

Table 2: Energy calculations.

Reaction	Energy required to break reactant bonds (kJ/mol).	Energy required to form product bonds (kJ/mol).	Overall energy needed to make reaction happen (kJ/mol).	Energy required per molecule (aJ).³²⁰
[1]	$(390 \times 3) + (414 \times 8) + (464 \times 4) = \underline{\underline{6728}}$	<u>Glycine:</u> $(390 \times 2) + 293 + (414 \times 2) + 347 + 730 + 351 + 464 = \underline{\underline{3793}}$ <u>Hydrogen:</u> $435 \times 5 = \underline{\underline{2175}}$ <u>TOTAL</u> = $3793 + 2175 = \underline{\underline{5968}}$	$6728 - 5968 = +\underline{\underline{760}}$	<u>1.26</u>
[2]	$(390 \times 6) + (730 \times 8) + (464 \times 4) = \underline{\underline{10036}}$	<u>Glycine:</u> $(390 \times 4) + (293 \times 2) + (414 \times 4) + (347 \times 2) + (730 \times 2) + (351 \times 2) + (464 \times 2) = \underline{\underline{7586}}$ <u>Oxygen:</u> $502 \times 3 = \underline{\underline{1506}}$ <u>TOTAL</u> = $7586 + 1506 = \underline{\underline{9092}}$	$10036 - 9092 = +\underline{\underline{944}}$	<u>1.57</u>
[3]	$(390 \times 6) + (730 \times 4) = \underline{\underline{5260}}$	<u>Glycine:</u> $(390 \times 2) + 293 + (414 \times 2) + 347 + 730 + 351 + 464 = \underline{\underline{3793}}$ <u>Nitrous acid:</u> $390 + (201 \times 2) = \underline{\underline{792}}$ <u>TOTAL</u> = $3793 + 792 = \underline{\underline{4585}}$	$5260 - 4585 = +\underline{\underline{675}}$	<u>1.12</u>

If you wanted to make glycine in the laboratory you would use monochloroethanoic acid,

³²⁰ aJ stands for “atto Joules” or 10^{-18} Joules. Note this is actually the average energy required for all molecules involved. Each different molecule would require a precise amount of energy to form.

(CH₂ClCOOH), and then react this with ammonia (NH₃). The normal procedure is quite complex. One researcher makes the following comments on this classical reaction:

*“... the preparation of glycine by the classical method ... has proved generally unsatisfactory because of the lengthy procedures involved in the isolation of a product free from ammonia and chloride and because of the low yield of pure glycine resulting.”*³²¹

There are complex unwanted side-products formed in the reaction. So to increase yield and reduce these unwanted products a large excess of ammonia is used.³²² Even with these constraints, the product must be purified which requires further exacting procedures. It is clear from these thoughts, that making glycine in controlled laboratory conditions is no simple matter.

But evolution does not have the luxury of having monochloroethanoic acid available. Instead it requires us to start with the four simple gases. So if we were to start with these to get glycine, you need first to form ethanoic acid (CH₃COOH) from methane. But it turns out, that just to make ethanoic acid (CH₃COOH) directly from methane and water is extremely difficult. Recently researchers, publishing in the journal *Nature*, have found a way to generate ethanoic acid from methane under mild conditions. To effect the reaction a highly specialised rhodium-zeolite or rhodium-titanium dioxide catalyst is required, as well as an atmosphere of oxygen and carbon monoxide. The yield is low and the resulting product depends on the the acidity of the mix.³²³ Other research has shown that methane can be converted into ethanoic acid directly using concentrated sulphuric acid, palladium and copper as catalyst, a temperature of 180 °C, and the presence of oxygen.³²⁴ So, again, the task of making simple molecules is, to put it mildly, not straight forward.

Next we need to convert ethanoic acid to monochloroethanoic acid. To do this you would need to react ethanoic acid (CH₃COOH) with chlorine! The problem with this reaction is that it requires another catalyst and it produces several other by-products which are very difficult to separate out. To sum up we need three main reactions (shown in table 3).

The point is that it is not very easy at all to get simple volcanic gases to react and become glycine! If intelligent chemists struggle to alter methane and other gases to produce glycine, with the need for stringent reaction conditions, all the laboratory equipment that goes along with such work, not to mention the exacting need to purify the product, how in the world can we expect such a process to happen *naturally*? The often stock answer to such a question is there is more than

321 <https://pubs.acs.org/doi/abs/10.1021/ja01358a504>

322 <https://pubs.acs.org/doi/abs/10.1021/ja01358a504>

323 <https://phys.org/news/2017-11-methane-methanol-acetic-acid-mild.html>

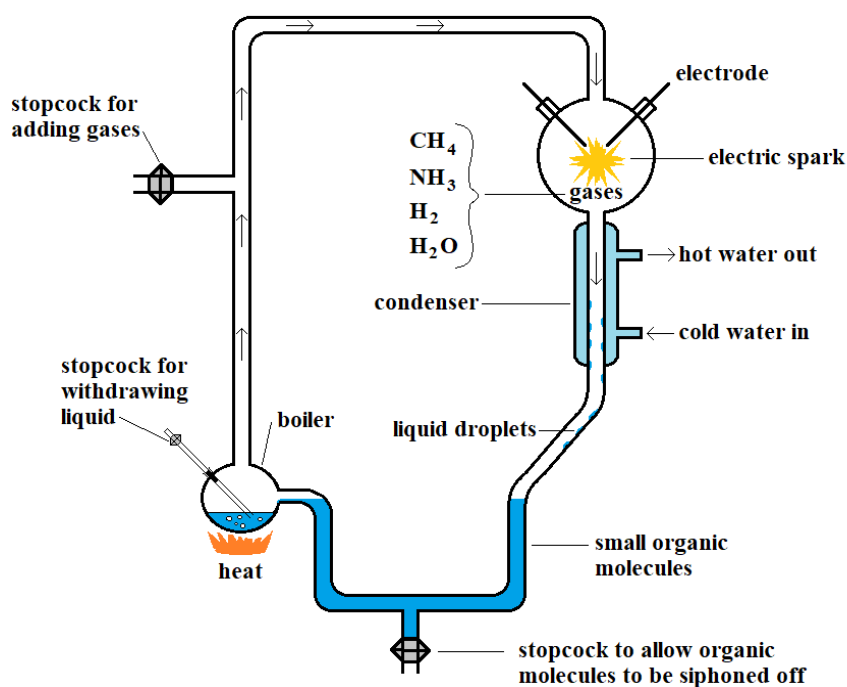
324 <https://pubs.rsc.org/en/content/articlelanding/2004/cc/b405549g#!divAbstract>

enough time throughout the supposed billions of years of earth history, and more than enough space across the globe's surface for at least some molecules to form! Such a hope is forlorn.

Table 3: Making glycine from simple gases.

[1]	Methane needs to be converted to ethanoic acid	Requires specific catalyst, oxygen atmosphere and 180 °C.
[2]	Ethanoic acid needs to be reacted with chlorine to form monochloroethanoic acid	Requires plenty of chlorine gas and needs carefully purifying.
[3]	Monochloroethanoic acid needs to be reacted with ammonia to form glycine.	Requires plenty of ammonia and needs carefully purifying.

A hopeless experiment.



Miller's experiment (1952).

Chemists have attempted to re-create what were thought to be the early conditions of earth to see if it would be possible to generate the simple organic molecules which could form life. S. L. Miller together with his student Harold C. Urey attempted this in 1952.³²⁵ A diagram of his set-up is shown in figure 11.

Just a cursory glance at the apparatus used is enough to show that some kind of intelligent design is needed to get anything at all! The mixture

Figure 11.

separate from other parts of the equipment. Gases are introduced and circulated around towards the

³²⁵ The results were published in 1953 in: Science, New Series, Volume 117, issue 3046 (May 15th 1953). P528-529.

chamber where a spark is generated. The products of reaction in the spark chamber are then immediately condensed and collected out for analysis. Now it turned out that many of the molecules formed in this apparatus were amino acids.

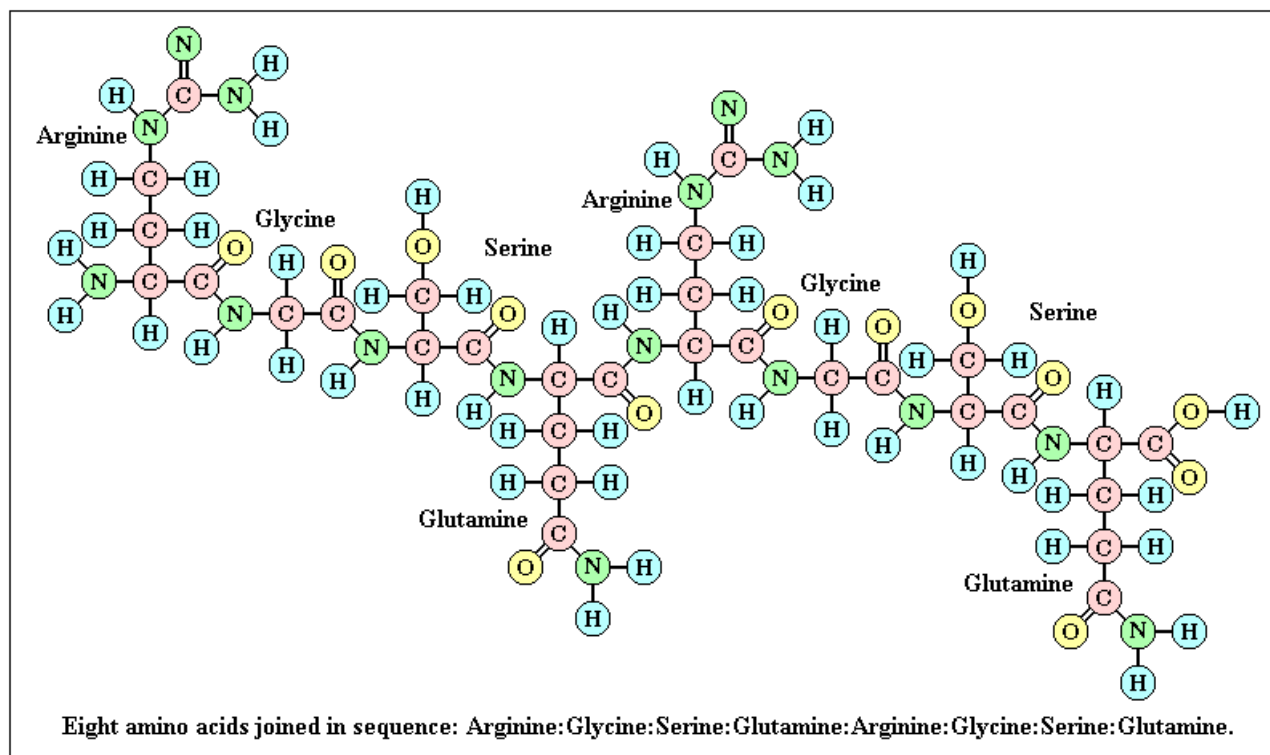


Figure 12.

However aside from the fact that the experiment was designed and organised intelligently, unlike the situation imagined in an early earth, there are other serious flaws with the findings. In the first place, modern scientists believe that the gases Miller and Urey chose for their experiment are wrong. It is now believed that carbon dioxide and nitrogen, not hydrogen, ammonia and methane formed the composition of the early earth atmosphere.³²⁶ This assumption derives from the belief that the atmosphere was produced by volcanic activity and the main composition of gases from current volcanoes is water, nitrogen and carbon dioxide.

From amino acid to protein.

The next stage in development is the production of a protein chain (figure 12). This occurs by means of amino acids joining together. The -COOH part of one amino acid reacts with the -NH₂ part of another amino acid as shown in figure 13. This reaction requires energy (23 kJ/mol) and it

326 https://evolutionnews.org/2012/12/top_five_prob/

produces a molecule of water (H-O-H). The requirement for energy is problematic, but the formation of water is a much greater greater problem. This is because water acts against the process. Amino acids do not join together in the presence of water naturally, and in fact water acts to do the opposite, namely to break up amino acids that were once joined together.

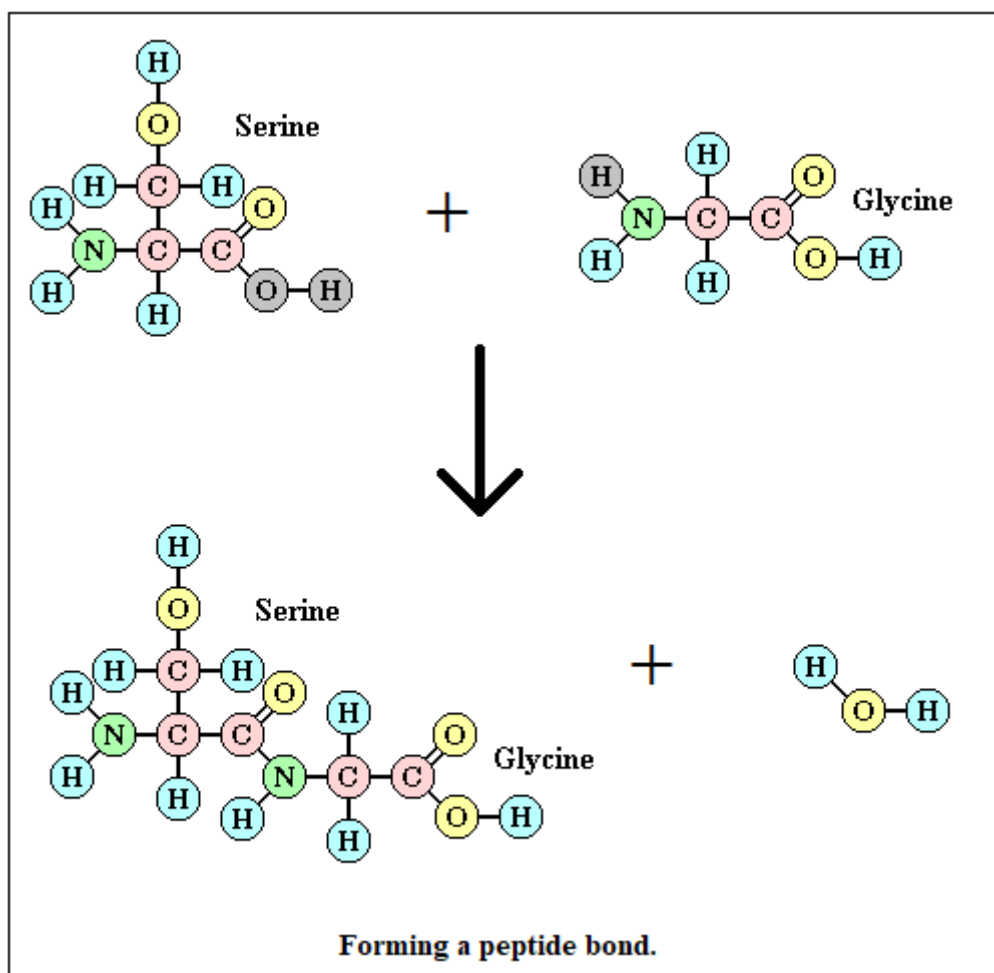


Figure 13.

A final problem with the Miller-Urey experiment is that the amino acids formed exist in what is known as a *racemic* mixture. To understand why this is a problem we need to look a little more closely at the basic structure of an amino acid. All amino acids can be thought of as being a single carbon atom bonded to four different groups of atoms, (see figure 14). A methane molecule shown in diagram (a) has four hydrogen atoms arranged in a tetrahedral shape (as shown by the 3D image of figure 14). This molecule can be rotated without any change in its appearance. The amino acid, Serine, has one carbon (identified in red) which has four different groups attached to it. This is

known as an “asymmetric” carbon or a “chiral” carbon. Diagram (c) shows Serine with its four different groups. Diagram (d) shows the same molecule of Serine but with a COOH group swapped with an H atom. Diagram (e) shows the original Serine molecule but rotated by 180°. The Serine with COOH and H swapped over, is a mirror image of the original Serine molecule rotated through 180°. These two molecules are the same compositionally – they have exactly the same atom types – but are different structurally.

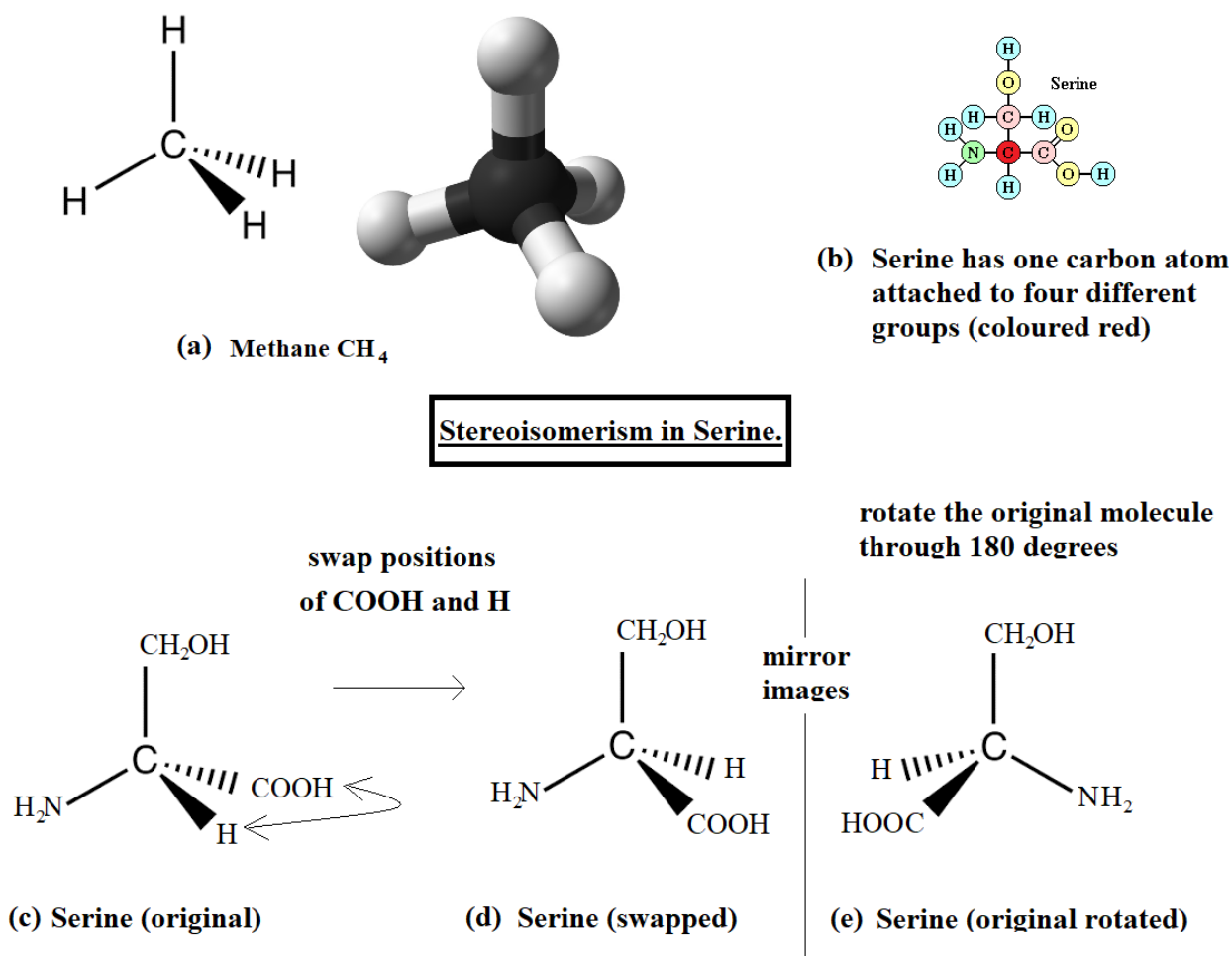


Figure 14.

It is not possible to superimpose one on the other. The same situation occurs with your hands. Your left and right hands are identical in terms of what they are made of (four fingers, a thumb, a palm and a wrist), but they are not the same structurally. You cannot superimpose your right hand upon your left. This asymmetry is a feature of all carbon atoms which have different groups of atoms on their four bonds. We refer to these sometimes as the “left-hand” form and the “right-hand” form.

The properties of the two asymmetric molecules are generally the same. However when they react with other amino acids the products formed are dependent on whether they are right-handed or left-handed. Now it turns out that all amino acids that are found in living proteins are of the left-handed variety, exclusively. When Miller and Urey did their experiment the amino acids formed were a mixture of both right-handed and left-handed forms, that is a racemic mixture. This is to be expected in a random situation, where there is no control over which group of atoms attaches to which bond on the carbon. However, for these amino acids to form usable functional proteins, the left-handed forms **only** must be selected! There is no conceivable natural mechanism by which this may happen.

The problems we have discussed are not the only issues to cast the whole idea into doubt, and it is no wonder that, according to one biochemist the primordial soup theory for the origin of life simply “*doesn't hold water.*”³²⁷

The origin of life? A (brief) look at the literature.

In 2011 John Horgan, a senior science writer for *Scientific American*, wrote an article with the provocative title: *Pssst! Don't tell the creationists, but scientists don't have a clue how life began.*³²⁸ The article was a review of the state of play regarding research into the origin of life. Horgan's main source of information was an article penned by Denis Overbye who reported in the *New York Times* on a major origin-of-life conference held at Arizona State University.³²⁹ Horgan begins this piece with the following admission:

*“Exactly 20 years ago, I wrote an article for Scientific American that, in draft form, had the headline above. My editor nixed it, so we went with something less dramatic: “In the Beginning...: Scientists are having a hard time agreeing on when, where and—most important—how life first emerged on the earth.” That editor is gone now, so I get to use my old headline, which is even more apt today.”*³³⁰

In 1991, despite more than a century of speculation and experimentation scientists had absolutely no clue at all about how life might have started in the so-called primordial soup, and, according to Horgan, in 2011 the situation was no better. Horgan charts the various ideas proposed, including

327 <https://www.npr.org/templates/story/story.php?storyId=123447937>

328 **John Horgan.** *Pssst! Don't tell the creationists, but scientists don't have a clue how life began.* *Scientific American*. February 28 2011. <https://blogs.scientificamerican.com/cross-check/pssst-dont-tell-the-creationists-but-scientists-dont-have-a-clue-how-life-began/>

329 **Denis Overbye.** *A Romp Into Theories of the Cradle of Life.* *New York Times*. February 21 2011. https://www.nytimes.com/2011/02/22/science/22origins.html?_r=1&ref=science

330 **John Horgan.** *Pssst! Don't tell the creationists, but scientists don't have a clue how life began.*

self-replicating RNA, but concludes that such an “*hypothesis remains problematic*” because it is extremely difficult to synthesise “*under the best of circumstances, in a laboratory, let alone under plausible prebiotic conditions.*” Even when a strand of self-replicating RNA is made by scientists within a laboratory it cannot replicate except “*with a great deal of chemical coaxing from the scientist.*” Even if RNA which scientists struggle to form in the laboratory did come about naturally, the probability that it would do so to push evolution are vanishingly small.³³¹ Such approaches have proved so unsatisfying that scientists are moving towards wild speculation and the notion of panspermia, that is, the idea that life originated in space and fell to earth somehow! Horgan concludes his article with an admission and a surprising piece of ignorance:

*“Of course, panspermia theories merely push the problem of life's origin into outer space. If life didn't begin here, how did it begin out there? Creationists are no doubt thrilled that origin-of-life research has reached such an impasse ... but they shouldn't be. Their explanations suffer from the same flaw: What created the divine Creator? And at least scientists are making an honest effort to solve life's mystery instead of blaming it all on God.”*³³²

In short, according to Horgan writing in 2011, scientists are clueless as to how life actually began before evolution could get a foothold! We should perhaps be thankful that Horgan at least displays science's ignorance on the matter of life's origins. However his final question displays an even greater ignorance. Locked within a world of stuff, of matter, energy, space and time Horgan is ignorant of even the possibility of existence beyond the universe. In the eyes of materialistic scientists they have ruled out the possibility of anything else which is other than matter/energy/space/time. Such reductionism is the gravest limitation of the scientist. To ask such a question is actually the height of pride. Scientists have created their “god” and it is the universe (or multiverse in today's language).³³³ When they ask who created the universe (or multiverse) they look to the 'laws of nature' or some other aspect of creation. This is their “god”! It cannot speak or move or do anything other than follow its instinct.

Although Horgan is a pessimist on science, (in 1996 he wrote a book with the title: ***The End of Science: Facing the Limits of Science in the Twilight of the Scientific Age***), yet he manages to

331 Denis Overbye. *A Romp Into Theories of the Cradle of Life.*

332 John Horgan. *Pssst! Don't tell the creationists, but scientists don't have a clue how life began.*

333 The multiverse idea is simply an extension of the idea of a universe. At one time scientists conceived of nothing much extending beyond our solar system. When some stars were resolved into galaxies the extended the world picture to include galaxies. When more and more galaxies were resolved along with other objects the world picture increased again into the universe – an all encompassing scheme. Today because the scientist cannot produce a universe theoretically they have speculated on countless universes – the multiverse. But such expansions are simply re-definitions. The more we find out the less we know!

keep his faith in science, for at least the scientists are trying to answer the impossible question!³³⁴

Before you can begin to speculate on what the origin of life might look like in an evolutionary world view, you first need a good definition of what is meant by “life.” The Arizona conference reported on by Overbye spent an evening debating the definition of “life.” He reports:

*“In front of a 2,400-member audience one night they debated the definition of life — “anything highly statistically improbable, but in a particular direction,” in the words of Richard Dawkins, the evolutionary biologist at Oxford. Or, they wondered if it could be defined at all in the absence of a second example to the Earth’s biosphere — a web of interdependence all based on DNA.”*³³⁵

If such is a fair report of what the conference concluded about the definition of life, it is staggering. If scientists cannot really define life, how can they possibly hope to speak of its origin? And yet in Genesis we have both a clear definition of life and what it means, and a definite statement on how man was created.

Overbye reported that the conference amounted to not much more than talk and speculation. The biochemist John Sutherland suggested that most interest for discussion on life's origin comes from geologists and astronomers rather than chemists even though the essence of the problem is in fact chemistry. When asked why chemists were not involved as much he responded *“chemists know how hard it is.”*³³⁶ In this brief overview of the reports from a conference on the origin of life two things emerge. First the probability of life coming about through random processes (following the 'laws of nature') are next to zero, and second, the chemistry involved is complex and demanding.

The three-fold problem of evolution.

When it comes to considering the idea of moving up from simple to more and more complex organisms through a process of evolution, we discover that there are three essential problems that such an idea encounters.

It would be helpful to simplify things by thinking of the whole process of evolution happening in one single leap, that is from a single celled organism to a human being. I recognise that evolutionary biologists would want to argue here that there are millions, or even billions, of intervals between these two extremes, but essentially evolution speaks about a simple single celled organism eventually coming to the complexity that is represented by a human being. When we look

334 **John Horgan.** The End of Science: Facing the Limits of Science in the Twilight of the Scientific Age. 1996. New York: Broadway Books.

335 <https://www.nytimes.com/2011/02/22/science/22origins.html>

336 **Denis Overbye.** *A Romp Into Theories of the Cradle of Life.*

at it like this we can see the big problem. For the simple single cell to change into the complexity of a multi-cellular organism with tissues, organs and systems there needs to be an increase in three essential things.

First there is the need to increase material. If we analyse the human body 99% of it is composed of a precise amount of 11 elements as shown in table 4 below.

Table 4: Chemical composition of the human body.

Element	Symbol	% in body
Oxygen	O	65.0
Carbon	C	18.5
Hydrogen	H	9.5
Nitrogen	N	3.2
Calcium	Ca	1.5
Phosphorus	P	1.0
Potassium	K	0.4
Sulphur	S	0.3
Sodium	Na	0.2
Chlorine	Cl	0.1
Magnesium	Mg	0.1

The remaining 1% is made up of 14 important trace elements that include: boron, chromium, cobalt, copper, fluorine, iodine, iron, manganese, molybdenum, selenium, silicon, tin, vanadium and zinc. Now this list of elements is unique to humans. The list for a single cell thought to be the “ancestor” will be much lower. It is, of course, impossible to identify the elements in the supposed first cell because we do not know what this was like! Assuming it contained the essential biomolecules like proteins, carbohydrates and fats, there may be some similarity with regard to the main elements (C,H, O, etc.), but it will not be identical. For example our bodies contain iron which is a specific component essential in red blood cells (used to carry oxygen). This feature would not be present in the first supposed cell, so iron would not be present (necessarily). Thus evolution requires directed input of *specific* elements. Taking the red blood cells as our example, the haemoglobin molecule when being manufactured must be supplied with iron otherwise it would not work. This iron comes to us through the food we eat and must be digested and transported through our bloodstreams to the sites where red blood cells are manufactured. Somehow, to get to a human being from the simple single cell, an influx of new material needs to happen. We could multiply examples for other

specialist cells, so that perhaps all the essential trace elements somehow need to be brought into this 'evolving' system.

Second there is the need to increase in energy. Energy is the ability or capacity to do work, or to engage a force through a distance, or, in other words, to make *use* of things. We could compute the total energy of a single celled organism compared to a human being. The total energy is the sum of all the chemical energies of the component parts plus the energy expressed in the operation of the various parts. The heart, for example, in its contractions utilises electrical energy. Molecules move within the cell expending kinetic energy, and mitochondria generate energy by means of proton transfer. All of these energies, and others, would go to make the total energy of the organism. It is clear from the relative size, the different composition, and the different abilities, that the human being has a greater energy component than does a simple single cell. Hence there must be an increase in energy.

Now this simple discussion hides a very important detail. The energy used by specialist cells for various functions is precise and directed in amount. In order for a particular process within the body to function correctly, the precise amount of energy is needed to enable this to happen. To change form from a single cell to a human you need an increase in energy, but you also need an increase in *precise* or definite amounts of energy of a *particular* form. For example, we can see by virtue of the fact that we have specialised cells in our eyes which receive the energy from a single photon of light. This photon of light can transfer its energy (through a series of chemical changes) into electrical energy which is transmitted to the brain to be visually interpreted. The molecule needed to receive this photon (or to detect it) is one which has a precise composition and structure and which is not found in the single cell. To make this molecule requires a series of steps in protein synthesis which all requires energy of precise amounts. When the protein is made it requires certain amino acids in a precise order and then the protein must be folded into a precise shape. All of these processes require specific forms and amounts of energy. Thus energy must increase, and it must increase in precise and particular forms. As an illustration think of the many devices we make use of in modern life. A phone requires to be charged a certain amount before it can be used. One form of motorised toy car needs three 1.5V batteries, whilst another more sophisticated one, able to perform more tricks, cannot work without a 9V power pack.

Third to change from a single cell to a human being requires an increase in information and order. A simple single cell is a highly organised living thing. It is common these days to describe the workings of one cell in terms of a city. Cities are made up of a number of component parts. These include governmental systems, policing, transport networks, trade and commerce, education, waste

disposal, energy generation, and manufacturing. The same is true of the single cell. There is a system and a plan or blueprint which is used both to make a copy of the cell and to form and manufacture required proteins. There is a waste disposal unit to remove unwanted components. There is a transport system whereby components made can be moved to other parts of the cell. There is an energy generator (the mitochondria) and so on. The difference between a single cell and the component elements from which the cell is made up is staggering in complexity. But when we consider a human being we move through several stages of increased order. In human beings cells are arranged into tissues, like muscle or the retina. A combination of different tissues are then arranged into organs.³³⁷ The stomach, for example, is made from smooth muscle, connective tissue, nervous tissue, epithelial cells, and blood vessels. Then at a higher level still, the stomach is part of the digestive system which includes the mouth, oesophagus, intestines, liver and pancreas. We have thus increased order by a factor of three from the simple single cell stage to the system level. But then also we need to remember that each of the eleven systems found in human beings, are integrated so that none work in isolation. We have just listed part of the digestive system, but this would have no point or use at all, unless there is also a transport system (cardio-vascular) to transport the products of digestion to all parts of the body. The digestive system cannot work either without a nervous system and an endocrine system. The intricacies of the human body are impressive. As a simple illustration think of the different systems found in an ordinary petrol car. The electrical system is connected to the fuel system to generate combustion. These days you cannot switch on the engine without also having seat-belt warning lights and door-open lights come on! The mechanical systems are also connected to these electrical systems and so on. So far we have only focused on the physical aspects of the human body. What about consciousness? How does this feature in the idea of evolution?

I have described the idea of evolution by focusing on the dramatic change from a single cell to a human being to show the big problems. But these three problems occur whenever you step up in any *small degree* from one form of an organism to another with only a slight change. For example imagine two simple single cells which are identical to one another except in one way. One has a flagellum and the other does not. The flagellum is a long tail-like feature which enables the cell to move under its own power. The difference between these two organisms may not be as big as that between a single cell and a human being, but still the cell with the flagellum requires more material, more energy and more information or order than the cell without a flagellum. Now this combined problem (more material, more energy and more information/order) is huge. If we think of

337 We shall reconsider the intricacies of the human body a little later.

an illustration we will see the problem clearly. Imagine I was making a toy boat. I had all the materials, the energy required (a workforce or machines), and the plans to show how to make it and was doing great business. Then all of a sudden a rival was making the same boat but with a motor! What do I need to do to compete? Well I need to change my plans and redesign my boat to produce a new one with a motor, I need to get in more materials, and I need more workers or machines to manufacture the new component. As the designer and the owner of the company I can organise all of these things, but what does evolution have in place to step up from a single cell to one with a flagellum? Nothing! Evolution simply requires time, apparently. It operates blindly, randomly and is not purpose driven. So where do the new materials, new energy and new information come from to go from one stage to the next?

We have focused on biological evolution, but evolution in modern scientific thought encompasses much more. It includes the origin of everything from nothing. If modern science had its own 'Bible' the opening verse would read something like this:

“In the beginning there was nothing. Not the absence of something like a vacuum, but absolutely nothing. No matter, no space, no energy and no time. Then from nowhere everything suddenly, in an instant (impossible to measure) began to exist, from no means and no purpose and from no originator. This initial existence, which contained all matter, energy and space confined in the smallest point, suddenly expanded, rapidly at first and then slower. As it grew ever bigger it cooled. Later parts of this expanding existence began to agglomerate and form galaxies, stars and planets. On one planet the temperature dropped, and the gases in the atmosphere changed so that the first organic molecules in chance dances could come together to form biomolecules. These agglomerated to form cells and”

Such a description is probably not full when compared to the details of modern theories but the essence of what is supposed to happen is all there. We can condense this into a type of equation:

$$0 \rightarrow \text{everything in chaos} \rightarrow \text{everything in increasing order}$$

In terms of biological evolution the same is true. We start from no life – just carbon, oxygen, hydrogen and so on in the form of water, carbon dioxide, methane and so on, – and move up the tree of life to living things made of biomolecules arranged precisely in cells which are organised nicely in tissues, organs and systems, and which become more and more complex and ordered as you climb the (imagined) tree of life. At this point we need to take a pause and consider. From a conceptual point of view evolution is an idea that is effectively bankrupt. Nobody seriously believes that everything comes from nothing do they?

Is that one small step or one giant leap?

The probability of forming something that may be considered living is so remotely small as to be effectively zero. Such a statement whilst hotly contested by evolutionists, is nevertheless simple to demonstrate. Some might contend that to go from chemicals (carbon dioxide, water, methane and the like) to a fully functioning cell is asking far too much. Such a jump will generate such an incredibly small number for probability because of the great complexity of a single cell. In the early days of cell biology in the nineteenth century scientists considered the cell to be simply a bag of protoplasm with a nucleus.³³⁸ Today the simple cell is anything but, and has been likened to a factory and even a city with all its organisation and interconnected services.³³⁹ Evolutionists claim that it is more realistic to consider the probability in much smaller steps (see table 5).

Table 5: Steps from molecules to life.

<u>Required step:</u>	<u>Steps envisaged by evolutionists:</u>
Simple chemicals	Simple chemicals
	Polymer (long chain molecules)
	Replicating polymers
	Integrated systems of different polymers
	Prebiotic organism
Bacterium	Bacterium

Of course the problem with such an argument is that it smooths out what may be considered as “life.” The evolutionist doesn't really worry about that because he (or she) is already committed to a spectrum of development which involves tiny incremental steps.

The atheistic evangelist for evolution, Richard Dawkins, has suggested the notion of “Mount Improbable” to fend off the difficulties biologists face when confronting mathematics (see figure 15).³⁴⁰

338 **Ernst Haeckel** (1834-1919) described the cell as: “*a homogeneous globule of plasm.*”

339 **Michael Denton**, (professor of biology). *Evolution: A Theory in Crisis*. 1985. Burnett Books. Denton describes the cell in the following way: “*To grasp the reality of life as it has been revealed by molecular biology, we must magnify a cell a thousand million times until it is twenty kilometres in diameter and resembles a giant airship large enough to cover a great city like London or New York. What we would then see would be an object of un-paralleled complexity and adaptive design. On the surface of the cell we would see millions of openings, like port holes of a vast space-ship, opening and closing to allow a continual stream of materials to flow in and out. If we were to enter one of these openings we would find ourselves in a world of supreme technology and bewildering complexity... (a complexity) beyond our own creative capacities, a reality which is the very antithesis of chance, which excels in every sense anything produced by the intelligence of man...*”

340 **Richard Dawkins**. *The God Delusion*. Mariner Books. 2006. P147.

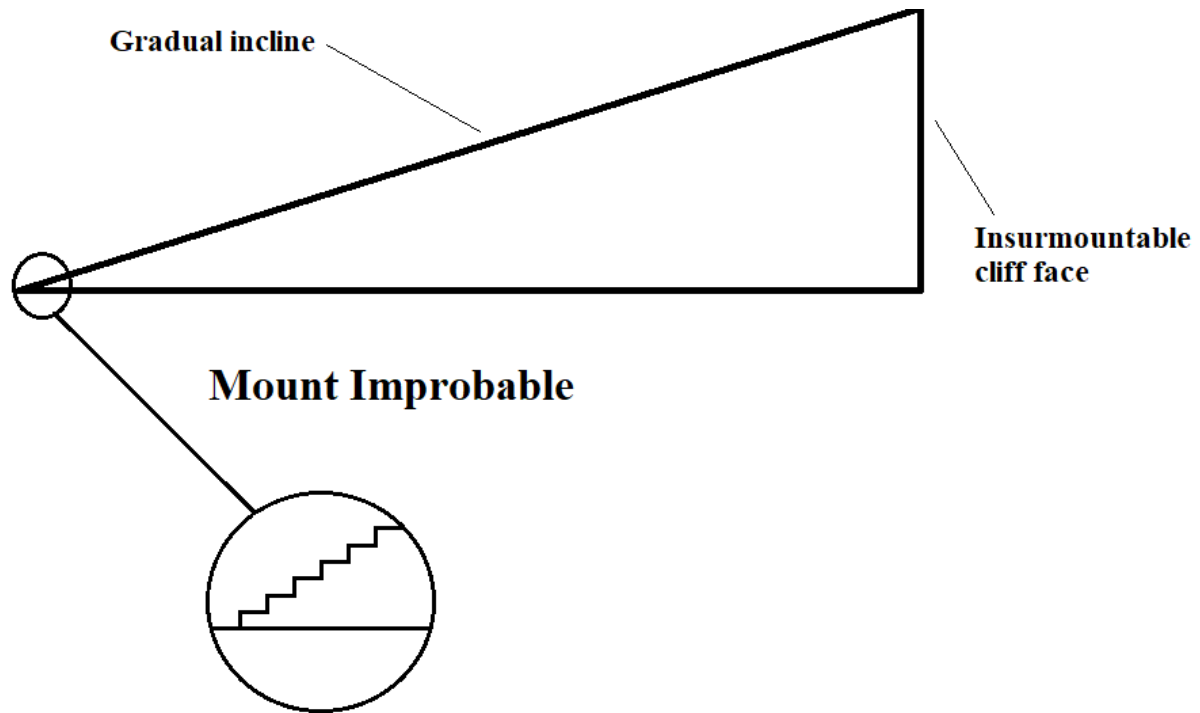


Figure 15.

Evolution does not jump the cliff face to the top in one step, but rather it ascends by means of the gradual slope through small rises along the escarpment. Here is how Dawkins puts it:

“Creationist ‘logic’ is always the same. Some natural phenomenon is too statistically improbable, too complex, too beautiful, too awe-inspiring to have come into existence by chance. Design is the only alternative to chance that the authors can imagine. Therefore a designer must have done it. And science’s answer to this faulty logic is also always the same. Design is not the only alternative to chance. Natural selection is a better alternative. Indeed, design is not a real alternative at all because it raises an even bigger problem than it solves: who designed the designer? Chance and design both fail as solutions to the problem of statistical improbability, because one of them is the problem, and the other regresses to it. Natural selection is a real solution. It is the only workable solution that has ever been suggested. And it is not only a workable solution, it is a solution of stunning elegance and power.

What is it that makes natural selection succeed as a solution to the problem of improbability, where chance and design both fail at the starting gate? The answer is that natural selection is a cumulative process, which breaks the problem of improbability up into small pieces. Each of the small pieces is slightly improbable, but not prohibitively so. When large numbers of these slightly improbable events are stacked up in series, the end product of the accumulation is very very improbable indeed, improbable enough to be far beyond the reach of chance. It is these end products that form the subjects of the creationist’s wearisomely recycled argument. The creationist completely misses the point, because he (women should for once not

mind being excluded by the pronoun) insists on treating the genesis of statistical improbability as a single, one-off event. He doesn't understand the power of accumulation.

*In Climbing Mount Improbable, I expressed the point in a parable. One side of the mountain is a sheer cliff, impossible to climb, but on the other side is a gentle slope to the summit. On the summit sits a complex device such as an eye or a bacterial flagellar motor. The absurd notion that such complexity could spontaneously self-assemble is symbolized by leaping from the foot of the cliff to the top in one bound. Evolution, by contrast, goes around the back of the mountain and creeps up the gentle slope to the summit: easy! The principle of climbing the gentle slope as opposed to leaping up the precipice is so simple, one is tempted to marvel that it took so long for a Darwin to arrive on the scene and discover it. By the time he did, nearly two centuries had elapsed since Newton's *annus mirabilis*, although his achievement seems, on the face of it, harder than Darwin's.*"³⁴¹

There are a number of problems with Dawkins' idea of "Mount Improbable." First the distance that needs to be reached to go from the necessary chemicals, for example, to a bacterium is the same whether you go via small steps up the gradual slope, or all at once up the cliff face. Introducing a gradual slope does not change the amount of energy that is needed. We shall return to this discussion concerning energy later on. A second problem with the idea is that it actually makes matters more complex. The amount of *effort* (force) required to go up the slope is much greater than that required to traverse the cliff face. Biologists may not have recognised this because they are deceived by the idea of extrapolating natural selection. For example, the change over many generations of beak sizes in finches is expanded to the development of some new feature a long way down the line. The problem is that the variety of beak shapes and sizes requires no addition of new matter or information. At some point in evolutionary thinking you cannot just talk about the variation in a particular feature. You have to step up to the next level where a new feature or organelle is present that wasn't there before. This would be represented by the steps.

If we examine Dawkins' Mount Improbable in connection with living things we cannot escape the main problem we have already established, namely, that to go up a small step, we require new information and new material. We will also need specific directed energy to get the new part in place. Imagine, for example, you bought a car and you were very happy with it for a while. But then you discover the manufacturer has brought out a new model which is the same as yours but also includes a new feature that your car doesn't have, like, for example, heated seats or park assist sensors. The question is, how did the manufacturer make the new model? What difference would there be in the process between the two? Obviously the extra feature (heating elements or sensors) need to be added. This indicates the need for additional materials. They may not amount to much in

341 Richard Dawkins. *The God Delusion*. P146-148.

the overall scheme of the car, but they are an addition. Further the new model will require an increase in energy. If you measure the amount of energy required to make the two models, the newer one will be slightly larger. What-is-more, the new addition requires *specific* energy directed in the right way. You cannot simply speed up the conveyor belt or heat the room up more. You need a person or a robot to utilise kinetic energy in a precise manner to place the new part in the right place. The energy requirement, and the information required to add the heating elements will not be the same as the energy required to add the sensors. This type of discussion is largely ignored by biologists.

Biological nano-machines.

Perhaps one of the most fascinating developments in biology over the last fifty years or so has been the elucidation of nano machines. A particularly elegant example is the bacterial flagellum. Painstaking research using electron microscopy has revealed a remarkable structure that involves specifically built proteins organised with machine-like precision. Two biological researchers, Morimoto and Minamino make the following assessment of the bacterial flagellum:

*“The bacterial flagellum is a supramolecular complex made of about 30 different proteins with copy numbers ranging from a few to a few tens of thousands The flagellum consists of at least three parts: the basal body, the hook and the filament. The basal body is embedded within the cell membranes and acts as a rotary motor. The hook and filament extend outwards in the cell exterior. The filament works as a helical screw to produce the thrust. The hook exists between the basal body and filament and functions as a universal joint to smoothly transmit torque produced by the motor to the helical filament.”*³⁴²

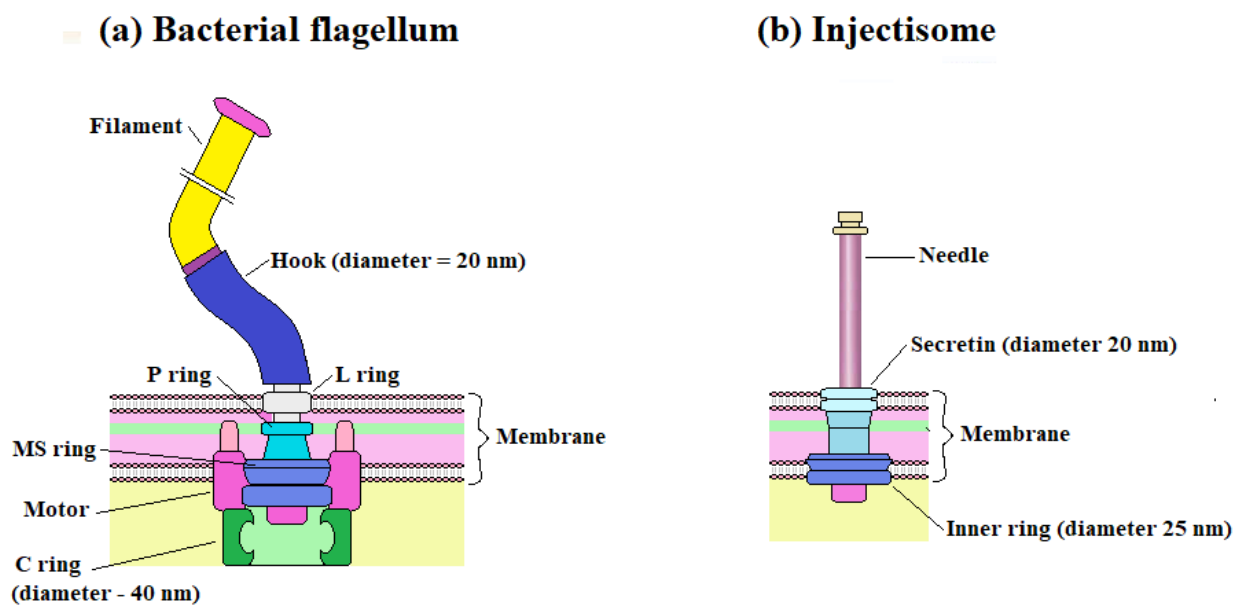
In 1996 Michael Behe suggested that the bacterial flagellum was an example of an “*irreducibly complex*” machine.³⁴³ Irreducibly complex machines are those which can only operate if all the components are in place and are fully functioning. As a more accessible example Behe discussed the mousetrap. If any one of the five essential elements was removed the device would become useless.³⁴⁴ Behe argued that the same could be said for the bacterial flagellum. To counter this, those who favour Darwinian evolution have argued that there are in fact precursors to the bacterial flagellum which could pose as intermediaries. These are known as “injectisomes” and have features

342 **Yusuke V. Morimoto** and **Tohru Minamino**. Structure and Function of the Bi-Directional Bacterial Flagellar Motor. *Biomolecules* **2014**, 4, 217-234. P218. www.mdpi.com/journal/biomolecules/ <http://www.mdpi.com/2218-273X/4/1/217/pdf>.

343 **Michael J. Behe**. Darwin's Black Box: The Biochemical Challenge to Evolution. Free Press. 1996. P39f.

344 The five elements are: the hammer, the spring, the catch, the holding bar, and the platform. **Michael J. Behe**. Darwin's Black Box. P42,43.

resembling the flagellar motor but are not identical (see figure 16). For example, whilst the flagellum has a universal joint and an Archimedean screw, the injectisome merely has a “needle” to allow secretion of fluids. Whatever the similarities and differences, it is clear that to go from one structure to the next requires some additional information, more material and directed energy. So let us look at these structures in a little more detail.



Bacterial nanomachines.

Figure 16.

The various coloured parts shown in figure 16 are aggregates of particular (and specific) proteins formed into specific components of each nano-machine. These proteins are, (as we have already noted), made up of strings of precisely ordered amino acids in long chains. The chains fold into specific shapes, so that each protein has its own morphology or 3D arrangement. When a group of proteins are joined together, they form a component of one of the nano-machines that are found in every cell. If you alter the amino acid sequence in a protein, its morphology or 3D arrangement will change. Consequently, each component of each nano-machine is made from a collection of precisely formed proteins (an example is shown in figure 17). The component parts can only form if the correct protein is made and this is combined with a specific number of identical proteins. It can be seen from figure 16 that both the shapes and the sizes of the various components are different. For example, the C-ring diameter of the bacterial flagellum is twice the size of the secretin ring in

the injectisome showing that the bacterial flagellum assembly is much bigger. This is because although sometimes the proteins may be similar, they are not identical and form different shapes.

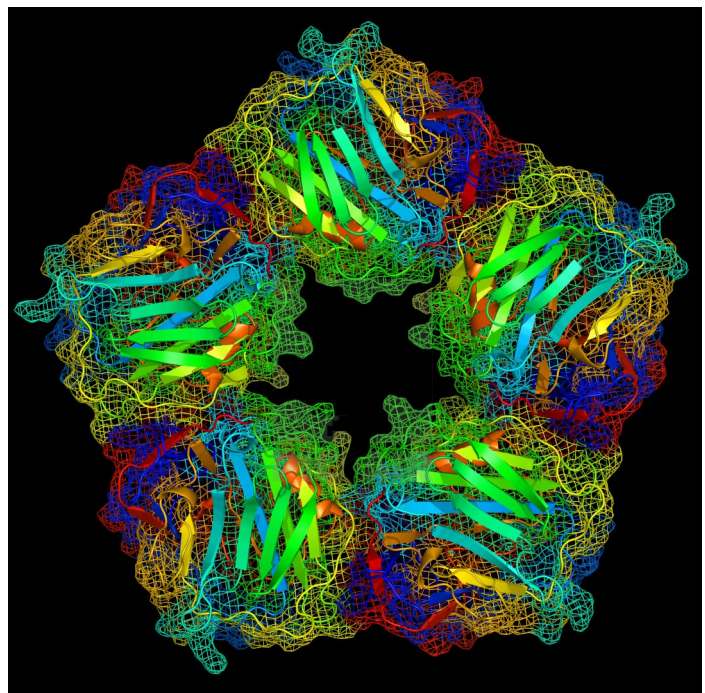
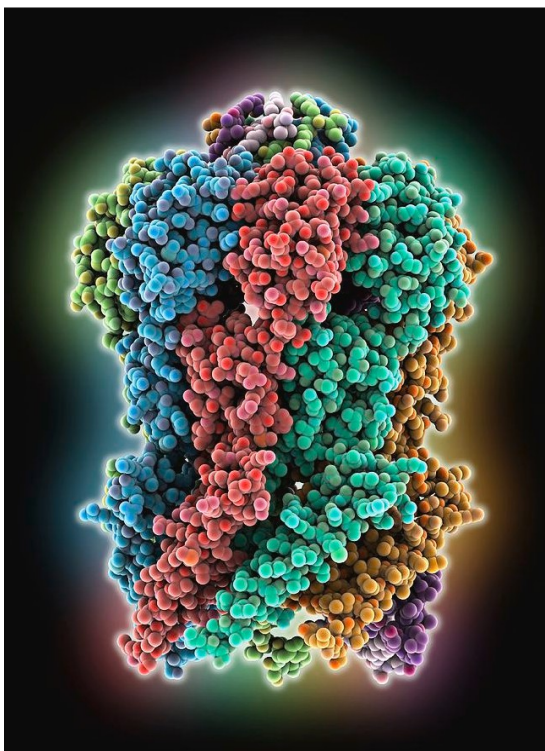
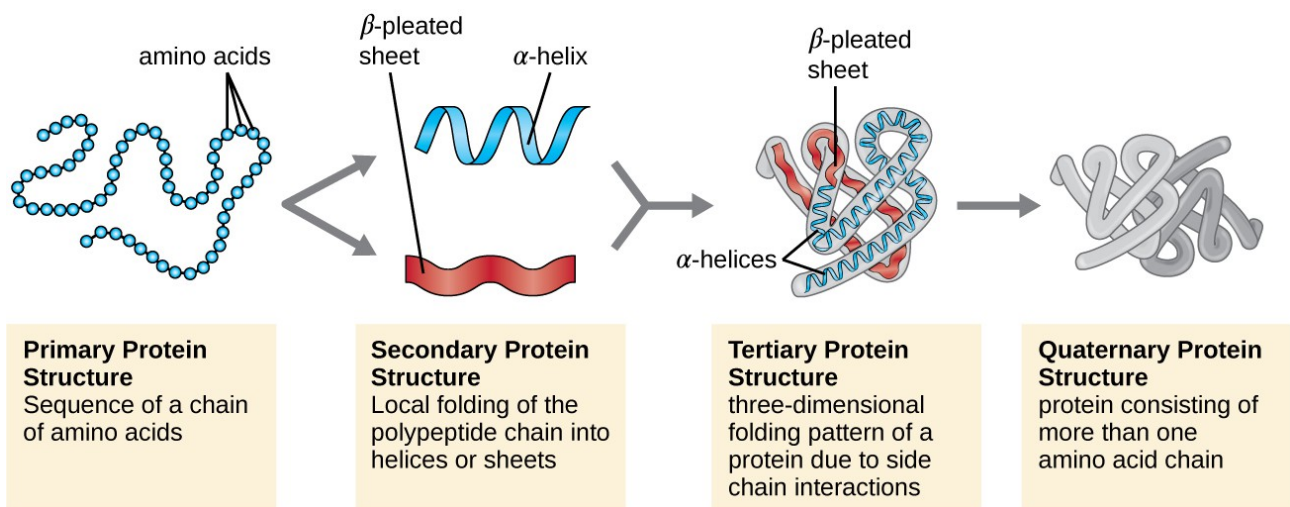


Figure 17.

Those who favour evolution argue against the idea of irreducible complexity for the bacterial flagellum (the more complex of the two) on the basis that injectisomes are closely related

in structure. Now it is clear that *some* of the proteins are *similar* in the two structures. Consequently researchers make the following assertions:

*“Although the flagellum and injectisome serve different purposes, they are evolutionarily related and share many structural similarities.”*³⁴⁵

Such an assertion based simply on similarity of structure is classic evolution-speak.³⁴⁶ Just because things *look similar* in structure or morphology, this is sufficient (it is assumed by evolutionary biologists) to suggest that there is a common ancestry. In one paper, for example, the two nano-machine structures were compared using various techniques. Although Erhardt, Namba and Hughes claim in their abstract that electron microscopy of the two nano-machines “*revealed clear structural similarities,*” in the body of their work the detailed molecular structures of a bacterial flagellum filament and the injectisome needle show greater differences than similarities.³⁴⁷ For a start, whilst there about 20 proteins needed to form the basal body of the bacterial flagellum, only “*about half have clear counterparts in the injectisome.*”³⁴⁸ When it comes to the filament of the bacterial flagellum and the needle of the injectisome the differences are stark. The bacterial flagellum is much longer and has a greater diameter. It consists of between 20,000 and 30,000 subunits of flagellin. In contrast:

*“the injectisome needle is a straight, hollow tube of approximately 60 nm in length and 7 nm in diameter and is made of 100–150 subunits of proteins of the YscF family.”*³⁴⁹

Further the proteins that make up the needle (YscF proteins) are not the same as those found in the filament, (FlgE), for they “*share no sequence homology to the flagellar filament or hook.*”³⁵⁰

The assumption that structural similarity proves common ancestry, goes against the observations many researchers make. For starters, we find that: “*biological supramolecular machines assemble in a highly organized and well-controlled manner.*”³⁵¹ Furthermore, it turns out

345 **Daniel H. Wee** and **Kelly T. Hughes**. Molecular ruler determines needle length for the *Salmonella* Spi-1 injectisome. PNAS March 31, 2015 112 (13) 4098-4103; first published March 16, 2015 <https://doi.org/10.1073/pnas.1423492112> *Proceedings of the National Academy of Sciences* <https://www.pnas.org/content/112/13/4098>

346 The proteins and the structures are **not** identical.

347 **Marc Erhardt, Keiichi Namba** and **Kelly T. Hughes**. Bacterial Nanomachines: The Flagellum and Type III Injectisome. Cold Spring Harbor Perspectives in Biology. 2010. November. 2(11). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2964186/>

348 **Marc Erhardt, Keiichi Namba** and **Kelly T. Hughes**. Bacterial Nanomachines.

349 **Marc Erhardt, Keiichi Namba** and **Kelly T. Hughes**. Bacterial Nanomachines.

350 **Marc Erhardt, Keiichi Namba** and **Kelly T. Hughes**. Bacterial Nanomachines.

351 **Naoya Terahara, Yumi Inoue, Noriyuke Kodera, Yusuke V. Morimoto, Takayuki Uchihashi, Katsumi**

that the complex injectisomes must also be assembled in a controlled manner:

“The complexity of the injectisome dictates that its assembly must occur in a highly coordinated, step-wise manner that is initiated by the formation of a complex of the core membrane protein components of the export apparatus, which are thought to nucleate the assembly of the lower rings.”³⁵²

Then also, it becomes clear that the way in which these two nano-structures assemble is not the same.³⁵³ These simple facts mitigate against the idea that such complex nano-machines have arisen through a long laborious process of natural selection and so on. Rather, what we are being informed of (even though the researchers ignore this plain truth), is that such intricate mechanisms must be manufactured in much the same way that human beings make complex gadgets they depend on.

Now the two nano-machines we have considered briefly above are highly complex systems which require specific and precise assembly. They share similar subunits (proteins) but are not identical in composition nor in structure. Even if we allow the evolutionists' assumption that the injectisome is largely built from the same subunits as the bacterial flagellum, we are still left with components which need to be added in (the C-ring, the motor, the hook and filament). We may have split the huge Mount Improbable into a smaller step, (or several smaller steps), but the same essential problem remains the same. How does an injectisome transform into a bacterial flagellum? New materials are required (remember the proteins are similar and not identical), and new structures are required, which means new information. To get these new structures and materials requires precise and specific forms of energy. No amount of speculative flights of fancy can conjure up this three-fold extra addition required to go from injectisome to bacterial flagellum. The same basic issue can be replayed for any major structure we may care to consider. Take, for example, the eye. Evolutionists like to suggest that there are a whole array of eye types from simple to more complex observed amongst a range of creatures. But however one may arrange these supposedly related organisms, from each one there is a step up requiring new material, new information and new energy. Natural selection merely works on what is already present. Mutations generally muck things up. Whilst the research being generated to show the detail of these biochemical wonders is

Imada, Toshio Ando, Keiichi Namba and Tohru Minamino. Insight into structural remodeling of the FlhA ring responsible for bacterial flagellar type III protein export. *Science Advances*. 25 April. 2018. Volume 4. Number 4. <https://advances.sciencemag.org/content/4/4/eaao7054>

352 **Carmen Butan, Maria Lara-Tejero, Wenwei Li, Jun Liu, and Jorge E. Galán.** High-resolution view of the type III secretion export apparatus *in situ* reveals membrane remodeling and a secretion pathway. <https://www.biorxiv.org/content/10.1101/709592v1.full> *Proceedings of the National Academy of Sciences* <https://www.pnas.org/content/116/49/24786>

353 **Daniel H. Wee and Kelly T. Hughes.** Molecular ruler determines needle length for the *Salmonella* Spi-1 injectisome.

impressive and we take our hats off to the painstaking work of scientists engaged in this work, we are astonished that the findings are not taken at face value, namely, that they speak of very careful design and intelligence.

The human eye.

Darwin suggested that the human eye was one example that was difficult to reconcile with his theory. Under the heading “*Organs of extreme perfection and complication,*” Darwin writes:

*“To suppose that the eye, with all its inimitable contrivances for adjusting the focus to different distances, for admitting different amounts of light, and for the correction of spherical and chromatic aberration, could have been formed by natural selection, seems, I freely confess, absurd in the highest possible degree. Yet reason tells me, that if numerous gradations from a perfect and complex eye to one very imperfect and simple, each grade being useful to its possessor, can be shown to exist; if further, the eye does vary ever so slightly, and the variations be inherited, which is certainly the case; and if any variation or modification in the organ be ever useful to an animal under changing conditions of life, then the difficulty of believing that a perfect and complex eye could be formed by natural selection, though insuperable by our imagination, can hardly be considered real. How a nerve comes to be sensitive to light, hardly concerns us more than how life itself first originated; but I may remark that several facts make me suspect that any sensitive nerve may be rendered sensitive to light, and likewise to those coarser vibrations of the air which produce sound.”*³⁵⁴

After admitting that the evolution of the eye by natural selection was “*absurd in the highest possible degree,*” Darwin continues unabated, declaring that reason is sufficient to the task! He admits that such a view may be “*insuperable to our imagination*” and certainly difficult to believe, but these obstacles should “*hardly be considered real.*”

Well what should we make of the eye with regard to evolution? The difficulties Darwin observes in the above quote are but the tip of the iceberg! In what follows we shall look briefly at the eye and some of its structures.

The context of the eye.

First of all we need to remember that the eye is not an isolated part but beautifully integrated into the body. Figure 18 shows three representations of the human eye. In the first image at top left we can see that the eye is attended by various other features we may often take for granted, (eye brows, eye lashes, eye muscles, tear ducts, lachrymal glands (not shown) and the eye socket). All of

354 Charles Darwin. On the Origin of Species. 1859.

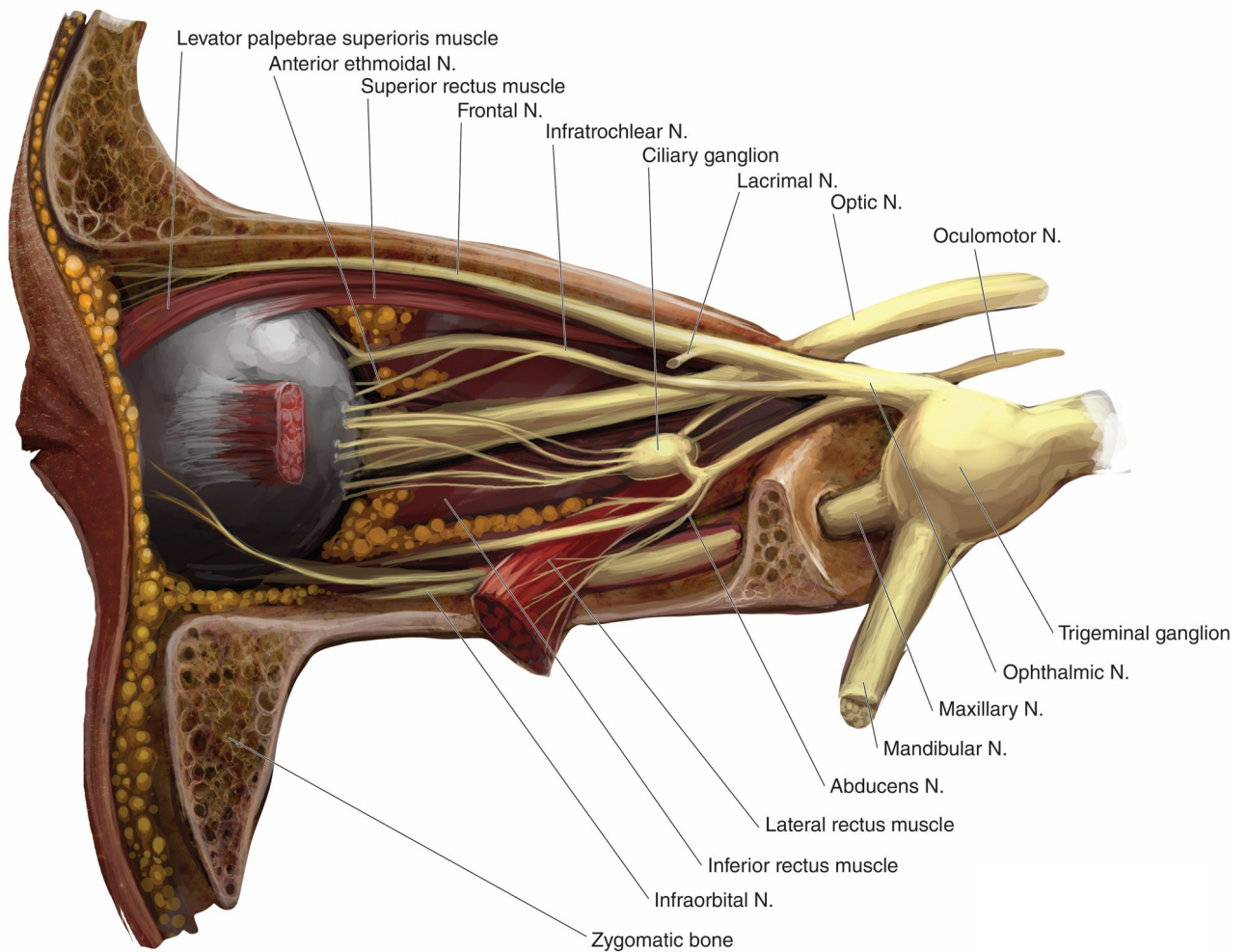
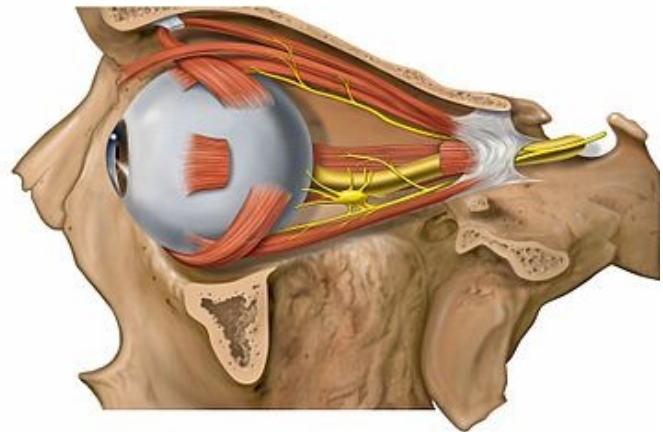


Figure 18.

these have important roles which aid the eye in its overall function. The second image at top right shows a side view of the eye. In this image we can see that the eye is located in the skull and is enabled to move by a system of muscles. The lower image of figure 18 shows how the nerves that are connected to the eye reach into the brain. Notice that apart from the optic nerve which funnels signals from the eye towards the brain, there are other nerve connections as well. One of these nerve connections has to pass through a part of bone which serves to show, at least, how interconnected the nervous system is with the skeletal system. Nerves are connected to the cornea, which is that part at the front of the eye which starts to bend light. These corneal nerves play a vital role in the blink reflex, the healing of wounds, tear production and secretion.

Apart from these surrounding features, we need to remember that the eye cannot function without a good supply of blood. The cardiovascular (circulatory) system exists to serve organs such as the eye with nutrients and an efficient means of removing waste. The main function of the eye is to receive and transmit visual information, so it would be useless without the processing ability of the brain. Thus muscles, the skeleton (skull), a blood supply and the nervous system are all essential parts of the eye without which the eye's function would be redundant. Scientists are often guilty of looking at features in isolation, but our brief and incomplete survey of the context of the eye serves to show that such a monocular view is problematic (to say the least).

How we see.

The eye is made up of quite a number of tissues each of which has a specialised function, but it will not be necessary to consider all of these here. After a brief discussion of how light enters the eye, we shall *focus* our attention on just two structures, the retina, (the light-sensitive layer of the eye), and the choroid which works in close conjunction with the retina.

Figure 19 shows the right eye in cross section looking from above. Light enters the eye passes through the conjunctiva and reaches the cornea where it is refracted or bent slightly. It then passes through the aqueous humour – a watery substance similar to plasma situated in front of the lens. Then it reaches the lens which is transparent and flexible, and allows the light to be focused clearly onto the retina. Before the light reaches the retina it passes through a clear jelly-like substance called the vitreous humour. Light reaches the light sensitive cells in the retina and is converted to electrical signals which are then transmitted via the optic nerve to the brain.

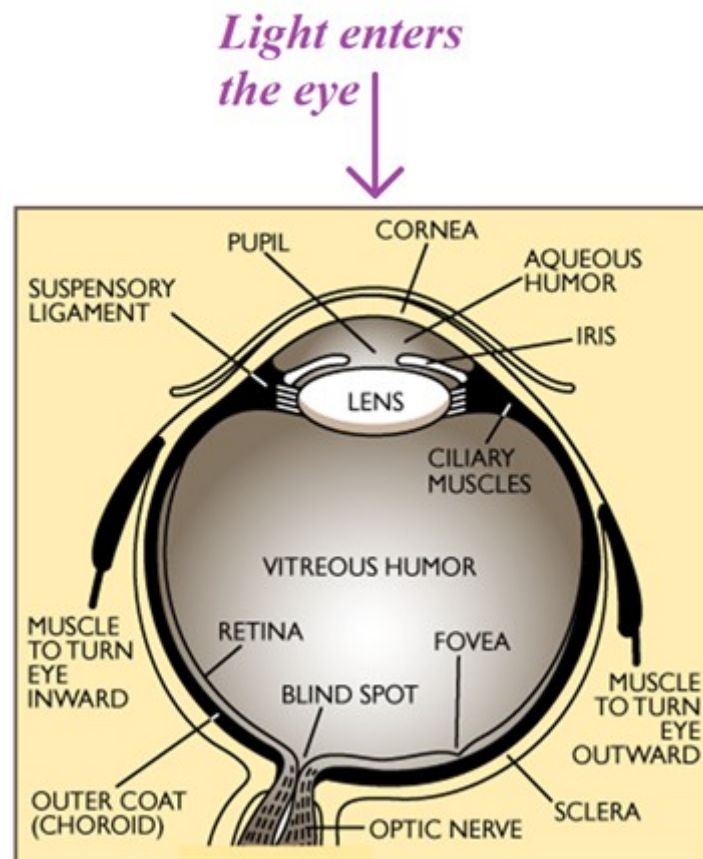
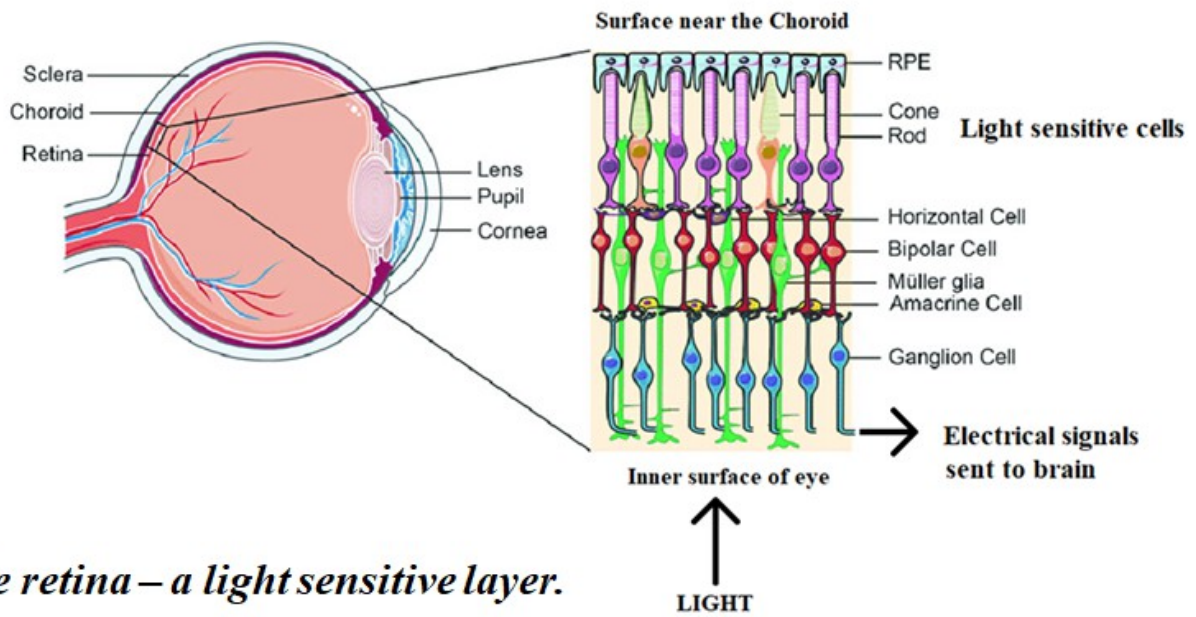


Figure 19.

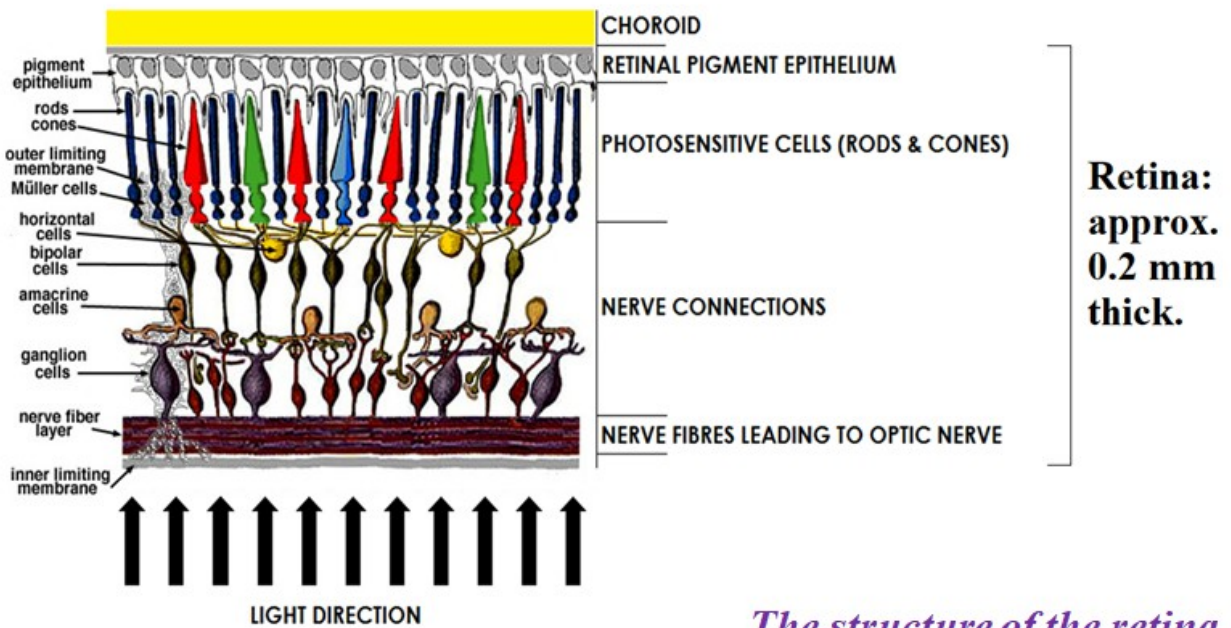
The retina.

So what then happens at the retina? Well Figure 20 shows a close up of the retinal layer. Notice to start (from the lower diagram) that the layer is around 0.2 mm thick. The thickness does vary across the eyeball but still it is a very thin layer approximately equivalent to the thickness of two pieces of standard A4 paper. The retina is a complex arrangement of two main types of cells called “rods,” and “cones.” From the diagram it can be observed that there are many more rods than cones. Rods have the ability to detect light at low levels, whilst the cones can pick up colours. These two types of cell are spread throughout the retina although cones are more prevalent in the centre, whilst rods are more frequent elsewhere. It can be seen from the lower diagram that the light sensitive cones and rods are connected to nerve cells in different ways. These nerve cells are then channelled to the centre of the eye towards the optic nerve by more nerve connections.

One of the curious facts about the retina is that the light sensitive cells are pointed away from the direction of light. The light has to pass through the nerve layer of the retina before it gets



The retina – a light sensitive layer.



The structure of the retina.

Figure 20.

to the rods and cones. Richard Dawkins, the militant atheist and self-professed champion of evolution, has seized upon this fact writing:

*“Any engineer would naturally assume that the photocells would point towards the light, with their wires leading backwards towards the brain. He would laugh at any suggestion that the photocells might point away, from the light, with their wires departing on the side nearest the light. Yet this is exactly what happens in all vertebrate retinas. Each photocell is, in effect, wired in backwards, with its wire sticking out on the side nearest the light. The wire has to travel over the surface of the retina to a point where it dives through a hole in the retina (the so-called ‘blind spot’) to join the optic nerve. This means that the light, instead of being granted an unrestricted passage to the photocells, has to pass through a forest of connecting wires, presumably suffering at least some attenuation and distortion (actually, probably not much but, still, it is the principle of the thing that would offend any tidy-minded engineer). **I don’t know the exact explanation for this strange state of affairs. The relevant period of evolution is so long ago.**”³⁵⁵ [My emphasis].*

Of course generally speaking, healthy people can see quite well, and Dawkins acknowledges this by noting that the “attenuation and distortion” he thinks may be felt by incoming light, was “probably not much” in reality! Notice also the last two sentences in which he pleads ignorance because how (he thinks) this “strange state of affairs” came to be was “so long ago.”

Now Dawkins wrote these words in 1986, and so he was unaware of a feature of the retina which was not discovered until early in the twenty-first century. Figure 21 shows two illustrations of these newly discovered **Müller** glial cells in the retina. The illustration on the left shows how these cells work. Effectively they act as light guides, or fibre optic cables. Müller cells have funnel-shaped end-feet that cover the retinal surface and so can guide light to photoreceptor cells on the opposite side. Consequently images are transmitted perfectly through optically distorting tissue.³⁵⁶ Two researchers, A. M. Labin and E. N. Ribak writing in *Physical Review Letters* conclude:

“The fundamental features of the array of glial cells are revealed as an optimal structure designed for preserving the acuity of images in the human retina. It plays a crucial role in vision quality, in humans and in other species.”³⁵⁷*

** Müller cells are a type of glial cell.*

355 **Richard Dawkins.** *The Blind Watchmaker: Why the evidence of evolution reveals a universe without design.* 1986. W.W. Norton and Company, New York, P93.

356 **Kristian Franze, Jens Grosche, Serguei N. Skatchkov, Stefan Schinkinger, Christian Foja, Detley Schild, Ortrud Uckermann, Kort Travis, Andreas Reichenbach and Jochen Guck.** Müller cells are living optical fibers in the vertebrate retina. PNAS. May 15, 2007. 104 (20) 8287-8292. <https://doi.org/10.1073/pnas.0611180104> <https://www.pnas.org/content/104/20/8287.short>

357 **A. M. Labin and E. N. Ribak.** Retinal Glial Cells Enhance Human Vision Acuity. RL 104, 158102 (2010) Physical Review Letters. 16th April 2010.

Once again scientists are hard pressed not to make reference to design!

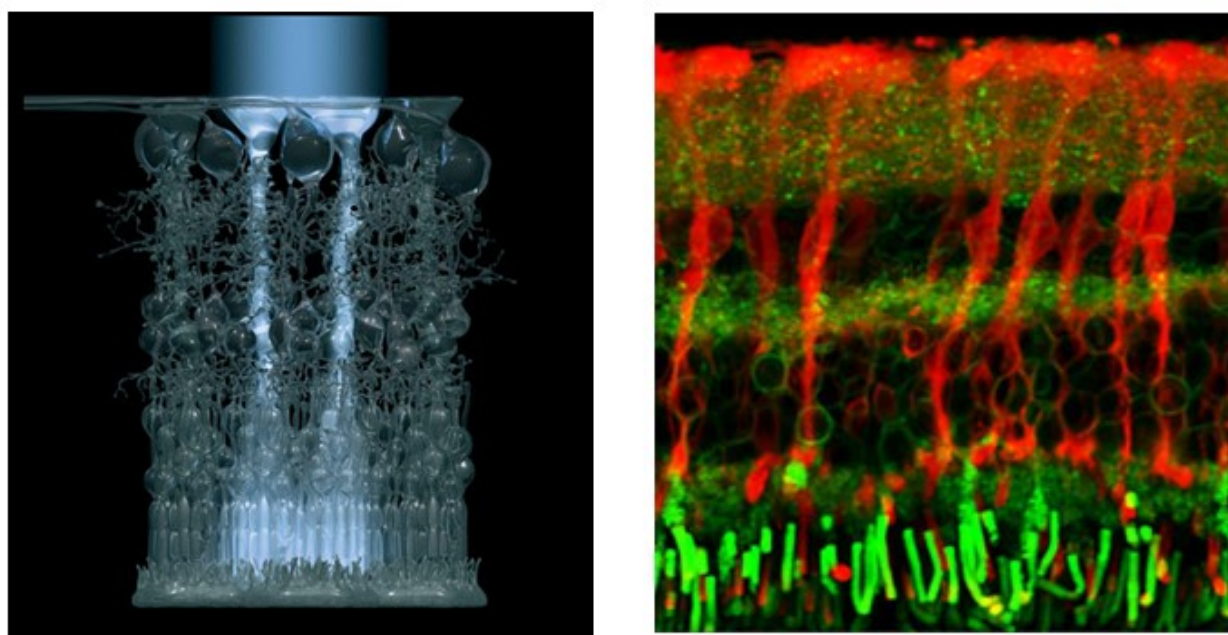
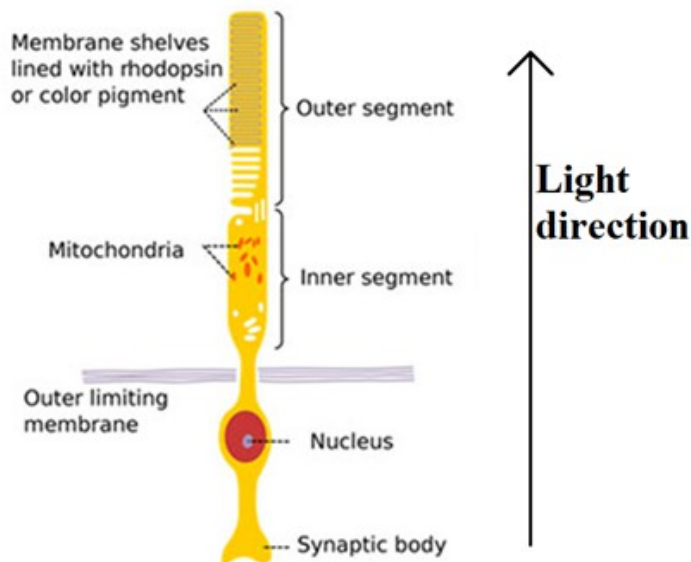


Figure 21.

The picture at the right of figure 21 shows a fluorescence microscope image of the retina with the Müller cells stained red.³⁵⁸

When we look closely at the processes going within the light sensitive cells we are brought once again back into the world of miniature machines, as we noted earlier with bacterial structures, that leaves the mind reeling. Figure 22 shows the rod cells and the molecules responsible for picking up the light signals. Light travels perfectly through the Müller cells and is picked up by a rod cell where it reaches the membrane discs (top illustration). Embedded within these discs is the molecule rhodopsin (middle picture). Rhodopsin is a protein molecule which has two components. The opsin molecule is the basic protein carrier (shown by the coloured ribbons in the central diagram). Embedded within opsin is the molecule retinal which when hit by a light photon has the ability to change its shape (as shown in the lower diagram). When retinal changes shape this triggers a series of reactions which ultimately results in the transmission of an electrical signal to the nerves. The sequence of reactions is mind blowing. It involves motion, change of shape and several feedback loops all of which serves to point us to a *carefully designed* system. Bear in mind the fact that these molecules are protein based and each has a specific function determined by

³⁵⁸ Professor Andreas Reichenbach. <https://neurophilosophy.wordpress.com/2007/05/09/muller-cells-natures-fibre-optics/>



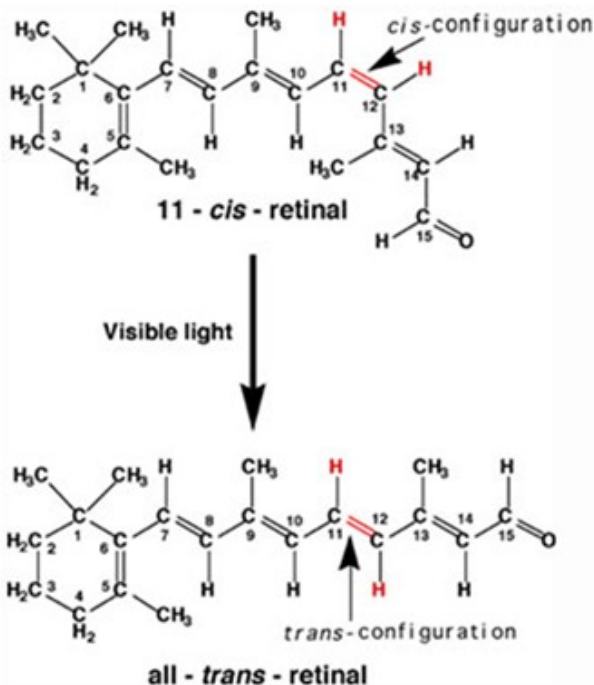
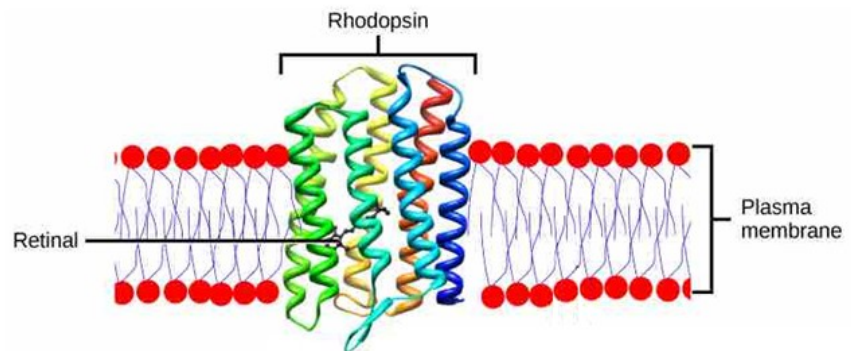
Rod cell – less than a tenth of a mm in length.

The rod cell showing the outer segment where the membrane with rhodopsin is found.

Mitochondria are where energy is generated through respiration.

The membrane with rhodopsin embedded.

The membrane is about 4 nm thick, or 4 millionths of a mm thick.



Rhodopsin is made from two parts:

[1] The opsin protein molecule shown as the coloured ribbons above.

[2] The molecule retinal which can change shape when hit by a photon of light.

Figure 22.

shape. It is hard to imagine any human genius coming up with such a sophisticated system for receiving and then converting light waves into electrical signals. The series of chemical reactions is depicted below in figure 23.

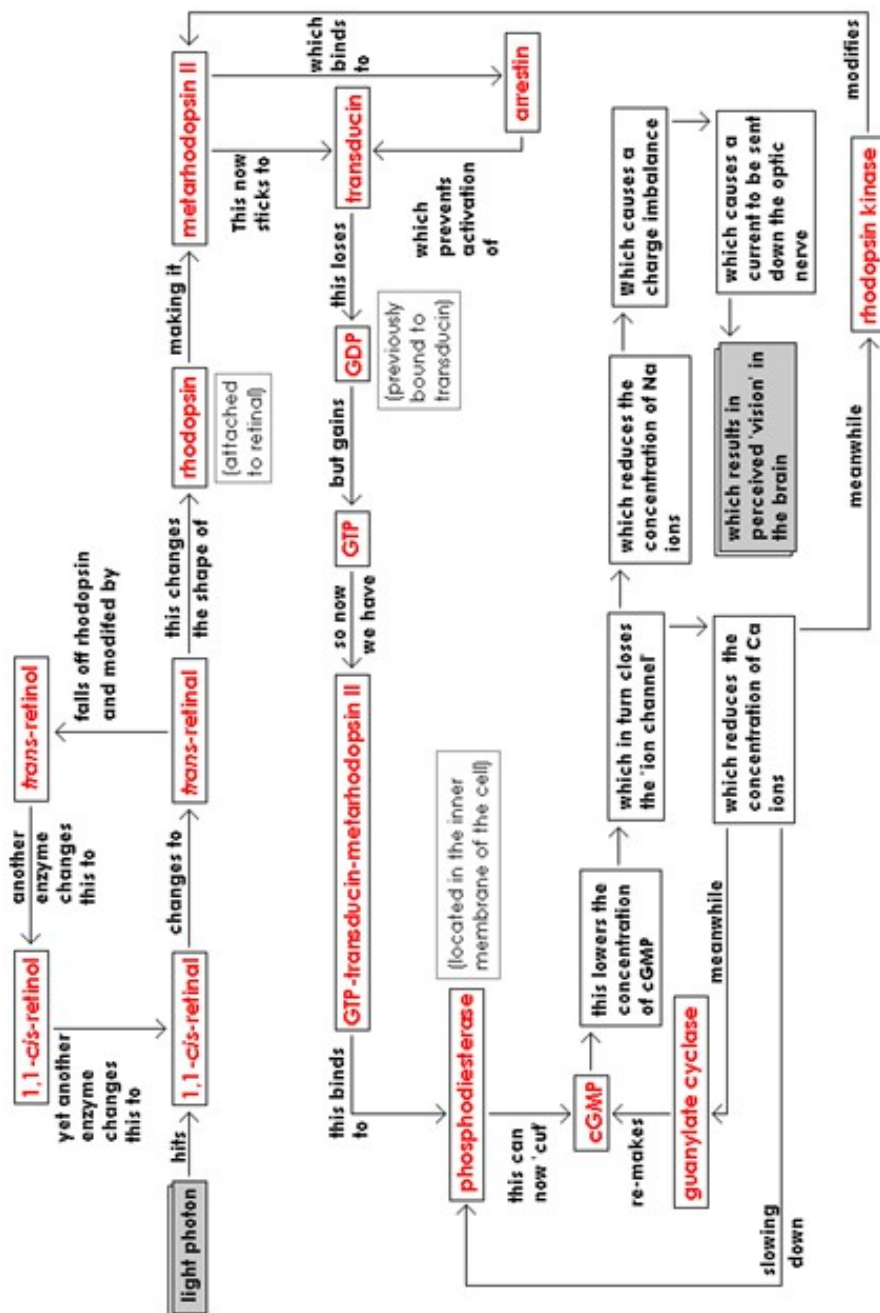


Figure 23.

If you follow the pathway from the grey box with the words “light photon” in at the left of the diagram, you will eventually trace through the series of reactions until you reach the last grey box

which reads “which results in perceived vision in the brain.” Along the way you can see a series of side reactions or points at which molecules are being replenished. Such a complex and intricate series of chemical reactions cannot be imagined to have come about through any gradual changes by natural selection. This system, along with so many others in the human body and other living things, screams to us of design.

The choroid.

Dawkins, along with others who take evolution as the paradigm for understanding, cannot imagine the eye in any other way than a cobbled together structure which has inherent flaws. However when we consider that the retina is just one small part of the overall structure, and that all the individual components are necessary for the whole to function, we are startled and perplexed at the foolishness displayed by evolutionists. We have shown briefly how sophisticated the retina is (there is a great deal more which could be added), but the retina cannot function properly without other structures doing their job too. One of these is the choroid.

The choroid is about the same thickness as the retina and extends all the way around the eye to the extent of covering the retina. Behind the choroid is the sclera, which is a fibrous layer made of collagen and elastic fibres that gives the eyeball its shape and strength. The sclera, or the 'white' of the eye, is thicker than the choroid and retina ranging from 0.4 mm to 0.9 mm.³⁵⁹ Interestingly, the sclera is continuous with the cornea, which is the transparent part at the front of the eye. The main function of the sclera is to give the eye its rounded shape and to provide protection.

Thus the choroid layer is sandwiched between the retina on the inner surface and the sclera which forms the outer protective layer. The main function of the choroid can only be seen in connection with the retina (see figure 24). We have only looked at part of how light is transferred into electrical signals and we have not considered all the other processes needed for a fully functioning retina. The choroid provides some of the requirements that enable the retina to perform its function. In the first place the choroid has the pigment melanin in great abundance and this enables it to act as a light-tight covering (the dark parts of figure 24). This feature of the choroid prevents stray light and reflections interfering with the signals being processed. In a normal camera the camera body is usually black inside and tightly bound to stop any stray light entering where it may cause distortion.

The choroid also has an intricate and carefully designed network of blood vessels which

359 S. Vurgese, S. Panda-Jonas and J. B. Jonas. Scleral thickness in human eyes. [PLoS One.](https://doi.org/10.1371/journal.pone.0029692) 2012;7(1):e29692. doi: 10.1371/journal.pone.0029692. Epub 2012 Jan 6. <https://www.ncbi.nlm.nih.gov/pubmed/22238635>

have two essential functions. First the blood supply acts as the transport system bringing in nutrients and taking away waste products. Without this supply of oxygen, glucose, and other substances, the retinal cells would not be able to function. The large number of mitochondria in each rod cell shows that oxygen and glucose are required in large amounts, for these are the materials required to release energy.

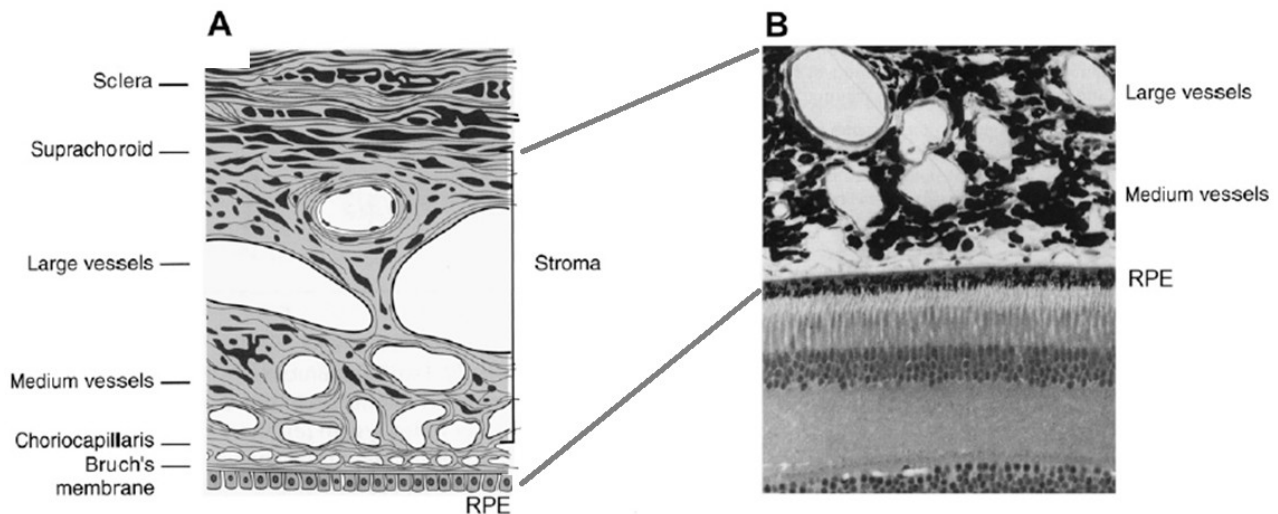


Figure 24.

RPE = retinal pigment epithelium.

But the second function of the blood vessel network in the choroid is to act as a heat sink. From figure 24 it can be seen that there are actually four distinct layers in the choroid. Closest to the retina is "Bruch's membrane." This is a very thin elastic sieve-like layer which allows transfer of nutrients and waste between the retina and the choroid. Above this is the "Choriocapillaris," which is a fine network of capillaries, that is, blood vessels with walls only one cell thick to allow diffusion of substances. Then above this is a section of medium sized blood vessels and then the last section where large blood vessels are found. The capillaries close to the retina enable nutrient transfer by diffusion, but the blood flow through the choroid is much faster than in other structures, and this acts to draw away the heat generated by incoming light that passes through to the back of the eye.

Without the choroid the retina would have no means to draw in nutrients and release waste, it would have nothing to prevent stray light from causing interference, and it would have a serious overheating problem. These two structures work together. How can it be possibly thought that one

or other of these came about through any gradual and slow process by means of natural selection? Remember that we have two body systems involved at this point in the eye. There is the cardiovascular system supplying nutrients and carrying away waste, and there is the nervous system for relaying information. In other words, the retina-choroid arrangement is the front line that connects two body systems. To have this arrangement requires there to be in place the tissues and organs that make up those systems! Remarkable!

Perception.

When we look at what happens to the electrical signals which are sent to the brain modern science is left in confusion. For our purposes here it is enough to recognise the amazing fact that light has been converted into electrical signals. Humans have only been able to produce machines to do this in the last 150 years or so, and our best efforts do not come anywhere near the sophistication of the eye. Figure 25 is an attempt at showing what is involved in transmitting a concert from the venue to the TV in your home.

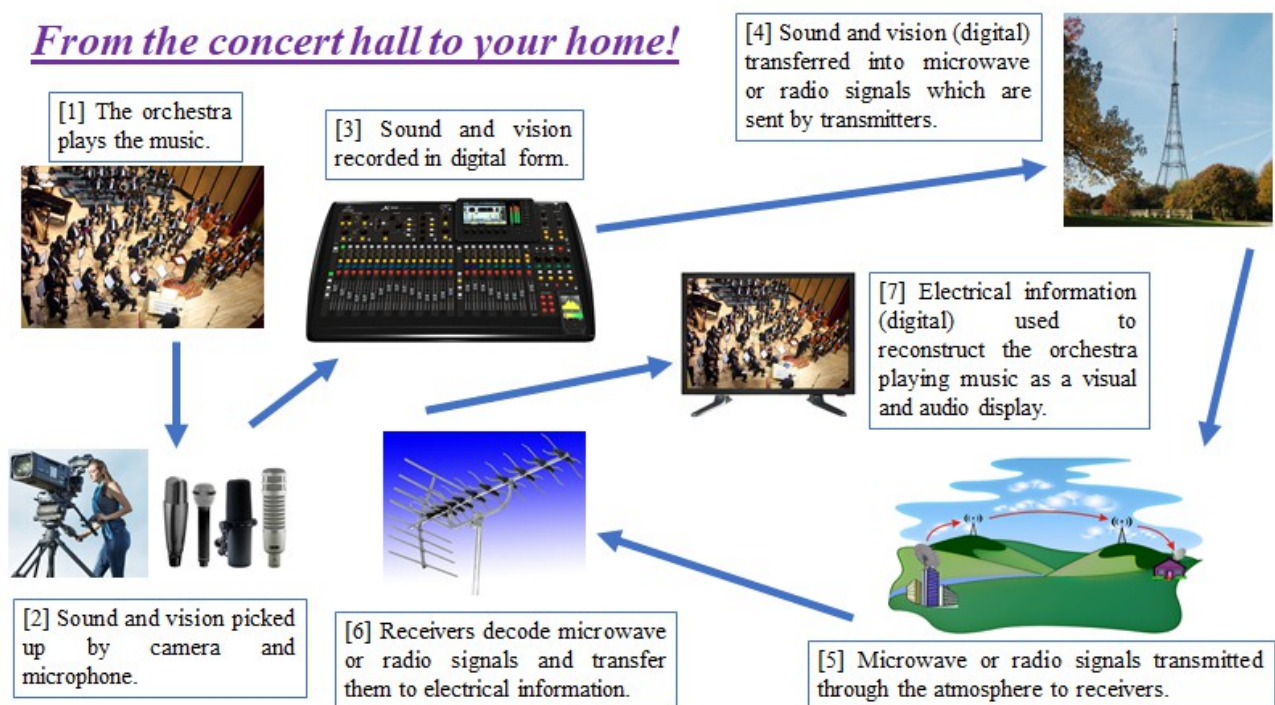


Figure 25.

The conundrum of what happens when the electrical signals are sent to the brain and then decoded is one which scientists have struggled with for some time. A look through the literature online shows us the truth of this statement. The following quotes come from a variety of sources on brain

research and perception (the emphasis in these quotes is mine):

*“Although the **visual processing mechanisms are not yet completely understood**, recent findings from anatomical and physiological studies in monkeys suggest that **visual signals are fed into at least three separate processing systems**. One system appears to process information mainly about shape; a second, mainly about colour; and a third, movement, location, and spatial organization.”³⁶⁰*

*“Despite some remarkable advances, **the brain remains largely a mystery**. We know it is made up of about 100 billion nerve cells, called neurons, connected like wires in a giant telephone exchange. We know messages pass down them like electrical signals, and jump from one neuron to the next by release of neurotransmitter chemicals. We even know where many of the different brain functions, such as memory, sight, and smell, reside. **But what we don’t really have a grasp on is the link between the micro and the macro: how the pattern of electrical and chemical signals results in such amazing things as consciousness, intelligence, and creativity.**”³⁶¹*

*“The big picture is that **we still really don't understand how our brain recognizes objects**. ... **...a major enigma** of what happens just in the next visual area. The issue, that even though it is just the next stage of processing, it has **very complicated features** that were **difficult to summarize**.”³⁶²*

*“Without question, conscious awareness is the most astounding — and most perplexing — aspect of the human brain. It’s what makes us the unique, self-reflective creatures that we are. Consciousness allows us to experience and react to our environment in an apparently self-directed way. We’re not just zombies; we have our own private thoughts, feelings, opinions, and preferences — and these traits allow us to figure out the world and operate within it. **But we are still quite a ways off from understanding how the brain produces phenomenal experience**, or qualia. **Neuroscientists cannot explain** how incoming sensations get routed around such that they can be translated into **subjective impressions like taste, colour, or pain**. **Or how we can conjure a mental image in our minds on demand.**”³⁶³*

*“The binding problem is when you look at what's happening in the brain, you find there's a division of labour. You have some parts of your brain that care about vision, some about hearing, some about touch. And even within a system, like vision, you have parts that care about colours, parts that care about orientations, parts that care about angles. And **how this all comes together so that you have a unified perception of the world is one of the unsolved mysteries in neuroscience.**”³⁶⁴*

360 <https://www.brainfacts.org/thinking-sensing-and-behaving/vision/2012/vision-processing-information>

361 <https://www.independent.co.uk/life-style/health-and-families/features/the-mystery-of-the-incredible-human-brain-weve-learned-a-lot-but-think-how-much-more-there-is-to-10115697.html>

362 **Tatyana Sharpee**. [Associate. Professor at the Computational Neurobiology Laboratory, Salk Institute for Biological Studies]. <https://www.salk.edu/scientist/tatyana-sharpee/videos/>

363 <https://io9.gizmodo.com/8-things-we-simply-dont-understand-about-the-human-brain-949442979>

364 <https://bigthink.com/in-their-own-words/unsolved-mysteries-of-neuroscience-the-binding-problem>

It makes complete sense that modern science is baffled at this point. When you turn to Scripture you discover that human beings are not just a collection of materials, blood flow, synapses, nerve connections and so on. We have a spiritual component which defies materialistic description. We shall have recourse to consider this vital subject later on. For now we simply note that the God who created us is Spirit.³⁶⁵ He who made all things is spiritual. He created all things visible and invisible. Modern science has no concept nor understanding of the spiritual realm and yet as human beings we are connected both to the physical and to the spiritual. Why does modern science fail here? Well we recall that, as Paul demonstrates, mankind is dead in trespasses and sins and has suppressed the truth.³⁶⁶

We are fearfully and wonderfully made.

The human body is a veritable marvel. Now as an exercise I used to get my students to describe as best they could the structure and function of a normal petrol-engine car (figure 26).

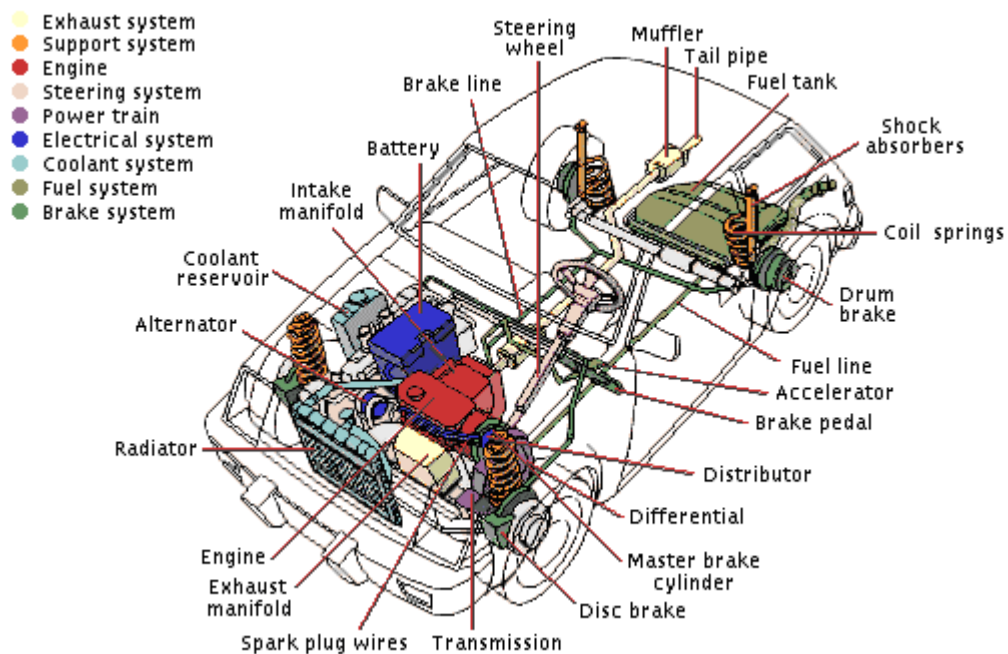


Figure 26.

As you may imagine there was a variety of response from the students. Some of the boys seemed to know all about how the engine worked, whilst many of the girls spoke of the interior and the

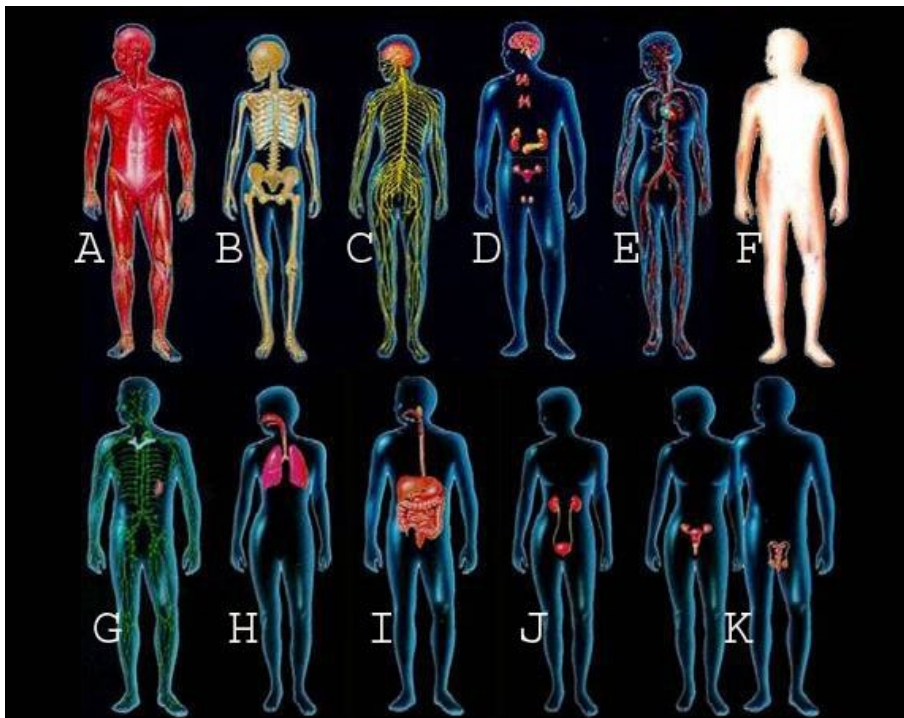
³⁶⁵ John 4:24.

³⁶⁶ Romans 1:18; Ephesians 2:1f.

entertainment additions!

After much searching of heart and great frivolity, we eventually arrived at all the main features of a car. Then we began to recognise something about how a car is designed for its function with all the various different systems in place to make the whole thing work. You cannot have a car without the “support” structure, that is, the chassis, the car body and its axles. In order for the car to function at all you need petrol and some system for delivering the petrol into the engine. Then, of course, you need the engine with all its component parts, pistons, crank shafts, and so on. To make the car begin the process of ignition of the petrol you need a sophisticated electrical system, that is, the starter motor, spark plugs and so on. To effect removal of waste gases produced by the explosion in the main chamber you need an exhaust system with catalytic converter and exhaust pipe. Then also there is the gear and clutch system, the brakes and tyres, a system for cooling the engine, and all the interior features for comfort. The electrical system does not just provide for ignition but also enables other features to operate, such as windscreen wipers, internal heater, headlights, windows and so on. All of these disparate systems are interconnected and reliant on one another. There would be no car at all if we had everything in place but no chassis, body and axle! What good would it be if we had everything in place but no fuel tank and fuel line? Discussions such as these are important to establish a basic principle. No one in their right mind would look at a modern petrol-engine car and conclude that it just came about through some random process. In fact we look at a car and can recognise the manufacturer from its shape and certain distinct features. Each car has been carefully designed and then carefully constructed. Now in car manufacturing the connection between design and manufacture is not linear but cyclic. The designer comes up with a blueprint but then the design needs to be tested out. It is all very well imagining what the next model will look like and planning various new features, but the great question is: will it work in practice? Thus the designer needs to have his work checked out, so prototypes are built and tested. The information from tests is then fed back to the designer who offers modifications until a workable model is arrived at. But in these interactions the central feature is intelligence. The designer, the constructor, the testers and so on are all intelligent human beings.

Now I used this exercise to begin a series of lessons on the human body. At the time of writing it is believed that there are 11 systems which go to make up a unified human being (see figure 27). These, as we shall see in a moment, are heavily interdependent. Having shown that modern petrol-engine cars are made up of integrated systems, it was not difficult for the students to see the connection to the human body. If the human body is made up of integrated systems then surely it too must have been designed? So let us consider some of these systems.



- A Muscular system.
- B Skeletal system.
- C Nervous system.
- D Endocrine system.
- E Circulatory system.
- F Integumentary system.
- G Lymphatic system.
- H Respiratory system.
- I Digestive system.
- J Urinary system.
- K Reproductive system.

Figure 27.

The respiratory system.

To begin with let us consider the respiratory system. This is made up of the mouth, nose, trachea and lungs. Immediately that we list these essential features of the respiratory system we recognise that these cannot exist independently. The lungs need a cavity, or space, within which to operate, that is, the chest. Thus the whole system needs a structure (the skeletal system) to enable it to function, which operates much like the support structure in a car (chassis, body, axles). Further, without a diaphragm (the large muscle in the middle of our bodies), and intercostal muscles (between rib bones), the respiratory system would not be able to operate properly. Now the respiratory system serves two essential functions. It enables oxygen to be taken in by the body, which is needed for the respiration reaction which releases energy, and it enables the waste gas carbon dioxide (CO_2) to be removed from the body. Essentially the respiratory system is a gas-exchanger. Now in order for such to work effectively it needs a good filtration system. Ventilation systems in buildings and machines all use some type of filter. These are provided to stop unwanted dust, particles and small debris clogging up the works. In the human body we have an elaborate series of mechanisms which do this job of filtration. Our noses catch dust and debris as we breathe in, and these are caught in hairs and sticky mucus, and can then be removed by blowing your nose!

Those particles which get through the nose (or mouth) are stopped by mucus and are wafted back up the airways by means of small hairs called “cilia” in our airways. In these ways we can see that the respiratory system is dependent upon the integumentary system (made up of skin, hair and nails), and also the cells that generate mucus.

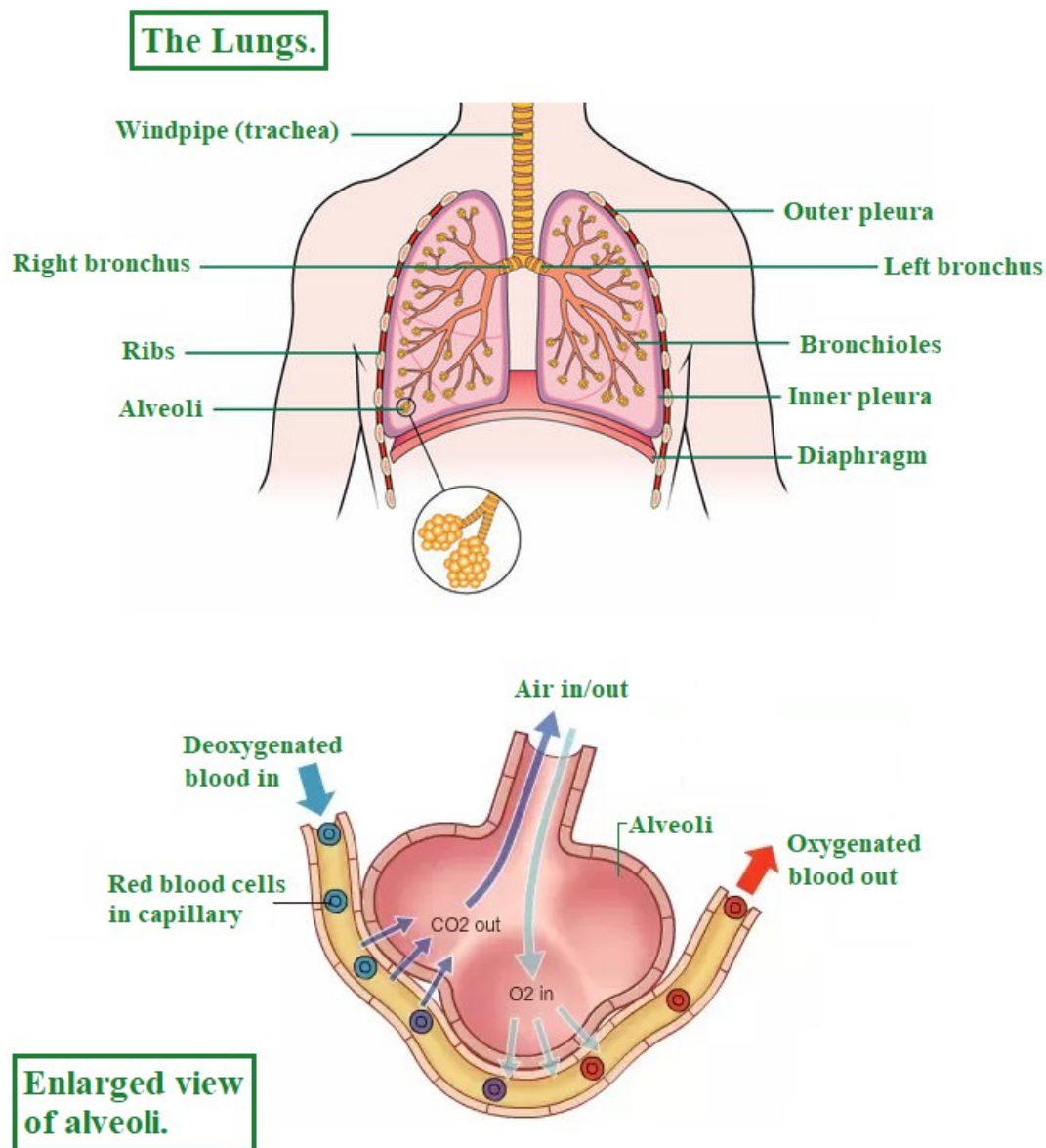


Figure 28.

Mucus has several functions apart from trapping unwanted material. It is found in the mouth, nose, sinuses, lungs and gastrointestinal tract, and acts as a protective blanket over the surfaces it covers preventing them from drying out and becoming cracked. It also contains antibodies which serve to attack any foreign microbes that may have entered the body.

Returning our thoughts to the main function of the respiratory system (gas exchange) we discover that at the smallest parts of this system (the tiny air sacs called “alveoli”) there is a connection to another major body system, namely, the circulatory system (also called the cardiovascular system). Figure 28 shows the lungs and a close-up of what happens at the alveoli. The alveoli sacs are covered in capillaries. Because both the alveoli and capillaries have such thin walls (one cell thick), gases can diffuse into and out of them quite quickly. Diffusion depends on concentration gradient. The concentration of oxygen inside the red blood cells coming towards an alveolus is much lower than the concentration of oxygen in the alveolus.³⁶⁷ Thus oxygen diffuses into the blood. The exact opposite is the case with regard to carbon dioxide, so this gas diffuses out of the blood into the alveolus. And so we see that the respiratory system's function is useless as a stand alone, for it is integrated at the basic level with the cardiovascular system.

The cardiovascular system.

The cardiovascular system comprises the heart, veins, arteries, capillaries and blood. The main function of this system is transport, but it also helps to maintain body temperature too. Blood flows all around the body carrying oxygen needed for respiration in cells. But that is not all because the transport system also carries other nutrients and also waste materials too. In fact it is known that blood carries more than 4,000 different kinds of components!³⁶⁸ Some details of the four most important constituents of blood are shown in table 6.

Blood, therefore has a multitude of functions. It carries oxygen to all the cells of the body which need it for metabolic processes, it contains the much needed defenders from infection and pathogens (thus white blood cells act a bit like the military guards), it has the rescue squad which patch up tears and damaged areas (platelets along with blood clotting factors), and it transports a multitude of other substances for an equally numerous number of functions.

In this brief description we can see that the circulatory system is connected to many other systems besides the respiratory system we have already discussed. By carrying the numerous hormones, which act as chemical messengers triggering specific reactions, it is inextricably linked to the endocrine system. Since the products of digestion are passed through the tiny villi found in stomach and intestine walls into the capillaries that surround them, it is intimately connected with the digestive system (see figure 29).³⁶⁹

367 Singular of alveoli.

368 <https://www.sciencedaily.com/releases/2011/02/110224145609.htm>

369 The villi are the finger-like projections lining stomach and intestine walls. They are no more than about 1mm in height. They dramatically increase the available surface area and so allow diffusion of digested molecules (sugars, proteins and fats) into the blood stream.

Table 6: Components of human blood.

Component.	Percentage volume of blood.	Essential facts.	Function.
Red blood cells. Erythrocytes.	40-50%.	Made in bone marrow at rate of 2 to 3 million per second.	Carries and transports oxygen. Each red cell has about 270,000,000 molecules of haemoglobin, which makes up 95% of red cell volume.
White blood cells. Leukocytes.	1%.	Made in bone marrow and thymus gland, found in lymphatic system.	Destroys pathogens – part of the immune system. There are several different types each with specific functions.
Platelets. Thrombocytes.	Varies.	Made in bone marrow.	Part of blood clotting system. Also aid in fighting infections.
Plasma.	55%	Liquid part of blood which is 92% water.	Watery fluid that enables transport of red and while blood cells and all of the dissolved substances to all parts of the body. These include: waste products, sugars, lipids, vitamins, minerals, hormones, enzymes, proteins, antibodies.

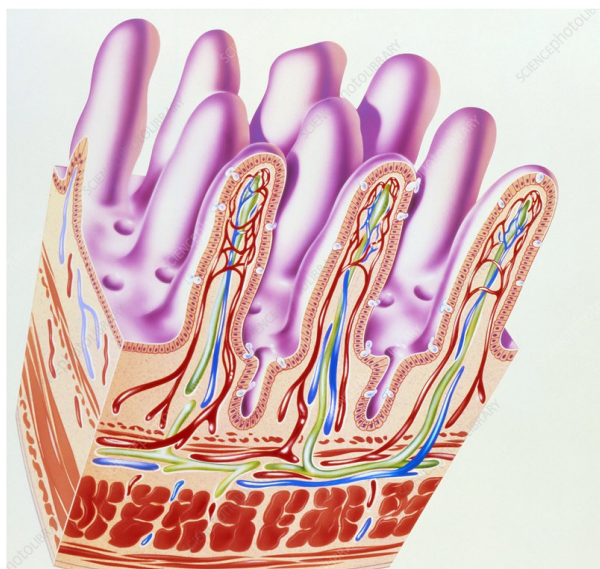


Figure 29.

Modern life as we know it is also intricately interwoven. We only have to consider how we get our food, the various jobs we do, and the organisation of the country as a whole to see how like a human body it all is. Although we often complain and moan about governments or about industries for their failures, nevertheless we know that the whole system operates because of intelligent human

Further, because it carries the waste products from metabolic reactions which are filtered by the kidneys and released to the bladder and out of the body, it is closely linked to the urinary system. Blood cells are generated in the bone marrow and so the circulatory system is dependent upon the skeletal system.

So just as our network of roads covers the entire country with major roads like motorways acting as arteries, and the tiny roads down country lanes are like capillaries, so the blood supply network extends to all the extremities of our bodies.

beings doing their work and carrying out their various functions. The farmer grows the food we eat, which is delivered by the lorry driver working for a haulage company, and this is supplied to us by the supermarkets. If this was haphazard and brought about by random chance do you think we would survive?

And then ...

But then what of the many other systems in the human body that require the delivery of oxygen and the removal of waste (apart from other things)? The brain, our sense organs, the bones, the kidneys, muscles, and sex organs all require this needed supply too. In short it is impossible to dissect the human body into separate parts perfectly because they are all interlinked and interdependent. The nervous system makes no sense on its own. It requires the muscles and skeleton to effect the response to stimuli. The digestive system considered on its own is equally redundant. For what purpose does it break down ingested food, if not to deliver these to parts of the body where they are needed? Why have a waste disposal system if there is no waste generated? Wherever we look in the human body we find that we are not looking at an isolated part but we are viewing the whole.

Given the above very brief descriptions of parts of the eleven systems of the human body, is it possible to believe that all of this has come about through a long and gradual process of evolution? Surely not! We mentioned at the start of this section that a modern petrol-engine car is similar to the human body with its integrated systems. No one in their right mind would conclude that the various models of cars we observe today have come about without design, without intelligent construction, or without human input. When we look into the human body we see a much more sophisticated system of engineering than we find in the modern car. So surely the only logical conclusion is to demand that there must be some grand Designer who conceived and constructed such a fearfully and wonderfully made marvel?

A question of probability.

Current theories of the origin of life demand nothing but statistical probability and the operation of what are known as the “laws of science.” To enable some semblance of reason, evolutionists also add vast amounts of time. Without time – and massive amounts of time – evolution would not even get off the starting blocks as an idea.

The problem is that whenever statistical probability calculations have been performed, they always lead to the conclusion that the concept of evolution is impossible. The French biophysicist,

Pierre Lecomte du Noüy, performed one such calculation, and reported this in his book *Human Destiny*. He calculated that given 500 combinations of amino acids per second, the chance of getting a protein molecule 2000 atoms long would be one in 10^{243} billion years.³⁷⁰ The English physical scientist J. A. V. Butler performed a similar calculation and published this in his work, *Man is a Microcosm*.³⁷¹ He calculated that the chance of forming a protein is one chance in 10^{160} , or once in 10^{243} billion years.

Two other scientists (who accept a creationist view) have calculated that a protein of 410 amino acids (an average size of protein) has one chance in 2^{410} or 10^{123} of forming such that all the amino acids would be the left handed version. This calculation does not take into account the need for the order of amino acids, which would increase the numbers unimaginably.³⁷²

In April 1962 a symposium was held at the Wistar Institute of Anatomy and Biology in Philadelphia, Pennsylvania. Present were distinguished evolutionists and eminent mathematicians. The symposium was titled: “*Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution*.” Dr. Murray Eden, a distinguished mathematician and professor of Electrical Engineering at MIT opened the symposium with a paper titled: “*Inadequacies of Neo-Darwinian Evolution as a Scientific Theory*,” Eden pointed out that relying on random chance as the mechanism simply wasn't an option. He stated:

*“It is our contention that if ‘random’ [chance] is given a serious and crucial interpretation from a probabilistic point of view, the randomness postulate is highly implausible and that an adequate scientific theory of evolution must await the discovery and elucidation of new natural laws, physical, chemical and biological.”*³⁷³

Eden then demonstrated the impossibility of chance alone being the engine that allowed for evolution. He discussed the probability of getting the genes of the bacterium E. Coli in the right sequence along their chromosomes. He calculated that if the bacteria were spread over the entire surface of the earth to a depth of one inch, then it would take some 5 billion years before you hit one chance that two genes would be brought into the correct position along the chromosome. More recently, Douglas Axe (director of the *Biologic Institute*) at Cambridge University has calculated

370 Pierre Lecomte du Noüy. *Human Destiny*. 1947. P34.

371 J. A. V. Butler. *Man is a Microcosm*. 1951. P112.

372 See, for example: <https://www.rae.org/essay-links/lefthandaa/>. A. E. Wilder-Smith and James F. Coppedge (in *Evolution: Possible or Impossible*) are examples.

373 All quotes taken from: Paul S. Moorehead and Martin M. Kaplan. *Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution* (The Wistar Institute Symposium Monograph Number 5) (Philadelphia, PA: The Wistar Institute Press, 1967).

that the probability of getting a **functional protein** (made from 150 amino acids) from all of the total possible proteins is 1 in 10^{74} .³⁷⁴

The astronomer Sir Fred Hoyle together with the mathematician Chandra Wickramasinghe, made the following statement in 1981 published in the popular magazine *New Scientist*:

*“Precious little in the way of biochemical evolution could have happened on the earth. If one counts the number of trial assemblies of amino acids that are needed to give rise to the enzymes, the probability of their discovery by random shufflings turns out to be less than 1 in $10^{40,000}$.”*³⁷⁵

Fred Hoyle has gone further in his estimation that evolution on earth is impossible. Quoted in a piece in *Nature* magazine in 1981, he is reputed to have claimed that:

*“The chance that higher life forms might have emerged in this way (through random chemical reactions) is comparable with the chance that “a tornado sweeping through a junk-yard might assemble a Boeing 747 from the materials therein.”*³⁷⁶

Whilst in an article in *New Scientist* the same year Hoyle declared that the chance of forming life on earth through random processes and the ordinary regular “laws of nature,” was simply “nonsense of a high order.”

*“Anyone with even a nodding acquaintance with the Rubik cube will concede the near impossibility of a solution being obtained by a blind person moving the cube faces at random. Now imagine 10^{50} blind persons (standing shoulder to shoulder, these would more than fill our entire planetary system) each with a scrambled Rubik cube and try to conceive of the chance of them all simultaneously arriving at the solved form. You then have the chance of arriving by random shuffling (random variation) of just one of the many biopolymers on which life depends. The notion that not only the biopolymers but the operating program of a living cell could be arrived at by chance in a primordial soup here on Earth is evidently nonsense of a high order.”*³⁷⁷

The well respected British astronomer Bernard Lovell, held that the chance of life forming through random combinations was “effectively zero.”

374 See: <https://www.youtube.com/watch?v=SC9Hx3WpsCk> and <http://www.originthefilm.com/mathematics.php>

375 **Fred Hoyle** and **Chandra Wickramasinghe**. Where Microbes Boldly Went. *New Scientist* 91 (1981). P412-415.

376 **Fred Hoyle** – quoted in “Hoyle on Evolution” *Nature* 294. 12 November 1981. P105.

377 **Fred Hoyle**. The big bang in astronomy. *New Scientist*. 92. 19 November 1981. P527

*“The operation of pure chance would mean that within half a billion year period the organic molecules in the primeval seas might have to undergo 1050 (one followed by 50 zeros) trial assemblies in order to hit upon the correct sequence. The possibility of such a chance occurrence leading to the formation of one of the smallest protein molecules is unimaginably small. Within the boundary conditions of time and space we are considering, it is effectively zero.”*³⁷⁸

The conclusion made by a selection of more than 30 biologists is that life simply could not have arisen upon earth in the time frame provided by (speculative) science:

*“The transformation of an ensemble of appropriately chosen biological monomers (e.g. amino acids, nucleotides) into a primitive living cell capable of further evolution appears to require overcoming an information hurdle of supraastronomical proportions ... an event that could not have happened within the time frame of the Earth except, we believe, as a miracle (Hoyle and Wickramasinghe, 1981,1982,2000). All laboratory experiments attempting to simulate such an event have so far led to dismal failure (Deamer, 2011; Walker and Wickramasinghe, 2015).”*³⁷⁹

Astonishingly scientists like these will not make the obvious conclusion that there must have been a designer, and instead they push the problem out into space:

*“It would thus seem reasonable to go to the biggest available “venue” in relation to space and time. A cosmological origin of life thus appears plausible and overwhelmingly likely to us, and various ideas that have a bearing on this question have been explored in great depth by Hoyle and Wickramasinghe (1979, 1981,1982, 2000) and Gibson et al. (2011).”*³⁸⁰

The mention of a “cosmological origin” for life hardly helps. If evolution cannot have gotten a foothold within the (supposed) 4.6 billion years of earth history, what difference would an extra 10 billion years (i.e. the supposed age of the universe – 14 or 15 billion years) make?

These mathematical calculations show without any reasonable doubt that the chance of life arising simply through the laws of science (or nature) is impossible. What then should we say? Well the clue is, of course, to be found in the concepts alluded to by Steele et al in the last two quotes. First they allude to the concept of “miracle,” and then they speak of a heavenly (“cosmological”) origin for life. In short, God is Creator. When He created He did so specially, by a singular process

378 **Sir Bernard Lovell.** In the Centre of Immensities. 1979. Arrow Books. P63.

379 **Edward J. Steele** – a molecular immunologist with interest in virology and evolution at the CY O'Connor ERADE Village Foundation in Australia – with more than 30 other researchers published “Cause of Cambrian Explosion - Terrestrial or Cosmic?” Progress in Biophysics and Molecular Biology 136 (2018), 7.

380 **Edward J. Steele.** Progress in Biophysics and Molecular Biology 136 (2018), 7.

or miracle, and not by following any law or system. The so-called “laws of science” (or nature) are, in point of fact, nothing more nor less than the regular operations of an ordered and perfect Being, namely God.

Chapter 4: Theistic evolution.

(The incompatibility of evolution with the Christian faith).

A little bit of history.

All through church history Christians have struggled to represent their Lord and Saviour in the real world as they experience it. Part of this struggle embraces the intellectual world of ideas. When a new idea arises in the world, Christians are often slow in responding. Sometimes the initial response is reactionary whereas a more thought out reply is really needed. At other times there is a robust response from Christians but the general drift and pressure to tear up the old ways amongst the leaders and intellectuals is (in human terms) unstoppable.

As an example of such changes, let us consider the seventeenth century where modern science burgeoned rapidly.³⁸¹ This is the period of time when the Westminster Confession was formulated (1646) just prior to the execution of king Charles I (1649) and the commonwealth era (1649-1660). It is also the period when Archbishop James Ussher calculated the date of creation at 4004 BC using Scripture (1650). There was also a significant change in the Church of England throughout this century, and new “Independent” churches began to flourish. On top of this there were many natural philosophers working which today we would call *scientists*. And, because the constraints of the state church domination were lifted to some degree, various new ideas were being expressed. One such to express new thought was Thomas Hobbes (1588-1679) who argued for a new understanding (or world view) based not on Biblical grounds but on “Natural Law.”³⁸² Hobbes influenced the philosopher John Locke (1632-1704) and contemporary political thought significantly at this time. The Puritan preacher Richard Baxter (1615-1691) wrote in opposition to Hobbes, but the push for thinking on grounds other than Scripture was now in full swing. Modern science as it grew through the seventeenth century switched its focus from God's creation, to *Nature* in all her cruelty and richness. Francis Bacon (1561-1626) limited the fall of creation to the realm of the will, and wrote forcefully and influentially of the “Two Books” of God (nature and Scripture) which were to be considered by different methods. Robert Boyle (1627-1691), the father of modern chemistry and a committed Christian, sought to stem this misunderstanding of God's creation. He wrote a book entitled: *The Free Enquiry into the Vulgar Notion of Nature*, in which

381 The Royal Society gained its Royal Charter in 1660.

382 This phrase is liberally scattered throughout his major work “*Leviathan*” published in 1651.

he laments the change in viewpoint from God's "creation," to the new idea that *Nature* is an autonomous entity (to which we have already referred).

In the eighteenth century deism began to take hold amongst many intellectuals, Deism is the idea that God may have started everything, but was allowing nature to run its course like the running down of a wound-up clock. By the end of the eighteenth century, the new science of geology had made its beginning through James Hutton (1726-1797), who argued before the *Royal Society of Edinburgh* circa 1785, that the earth was much older than thought according to Scripture. Further, in 1795 Thomas Paine (1737-1809) published his book, *The Age of Reason*, which was a full frontal attack on the Christian faith. Despite the revivals of this century brought about by the Lord using George Whitfield (1714-1770) and John Wesley (1703-1791) amongst others, the period is usually characterised by historians as "The Age of the Enlightenment." Attacks on the old Christian basis for life and thought came thick and fast. The Scottish enlightenment thinker David Hume (1711-1776) attacked the notion of miracles in a work published in 1748, and the German enlightenment thinker Immanuel Kant (1724-1804) argued for reason as the foundation or basis for life in his work *The Critique of Pure Reason* published in 1787.

By the time we reach the nineteenth century, the stage has been set and made ready for the coming of Darwin and the promotion of evolution. We shall not elaborate further suffice to say that the general drift and impetus amongst intellectuals in the world is *always* away from godly Scriptural principles. Whenever a new idea surfaces there are responses and counter-arguments made by Christians motivated by their love for God's glory, but these never have the impact they deserve. It might be concluded from such a statement that such a poor outcome shows these responses as weak and of no real value. If the weight of Christian response to new ideas does not effect a change, then what worth do they really have? But of course this is to overlook the way in which the Lord Himself has revealed to us how history is progressing. The rulers (or kings) of the earth may take their stand and "*set themselves ... against the Lord and His Anointed,*" but they do so in vain for "*He who sits in the heavens shall laugh.*"³⁸³ In the meantime we recall the fact that our Lord and Saviour told the disciples that they would have "*tribulation*" in the world, whilst Paul taught us in his second letter to Timothy that things would progress from bad to "*worse*" because men will be focused on self-love, ambition hating the good, and so on, and in his letter to the Romans that men will "*suppress the truth in unrighteousness.*"³⁸⁴ We are not to expect intellectual "success" or approbation in this world because it, and all its ways, are doomed to destruction.³⁸⁵

383 Psalm 2:2-4.

384 John 16:33; 2Timothy 3:1-13; Romans 1:18.

385 2Peter 3:10f.

That is not to say that some men and women might not achieve and be noted for their godly stand and faithfulness to God amongst the intellectuals of the world. Far from it. We could name many who have, like Daniel, been able to stand for truth in a dark and desperate age. But we should not be surprised at the general drift in intellectual thought from one degree of darkness to another. In the midst of this decline, our task is to offer good, godly and faithful response whenever called upon, but knowing that we shall not be heeded ultimately. All the while the gospel is progressing and people are turning to Christ to be rescued from the destruction that this world and its leaders are rushing headlong into. Praise God!

I sometimes wonder whether Christians really do grasp this tension that we exist within between the old world (which is destined for conflagration) and the new of which we are the first fruits? Through Israel of old the Lord demonstrated that with all the advantages God could muster, there could be no success on this (fallen) earth for man in terms of an earthly kingdom. Man could not keep the covenant of Sinai, and a new covenant which stemmed from eternity was required. The book of Ecclesiastes is a potent statement to the effect that try as we might with all our might, man simply cannot “*discover*,” and he cannot prevail.³⁸⁶ How many times do we read words such as “*I will destroy the wisdom of the wise*” or that man's mind is foolish, darkened or vain?³⁸⁷ Given these thoughts we do well to draw ever closer to God and His ways and shun this world in totality. We ought to heed the words of Paul who so keenly expressed his desire to throw off the shackles and weight of this world's feigned respectability in his pursuit of Christ. Consider this man who had a glittering career as an intellectual amongst his peers. And yet he counts all these things, which most certainly would have given him reputation, position, honour and status in the ancient world, as rubbish, refuse, or that which is thrown to the dogs!

7 But what things were gain to me, these I have counted loss for Christ. **8** Yet indeed I also count all things loss for the excellence of the knowledge of Christ Jesus my Lord, for whom I have suffered the loss of all things, and count them as rubbish, that I may gain Christ **9** and be found in Him, not having my own righteousness, which *is* from the law, but that which *is* through faith in Christ, the righteousness which is from God by faith; **10** that I may know Him and the power of His resurrection, and the fellowship of His sufferings, being conformed to His death.³⁸⁸

When he came to the Corinthian believers who were partial to those who presented as especial and superior, who presented themselves with great wisdom and pomp, he writes:

386 Ecclesiastes 7:29; 8:16,17.

387 Psalm 94:11; Isaiah 29:14; Jeremiah 8:9; 1Corinthians 1:19; Ephesians 4:18

388 Philippians 3:7-10.

1 And I, brethren, when I came to you, did not come with excellence of speech or of wisdom declaring to you the testimony of God. **2** For I determined not to know anything among you except Jesus Christ and Him crucified. **3** I was with you in weakness, in fear, and in much trembling. **4** And my speech and my preaching *were* not with persuasive words of human wisdom, but in demonstration of the Spirit and of power, **5** that your faith should not be in the wisdom of men but in the power of God.³⁸⁹

The cross of Christ is not only fundamental to the believer, it is pivotal. Consider this, that Paul made it his policy to know nothing amongst those who favoured intellectual pursuits but Christ and Him crucified. Here is the question: to what extent is Christ and His atoning sacrifice central in the pursuit of modern science? I do not ask this question amiss, for Christ is the very focus of creation as Paul writes:

15 He is the image of the invisible God, the firstborn over all creation. **16** For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him. **17** And He is before all things, and in Him all things consist. **18** And He is the head of the body, the church, who is the beginning, the firstborn from the dead, that in all things He may have the pre-eminence.³⁹⁰

Verse 17 has always been important in my testimony. As a chemist studying structures of inorganic compounds using electron microscopy, the atomic theory has always been something I have studied. But here in verse 17 we discover that truly indeed “*underneath are the everlasting arms,*” for at the root of Creation is Christ so that “*in Him all things consist.*”³⁹¹ Other translations suggest that it is in Christ that “*all things hold together.*”³⁹² The word used here is the Greek *synistēmi* and it has the basic meaning “to stand together.” The Latin *consisto*, from which we get our English word “consist” is the exact equivalent of the Greek *synistēmi*. So the main point is that creation exists and continues only because Christ is the “I am.” The statement in the first chapter of Hebrews where we read that Christ is “*upholding all things by the word of His power,*” is also pertinent here.³⁹³ The word “*upholding*” means “to bear” and can signify not only the idea of carrying something but also to bring forth (e.g. fruit).³⁹⁴ Thus creation exists only because Christ upholds it by His word.

Consequently we cannot agree with those who mix modern secular science with Scripture.

We agree instead with the apostle Paul who wrote:

389 1Corinthians 2:1-4.

390 Colossians 1:15-17.

391 Deuteronomy 33:27.

392 NIV, NASB, ESV.

393 Hebrews 1:3.

394 In the AKJ the word is translated “*bear fruit*” in John 15:2,6, whilst it is translated as “*carry*” in John 21:18.

But God forbid that I should boast except in the cross of our Lord Jesus Christ, by whom the world has been crucified to me, and I to the world.³⁹⁵

The tension that exists between the believer and the world, especially in the realm of ideas is a fraught one. It is vital that we call ourselves to attention often, and remember whom we are serving. The tendencies are twofold. We either compromise and give up truth in the drive to be a part of what is going on in this world, or we flee from the world becoming isolated so that our truth has no effect on anyone at all. The trick is to recognise that there is a battle, that we will face tribulation, and in such circumstances to maintain sound doctrine in our determination to preach the good news to the entire world. Make no mistake here, the good news encompasses the ideas of Christ as Creator and upholder of all things. Fractured, disjointed and simplistic messages, such as “admit that you are a sinner and turn to Christ” do little to stem the tide of rampant sin.³⁹⁶ We need to teach the “*whole counsel of God*.”³⁹⁷ Recognising the temptation to compromise or run away is essential for every believer. Thankfully we have a Saviour who is ready and willing to oft hear our confession and will forgive so that we can begin again.³⁹⁸

Theistic evolution as an idea.

In part 2 of this work we shall elaborate on the views of various writers who have opted for some form of compromise with modern science in order to *understand* Genesis and origins. For now, however, we need to establish what we mean by the term “theistic evolution.” Up to this juncture we have discussed biological evolution and pointed out some of its flaws. In general, however, evolution embraces the idea that at some vast distant age life spontaneously arose from simple organic chemicals, and that since that point over the vast ages of time a combination of natural selection and genetic mutations have operated to build more and more complex organisms. There has been no purpose or direction to evolution's *progress*, but all has been governed by natural law.

Theism is the idea that there is a God. More specifically we mean to limit our discussion to the Christian concept of God as revealed to us in the Holy Scriptures. Through the church age

395 Galatians 6:14.

396 I am not arguing that such a message has no place at all, for it depends on the context. If this message comes on the back of discussion of the nature of things as Scripture depicts them (God created all things, man sinned, God cursed the world, Christ has come to redeem all things) then it may well be enough to bring about the salvation of someone. What I am suggesting is that simply issuing trite and short-cut versions of the truth (sound-bites) is not good enough. The Lord instructs His church to teach everything about Christ, not just the four spiritual laws (Matthew 28:18f).

397 Acts 20:27.

398 1John 1:8,9.

Christians have delved into the Scriptures to discover more and more about this remarkable Being. Now is not the time to embark on a course of systematic theology but we must establish some basic truths concerning God. To begin we observe that God presents Himself to us first as Creator in Genesis chapter 1. Again we cannot enter into specific details at this point but suffice it to say that God's action in creating the universe is reported to us as having taken 6 days and was then fully completed by the seventh day. God is thus the sovereign owner and sustainer of all that is. God is the King of the universe. We note also that God is the one who takes the initiative and that He has made Himself known by revelation of His word, and in and through His creation. God is next presented to us as Lord, Yahweh, the self-existent or eternal one who created man in His own image and delights to interact and know man.³⁹⁹ That God is intimately involved in creation is seen not only in the story of creation of man and woman, but throughout Scripture. Third God is presented to us as Judge, the one who brings sin and rebellion to justice.⁴⁰⁰ In this way we note that God as sovereign owner and ruler of creation has subjected creation to the curse, or to futility as Paul describes it.⁴⁰¹ This truth we will find is also one we see throughout the pages of the Bible. Fourth we discover that God is merciful and has made a way for sinful rebellious humankind to return to a right relationship with Him.⁴⁰² At this point we discover that there is to come One who would effect deliverance and salvation for mankind, namely, the “Seed” of the woman, who will bruise the serpent's head.⁴⁰³ The remainder of the Bible brings to light this one whom we come to know as the incarnate God, the Word made flesh, Jesus Christ, the Son of God, and Lord of all. This One is referred to as the “second” man and the “last” Adam.⁴⁰⁴ We learn further that Christ Jesus is: *One with the Father*, and that He was with the Father before ever the worlds began.⁴⁰⁵ Then also we learn of the Holy Spirit who is equally God! We move from these individual concepts of the three separate persons to an understanding that God is three persons in one indivisible perfect unity. We learn also of God's plan for mankind and this fallen world. Believers who have been born again of the Spirit of God are part of the new creation, the new kingdom and are not of this world which is doomed to destruction by fire.⁴⁰⁶ We learn of Christ's atoning and substitutionary sacrifice for sin, the only way possible for men, women and children to be forgiven and made new.⁴⁰⁷ We discover that whosoever will come to Christ in repentance for sin and whoever places their faith in the triune

399 Genesis 2:4bf.

400 Genesis 3:14f.

401 Romans 8:20.

402 Genesis 3:15,21.

403 Genesis 3:15.

404 1Corinthians 15:45,47; Romans 5:12.

405 John 1:1f; 10:30; 17:5.

406 John 18:36; Colossians 1:13; 2Peter 3:10f.

407 John 14:6; Acts 4:12.

God for life, and in particular in what Christ has done through His death and resurrection, will be redeemed and will have the right to become children of God born not of the will of man but of God.⁴⁰⁸ We discover that Christ's death on the cross and His resurrection were not simply to redeem man, but to bring reconciliation to all things, the universe included.⁴⁰⁹ Finally we learn of God's way to reach man through His word by His Spirit. What God has said forms a believer's very basis and standard for all that is, all that he thinks or seeks to do. After all it is only in Christ that are hid "*all the treasures of wisdom and knowledge*" and we only learn of Him through God's word, the Bible.⁴¹⁰ These are the things which one who claims to be a theist will own.

From this very brief introduction to the Christian faith and our more detailed treatment of evolution it can be readily seen that to be a theistic evolutionist requires some incredible mental gymnastics! Immediately we note that the concept presented in Scripture of a finished creation which was originally good but now cursed because of sin plays havoc with the idea that everything has evolved in a non-directed purposeless way! Then also we note the connection between Christ and Adam. If one is historical then both are, and yet there is no place for Adam within an evolutionary system. We shall examine the conflicts in more detail later on but simply note here that what is presented to us as Christian doctrine shows no room for, nor compatibility with, the modern notion of molecules to man evolution.

The problems of theistic evolution.

It is one thing to be all things to all men and to appeal to people by virtue of sharing common themes and lots in life, but it is quite another thing to fall headlong into a compromise that ends up destroying the central tenets of your most cherished beliefs, whilst at the same time alienating those whom you have tried to connect with. This, sadly, is the fate of those who pursue theistic evolution as an idea to explain our origins. Theistic evolution is the idea that God has used evolution to create and maintain all things. Theistic evolutionists work hard to reconcile the modern science of evolution with the Bible. In order to do this they have to opt for some creative ways of interpreting Scripture. Some, with low views of Scripture and its origin, do not bother to effect any reconciliation with Scripture at all. Others attempt to modify Scripture and are selective with respect to the place of modern science. But all of them accept general evolution as an idea. Now, having outlined broadly what we mean by the term "theistic evolution," it is time to point out the immense difficulties such a view point generates.

408 John 1:13; 3:16.

409 Colossians 1:20.

410 Colossians 2:2,3; Luke 24:27; 44-47.

In what follows we shall have cause to consider a large variety of aspects for which belief in a theistic evolution view of existence causes serious problems. Evolution is not found as an idea in Scripture and common sense tells us that evolution is really counter to experience. Of course 'electrical theory,' for example, is not found in Scripture either, but this subject does not impinge on how we view life and its purpose, whereas evolution most emphatically does. Theistic evolution renders Adam and Eve as not real historical persons which has consequences for Paul's use of Adam in connection with his teaching on Christ. If there is no Adam what of this connection to Christ? If all things have evolved, and are still evolving, what then of the future and how does theistic evolution deal with the new heavens and the new earth? To be consistent would not a theistic evolutionist talk of an evolving new era? Of course the greatest problem that theistic evolution has is with the vexed subject of death. Death is not natural, and Christ came to destroy death. We may ask also, why did Christ raise some from physical death if evolution were true? Theistic evolution also poses a problem when we consider the meaning of life. From a theistic evolution point of view, life entails physical death, which seems peculiar in light of the general teaching of Scripture. These and other issues will form the basis for our rejection of theistic evolution.

Common sense tells us things are getting worse.

Although we have made this point already it is well worth repeating. In essence the idea of evolution goes against common sense. What I mean is that nobody in their right mind considers that you can get everything from nothing. God has created ex nihilo, (i.e. all things from nothing), and such creation is always good and always purposeful. Furthermore it involves an intelligent designer, namely God. When we look at the world today, however, the general direction is always downward. We are born, grow up, then we mature and finally we get old and die. Our cars rust, decay and are eventually scrapped. The house gets filthy and dirty and needs to be cleaned. We need to redecorate and constantly maintain it against the ageing process. There is a principle of decay at work, and the element of death is always present. Expecting things to evolve and increase in complexity seems to be against all expectations and observations. How does this observation affect the gospel? Well it is vital that we understand the fact that all of creation has been subjected to the curse. We read of this in Genesis 3, Isaiah 24 and also in Romans 8 where Paul puts it like this:

20 For the creation was subjected to futility, not willingly, but because of Him who subjected *it* in hope; **21** because the creation itself also will be delivered from the bondage of corruption into the glorious liberty of the children of God. **22** For we

know that the whole creation groans and labours with birth pangs together until now.⁴¹¹

Creation has been, “*subjected to futility*,” it exists in the “*bondage of corruption*,” and it “*groans and labours*” like a woman giving birth. In Isaiah 24 the prophet describes the earth as, “*mourning*,” “*fading away*,” “*languishing*,” “*violently broken*,” “*split open*,” “*shaken exceedingly*,” “*a drunkard*,” and as “*tottering hut*,” whilst in Genesis 3 we are informed (as Paul teaches) that it was God who cursed the serpent, and the ground, and increased the pain and sorrow of child birth. These things are the result and outcome of Adam and Eve's disobedience. So a belief in evolution which teaches a steady improvement towards more and higher forms of life runs full counter to the idea of things getting progressively worse.⁴¹² Evolution defies common sense.

Evolution is nowhere in Scripture.

Another reason to reject evolution in any form as we have described it, is that it is not found in the Bible. In fact we need to be more explicit. The Bible not only does not give any indication of evolution being an option, it actually goes against it. Creation is described as a past event. In the opening verses of Genesis 2 the Lord has gone to great lengths in stating that creation was done and dusted in creation week, after which the Lord rested from this work of creation. The Lord did not need to rest, of course, but the text tells us that He ***stopped*** engaging in this kind of work on the seventh day. Throughout the rest of Scripture, creation is depicted as something which happened at the beginning. It is never displayed as an on-going thing, but always put as a past event.

Then also, we need to add that the Lord has given to us everything we need in order to lead a godly life on earth as it awaits destruction and renewal.⁴¹³ The Lord who is “*the truth*” has revealed all truth necessary for us.⁴¹⁴ The God who exhorted Jeremiah to call to Him so that He would tell Him great and mighty things Jeremiah did not know, has revealed all that is necessary.⁴¹⁵ No good thing has the Lord withheld from those who follow Him.⁴¹⁶ The secret of the Lord is for those who fear Him.⁴¹⁷ It would also appear from Scriptures such as Amos 3:7 that the Lord does not do anything without openly declaring what He has done. Then also in Isaiah we read that the Lord has spoken openly about His ways *from the very beginning*.⁴¹⁸ Given all of these thoughts it is

411 Romans 8:20-22.

412 See 2Timothy 3:1,13.

413 2Peter 1.

414 John 14:6. See also Deuteronomy 32:4; Psalm 31:5; Isaiah 65:16; John 16:13.

415 Deuteronomy 29:29; Jeremiah 33:3.

416 Psalm 84:11.

417 Psalm 25:14.

418 Isaiah 40:21; 48:16; 64:4.

inconceivable that the Lord would have left out such an important truth about how we have come to exist. Of course He has not left how we came to be out – for Genesis tells us clearly how creation occurred. It does not speak in great detail, of course, but it does give us exact information on what happened historically. Evolution is nowhere to be seen amongst all that God reveals. If we consider general revelation – God's witness to Himself in creation – again we find no evidence of evolution. Instead the heavens declare the glory of God, and the whole of creation testifies to the character and nature of God – His invisible attributes, eternal power and Godhead.⁴¹⁹ I might add in passing that the rocks and fossils so beloved of geology declare the world-wide judgment on the sin of the pre-flood world. He who looks properly at the mountains, rivers, valleys, gorges and so on cannot but see the judgement of God by water.

No Adam and Eve.

Genesis is very clear about the fact that God created the very first human pair in a distinct and unique way. Their formation is not presented to us in the same way as that of other creatures, so that it simply isn't possible to view creation as a continuous spectrum of life that evolution depicts from protists to man.

Genesis is also matter of fact with regard to the creation of mankind. And yet evolution destroys any notion of an historical Adam and Eve. If evolution were true we cannot therefore point back to an original pair who were the parents of all living humans. Such a situation would mean that we could not speak about humanity as a unified whole. Evolution does not necessarily require a single progenitor, and therefore it might be possible to talk about different races or different types of humans. Isn't this what Adolf Hitler concluded when he tried to eliminate those whom he thought were less fit and less human? Are there not countless examples of such racist attitude deriving from an evolutionary scheme? Furthermore by destroying any notion of Adam and Eve, (the parents of every man, woman and child that has ever lived), we destroy the connection between Adam and Christ that Paul makes use of in Romans and first Corinthians. I quote both relevant passages in full below to show the vital link Paul makes between Adam and Christ.

12 Therefore, just as through one man sin entered the world, and death through sin, and thus death spread to all men, because all sinned— **13** (For until the law sin was in the world, but sin is not imputed when there is no law. **14** Nevertheless death reigned from Adam to Moses, even over those who had not sinned according to the likeness of the transgression of Adam, who is a type of Him who was to come. **15** But the free gift is not like the offence. For if by the one man's offence many died,

419 Psalm 19; Romans 1:20.

much more the grace of God and the gift by the grace of the one Man, Jesus Christ, abounded to many. **16** And the gift *is* not like *that which came* through the one who sinned. For the judgment *which came* from one *offence resulted* in condemnation, but the free gift *which came* from many offences *resulted* in justification. **17** For if by the one man's offence death reigned through the one, much more those who receive abundance of grace and of the gift of righteousness will reign in life through the One, Jesus Christ.) **18** Therefore, as through one man's offence *judgment came* to all men, resulting in condemnation, even so through one Man's righteous act *the free gift came* to all men, resulting in justification of life. **19** For as by one man's disobedience many were made sinners, so also by one Man's obedience many will be made righteous.⁴²⁰

21 For since by man *came* death, by Man also *came* the resurrection of the dead. **22** For as in Adam all die, even so in Christ all shall be made alive. ... **45** And so it is written, "The first man Adam became a living being." The last Adam *became* a life-giving spirit. **46** However, the spiritual is not first, but the natural, and afterwards the spiritual. **47** The first man *was* of the earth, *made* of dust; the second Man *is* the Lord from heaven. **48** As *was* the *man* of dust, so also *are* those *who are made* of dust; and as *is* the heavenly *Man*, so also *are* those *who are* heavenly. **49** And as we have borne the image of the *man* of dust, we shall also bear the image of the heavenly *Man*.⁴²¹

We learn from these passages the following vital information about Adam:

1. Sin entered the world through one man (Adam) and the consequence of this first sin was death and this death spread to all mankind (Romans 5:12; 1Corinthians 15:21,22).
2. It was through "*one man's offence*," (Adam's) that many died, death reigned, and judgement came to all resulting in condemnation (Romans 5:15,17,18).
3. It was because of one man's disobedience (Adam's) that many were made sinners (Romans 1:19).
4. Adam is referred to as a man of dust and of the earth pointing to his special creation (1Corinthians 15:47-49).

But the wonder is that Christ, the second and last "Adam" provided the antidote to all that Adam destroyed. Concerning Christ we learn the following:

1. The abundant grace of God and the free gift which resulted in justification came to many through one Man, Jesus Christ (Romans 5:15,16,17).
2. Through One Man's righteous act comes the free gift that results in justification of life to many (Romans 1:18).

420 Romans 5:12-19.

421 1Corinthians 15:21,45-49.

3. The resurrection and new life came in Christ (1Corinthians 15:21).
4. Christ is the heavenly Man, the Lord from heaven (1Corinthians 15:47,48,49).

The apostle Paul interweaves the two figures making stark the contrast between the entrance of sin and death by the one man, Adam, and the bringing in of justification and life by the One Man, Christ. It is impossible to disentangle these two. If one is not really real, what can we say of the other? If evolution teaches us that Adam (and Eve) never existed, then what trust can we place in Paul's comparison? If Adam did not exist, sin cannot have entered through him and neither can we understand the origin of death which resulted from that sin.

A falsely elongated view of history.

Theistic evolution and those who follow such a scheme accept the vast ages for the earth and the universe. Consequently a belief in theistic evolution effectively reduces the impact and pre-eminence of Christ and all that He has done. Apart from the fact that to come to a belief in evolution requires human ingenuity rather than rely on God's revelation, we discover that in an evolutionary world view, Biblical history is a mere blip which comes very late on into the scene. The vast majority of cosmic and earth history tells us nothing at all about God and salvation (according to evolution). Accepting an evolutionary view of the universe leads to an acceptance of the (secular) view of history which places Israel and Biblical revelation as a grovelling latecomer following on from more ancient cultures in the ancient Near East (Mesopotamia, Egypt etc.).⁴²² This leads inevitably to the notion that God's revelation by Scripture is an afterthought, thereby lessening the impact it may have. After all, if more than 99% of history is cosmology, geology and biological evolution, why consider the recent thoughts of one nation about God and salvation?

Evolution is not simply about origins.

I have met many people over the course of my Christian walk since being converted in 1977 and I often hear people say things like: "evolution is just one possibility of origins so why worry about it?" Or they may say: "I can accept evolution as how God has worked but now I look to Scripture for how to live." In some circles the conflict between creation and evolution is likened to the debate over baptism or church government and is therefore seen as a secondary issue. There are two main problems with such a view point apart from the fact that it indicates a laziness in thinking.

First, and this is the main point I want to make, evolution is not just about how things

⁴²² The terms "ancient Near East" and "ancient Near Eastern" refer to the culture and literature of ancient Babylon, Egypt, Canaan and so on. We shall adopt the acronym ANE when referring to these in future.

started. It is a world view. If evolution were to be true then it has not stopped operating and it will continue. If evolution were true then death is a natural part of life. If evolution were true then we ought to expect at some stage the human species to be superseded by another species as dominant on earth. If evolution were true then the history of the universe has little in connection with the gospel, because, as we have just noted, the Biblical stories stretch back only as far as about 1500 BC according to most modern commentators.⁴²³ You cannot really entertain an evolutionary world view alongside a Biblical one. The Bible maintains that God created all things “good,” but then subjected the universe to the curse and futility because of sin. It declares that Christ came from heaven's glory (the God-man) to redeem mankind and all of creation by His supremely wonderful work on Calvary. It tells us that Christ's mission was 100% successful for He was raised from the dead and is seated at the right hand of the Father, having accomplished everything necessary and that was asked of Him by the Father. It tells us also that one day the Lord will return to judge the living and the dead and that this broken, diseased and crumbling world will be burnt in a massive conflagration. Now these statements (and others we could mention) are totally incompatible with the picture painted by evolution. This means that we are not talking about a secondary issue or a matter of choice by conscience, but a fundamental view of how things are. Is our world the product of evolution, or is it the product of a good Creator God? The two do not mix.

A second point to add is that it reinforces the false notion that Scripture (and therefore the Christian faith as a whole) is only concerned about “matters of faith and practice.”⁴²⁴ Now it is possible for such a phrase to be extensive and comprehensive meaning to cover all things whatsoever we do or think because we are to live by faith. However it is often used to stipulate the area allowed to the church. In matters of reason and reality we go to Athens (representative of rationality, science and logic). In matters of the heart and faith we go to Jerusalem (representative of religious thought and life). The church Father Tertullian (155-220) asked the question:

“What indeed has Athens to do with Jerusalem? What concord is there between the Academy and the Church? What between heretics and Christians? Our instruction comes from “the porch of Solomon,” who had himself taught that “the Lord should be sought in simplicity of heart.” Away with all attempts to produce a mottled Christianity of Stoic, Platonic, and dialectic composition! We want no curious disputation after possessing Christ Jesus, no inquisition after enjoying the gospel! With our faith, we desire no further belief. For this is our palmary faith, that there*

423 In actual fact Biblical history does stretch back to the dawn of time. Genesis 1 and 2 were written contemporary with the dawn of creation which was around 4,000 BC.

424 At some point in church history this phrase has been adopted by many churches to side-step difficulties and controversy. Essentially those who use such a phrase are arguing for a separation or division of things in life.

*is nothing which we ought to believe besides.”*⁴²⁵

** Worthy of bearing the palm, hence victorious or pre-eminent. The word was in ancient Rome to describe someone or something extraordinary – from the palm leaf given to a victor in a sports competition.,*

There has been an on-going battle between faith and reason which re-surfaces in modern times as the battle between Christianity (or Scripture) and modern science. We shall have cause to look at this subject in another section. For now, however, we note that the Christian faith as expressed plainly and clearly in Scripture knows no bounds to its remit.⁴²⁶ Our faith, which is once for all delivered to the saints, is comprehensive in scope.⁴²⁷ There is nothing to which Scripture does not have authority. The idea that we can speak of those matters of life which concern faith, and those matters of life which are to do with reason or science, is patent nonsense. We can establish this on theological and Biblical grounds. First, since God is the Creator of all things and has revealed to us all we need to live on this planet, it follows that nothing we encounter is outside of His special revelation. God cannot and does not lie and God is an abundant giver.⁴²⁸ Second we learn from specific Scriptures that God has been pleased to reveal to us all that is needful.⁴²⁹

What does the future hold?

Although much of modern life concerns itself with the present (“*let us eat and drink, for tomorrow we die*”), very few do not cast thoughts towards the future.⁴³⁰ But taking an evolutionary view of life leads to making the gospel effectively redundant or irrelevant. If evolution were true, then what do we have to look forward to? From an evolutionary perspective we look to an advance surely? I think this is where many who take evolution on board with their Christian faith have not thought things through properly. If evolution were true, then humanity as a species is merely the current pinnacle which will be superseded by future developments. Considering some practicalities, could it not be possible through genetic engineering and artificial intelligence that the next step would be man-engineered? I do not see why such things could not happen if you follow evolution. Surely this is where you would look – to a higher and more evolved form of life? Or what about the hope of mankind in space exploration and so on? At what point within an evolutionary scheme does the gospel have anything to say? Surely nothing at all, for evolution is the relentless march of

425 <https://www.bluffton.edu/courses/humanities/1/prescr.htm>

426 Psalm 119:96.

427 Jude 1:3.

428 Consider Scriptures such as Deuteronomy 29:29; Psalm 25:14; and Jeremiah 33:3.

429 See, for example, Psalm 119:99,100 ; Colossians 2:2,3; 2 Peter 1.

430 Isaiah 22:13; 1 Corinthians 15:32.

genetic diversity to ever new forms of life. To be honest most who advocate belief in evolution and claim to be Christian do not really contemplate this much. There are a few who have. Among these are John Polkinghorne, a physicist, who writes about future developments in cosmological terms.⁴³¹ Then there is the biologist Arthur Peacocke, whose understanding of the faith is peppered with evolution. For Peacocke, Christ was merely an emergence of one who aspired to divinity, and the future is simply the attainment of higher degrees of Christ-likeness in a kind of superhuman sense.⁴³² More recently Peter Enns has also advocated a new synthesis between Christianity and evolution.⁴³³ Apart from these, most simply do not work out the implications for the future with regard to a belief in evolution.

A low view of life.

A very important area where evolution seriously affects the gospel is in connection with its view of life. In Scripture life is defined not just in regard to composition and make-up, but also in regard to relationship with God. Plants are not technically “alive” as far as the Biblical revelation is concerned. They do grow and propagate, but they have no internal animating principle. Furthermore they are provided for living creatures as sustenance and for habitats. Their main purpose in creation is to provide food and energy for all true life. Life can be divided into two types: animals and mankind. Mankind is thus not an animal. Animals have “*nephesh*” or an animating principle, whilst mankind is endowed with a soul/spirit and has been made in the image of God.⁴³⁴ These three groups (plants, animals and mankind) share features in their composition and make-up but they are essentially distinct in type. Evolution destroys these distinctions and places all “life” (which includes plants) on a spectrum, so that we can move seamlessly in thought from one type to another. This feature is not at all grasped by those who try to amalgamate evolution with the Christian life. They blur the distinction between all created forms and smooth out the disjunction between life before and after the fall of man. As a consequence of this, their view of heaven is often corrupted

431 See, for example: **John Polkinghorne**. Reason and Reality. (The relationship between science and theology). 1991. SPCK. P81f, 102f. **John Polkinghorne**. Science & Christian Belief. (Theological Reflections of a Bottom-Up Thinker – The Gifford Lectures for 1993-4). 1994. SPCK. P164. **John Polkinghorne**. Science & Theology. (An Introduction). 1998. SPCK/Fortress Press. P114f. **John Polkinghorne**. Science and Religion in Quest of Truth. 2011. SPCK. P102f.

432 See, for example: **Arthur Peacocke**. Theology for a Scientific Age. (Being and Becoming – Natural, Divine and Human). 1993. Fortress Press. P303,304. **Arthur Peacocke**. Creation and the World of Science. (The Bampton Lectures: 1978). 1979. Oxford: Clarendon Press. P223,230,231,240-242. **Arthur Peacocke**. God and Science. (A Quest for Christian Credibility). 1996. London: SCM Press. P 81-83,242. **Arthur Peacocke**. From DNA to Dean. (Reflections and Explorations of a Priest-Scientist). 1996. Norwich: The Canterbury Press. P29,104. **Arthur Peacocke**. All That Is. (A Naturalistic Faith for the Twenty-First Century). 2007. Edited by Philip Clayton, Minneapolis: Fortress Press. P36-38.

433 **Peter Enns**. The Evolution of Adam. 2012. Brazos Press. P147.

434 *Nephesh* is one Hebrew word used to indicate the inner principle of life.

too. Furthermore, if life must be considered as a series of struggles to exist, or a competitive fight for food, mates and space, as evolution requires, how does this compare to the abundance and beauty of original creation? God provided a wealth of plant and vegetable food for all creatures in the beginning. Remember that the Lord Jesus came to give life in all its “abundance,” whereas the devil is bent on destruction, theft and murder – the very elements that are found in the doctrine of evolution.⁴³⁵

The question of death.

Theologically speaking, the idea that death is *natural* is much more than merely problematic. As I write these very words I have been rocked by the sudden death of our next door neighbour who committed suicide. Equally shocking was the sudden death of an old friend who was the very picture of health at the tender age of 61. A close church friend is mourning the passing of a near relative, and my wife and I sit and reminisce over parents who left us in 2004, 2015 and 2017. We are all immersed in death, even if we try desperately to push it to the extremities or periphery of our experience. However, there is one thing I believe most, if not all will surely agree on: death is a terrible thing. Even Oliva Hudson refers to high infant mortality rates as “*horrific*.”⁴³⁶

How then should we respond to those who favour a theistic evolutionary view of our origins in which physical death is embraced as a part of God's creation using evolution? Well we need to respond by appealing to Scripture. In Genesis 1, the act of creation throughout creation week is repeatedly described by God as being “*good*.”⁴³⁷ If we look into Scripture as a whole we find that what God has to say about death is very far from being good. Death is described by God's word, (i.e. what God has said), in some rather negative ways:

- ***Death is full of sorrow.*** 2Samuel 22:6; Psalm 18:5; 116:3; Revelation 21:4.
- ***Death is a trap or a snare.*** 2Samuel 22:6; Psalm 18:5; Proverbs 13:14; 14:27; Ecclesiastes 7:26.
- ***Death casts a shadow.*** Job 3:5; 10:21,22; 12:22; 16:16; 24:17; 28:3; 34:22; 38:17; Psalm 23:4; 44:19; 107:10,14; Isaiah 9:2; Jeremiah 2:6; 13:16; Amos 5:8; Matthew 4:16; Luke 1:79.
- ***Death has terrors.*** Job 24:17; Psalm 55:4.

435 John 10:10.

436 **Olivia Judson.** Ashes to ashes, dust to dust. NY Times 11th October 2008.

437 Genesis 1:4,10,12,18,21,25,31.

- *Death brings in bitterness.* 1Samuel 15:32; Ecclesiastes 7:26.
- *Death is an enemy.* 1Corinthians 15:26.
- *Death has a sting,* 1Corinthians 15:55,56.
- *Death is suffering.* Hebrews 2:9.
- *Death brings fear.* Psalm 23:4; Hebrews 2:16.
- *Death is opposed to life.* Deuteronomy 30:19; Jeremiah 21:8; John 10:10.

To be clear, many theistic evolutionists attempt to circumvent this problem by making a sharp separation or distinction between physical and spiritual death. Whilst physical death for a theistic evolutionist is *natural*, spiritual death is not natural and is something to be avoided. Consequently many would apply the above descriptions concerning death to spiritual death only. But is this a tenable or viable option? Well it seems clear to me that there is absolutely no way whatsoever that we can reconcile the notion of a good creation, (which stems from the character of God who is described as “good”), and physical death.⁴³⁸ In what follows I hope to show the reader that the goodness of God in creation and death are utterly incompatible.

A look at Scriptural examples referring to physical death.

Looking only at one of the descriptions noted above should surely clinch the point that physical death is incompatible with the good creation of Genesis 1. Evolution requires the idea that creation of new species can only happen through the death of many previous generations. This essential feature runs in full opposition to the gospel, for in Scripture we read that death is an *enemy* which is defeated by Christ.⁴³⁹ The Lord speaking through Hosea declares that we are redeemed from the grave:

I will ransom them from the power of the grave; I will redeem them from death. O Death, I will be your plagues! O Grave, I will be your destruction! Pity is hidden from My eyes.⁴⁴⁰

Thus Christ came to rescue mankind from physical death! Clearly this means that physical death cannot be good, and therefore cannot be a part of original creation. Or, as another example, take the Lord's plea as revealed through the prophet Ezekiel:

438 Psalm 34:8; 73:1; 100:5; 135:3; 145:9; Jeremiah 33:11; Lamentations 3:25; Nahum 1:7.

439 1Corinthians 15:26.

440 Hosea 13:14.

31 Cast away from you all the transgressions which you have committed, and get yourselves a new heart and a new spirit. For why should you die, O house of Israel?
32 For I have no pleasure in the death of one who dies,” says the Lord God.
“Therefore turn and live!” ⁴⁴¹

The Lord is speaking to spiritually dead people. He calls them to deal with their sin problem and to get a new heart – to be converted and regenerated. At the end of verse 31 he asks the question “*why should you die, O house of Israel?*” This cannot be taken in a spiritual sense because they were already dead spiritually speaking. Then in verse 32 we have the statement that God does not take pleasure in death. This applies both to spiritual death and physical death. Or what of those marvellous statements concerning Christ we find in the second chapter of Hebrews?

9 But we see Jesus, who was made a little lower than the angels, for the suffering of death crowned with glory and honour, that He, by the grace of God, might taste death for everyone. **10** For it was fitting for Him, for whom *are* all things and by whom *are* all things, in bringing many sons to glory, to make the captain of their salvation perfect through sufferings. **11** For both He who sanctifies and those who are being sanctified *are* all of one, for which reason He is not ashamed to call them brethren, **12** saying: “I will declare Your name to My brethren; In the midst of the assembly I will sing praise to You.” **13** And again: “I will put My trust in Him.” And again: “Here am I and the children whom God has given Me.” **14** Inasmuch then as the children have partaken of flesh and blood, He Himself likewise shared in the same, that through death He might destroy him who had the power of death, that is, the devil, **15** and release those who through fear of death were all their lifetime subject to bondage.⁴⁴²

In Hebrews 2:9 we read that Christ became man “*for the suffering of death*” and in order that He “*might taste death for everyone.*” If spiritual death only is meant here then why did Christ suffer physically? At the end of this passage we discover that Christ shared our “*flesh and blood*” so that “*through death He might destroy him who had the power of death.*” These statements cannot be taken to refer only to spiritual death. Christ became man and suffered physical death in our place. In the last verse of this passage (verse 15) we learn that mankind is generally in “*fear of death.*” Why would man fear death if this were part of the normal condition of man and just a natural part of how God created? Or what of Paul's treatment of the subject in 1Corinthians 15?

53 For this corruptible must put on incorruption, and this mortal *must* put on immortality. **54** So when this corruptible has put on incorruption, and this mortal has put on immortality, then shall be brought to pass the saying that is written: “Death is

441 Ezekiel 18:31,32.

442 Hebrews 2:9-15.

swallowed up in victory.” **55** “O Death, where *is* your sting? O Hades, where *is* your victory?” **56** The sting of death *is* sin, and the strength of sin *is* the law. **57** But thanks *be* to God, who gives us the victory through our Lord Jesus Christ.

Paul's subject here is the resurrection of the physical body. Earlier he argues that our current physical bodies (flesh and blood) are subject to death and decay and therefore “*cannot inherit the kingdom of God.*”⁴⁴³ The corrupt bodies we have, must be changed. Now if this is the case how then can such be described as *natural, normal* or *good*? Once again the death being referred to here must be physical death.

The introduction of death into creation.

Although we can separate physical death from spiritual death in one sense, the two are intricately connected. In fact the whole history of how Adam was created and fell demonstrates this clearly. Adam was created sinless and was not subject to death but was warned that the outcome of disobeying God's command would result in his death both immediately in a spiritual sense, and then, as a consequence, in a physical sense some years later. It is to be noted that the creation account introduces the subject of death in Genesis 2, records its actual introduction into creation in Genesis 3, but is nowhere evident in Genesis 1. The very structure of Genesis does not agree with having death incorporated into creation as theistic evolution demands.⁴⁴⁴ If physical death was an integral part of God's original creation it would be evident within the early chapters of Genesis, for God is not one to deceive.

The phrase in Genesis 2:17 and the repeated statements in Genesis 5 are worth considering.⁴⁴⁵ The Lord told Adam that if he disobeyed the single command given then, literally,

443 1Corinthians 15:50.

444 As a consequence many theistic evolutionists challenge the historicity and/or accuracy of the Genesis accounts. They speak of them in terms of man's words rather than divine inspiration.

445 **John Calvin** wrote in His commentary on Genesis:

“But it is asked, what kind of death God means in this place? It appears to me, that the definition of this death is to be sought from its opposite; we must, I say, remember from what kind of life man fell. He was, in every respect, happy; his life, therefore, had alike respect to his body and his soul, since in his soul a right judgment and a proper government of the affections prevailed, there also life reigned; in his body there was no defect, wherefore he was wholly free from death. His earthly life truly would have been temporal; yet he would have passed into heaven without death and without injury. Death, therefore, is now a terror to us; first, because there is a kind of annihilation, as it respects the body; then, because the soul feels the curse of God. We must also see what is the cause of death, namely, alienation from God. Thence it follows, that under the name of death is comprehended all those miseries in which Adam involved himself by his defection; for as soon as he revolted from God, the fountain of life, he was cast down from his former state, in order that he might perceive the life of man without God to be wretched and lost, and therefore differing nothing from death. Hence the condition of man after his sin is not improperly called both the privation of life, and death. The miseries and evils both of soul and body, with which man is beset so long as he is on earth, are a kind of entrance into death, till death itself entirely absorbs him; for the Scripture everywhere calls those dead, who, being oppressed by the tyranny of sin and Satan, breathe nothing but their own destruction. Wherefore the question is superfluous, how it was that God threatened death to Adam on the day in which he should touch the fruit, when

“dying you shall die.”⁴⁴⁶ This Hebrew way of saying that death would be the result is intended to be superlative and so some translations suggest the following translation: “you shall surely die.” But the duplication in the word “die” is intended to show how death works out. Adam died spiritually the moment he disobeyed. We see this in his behaviour. Before he sinned he walked in close communion with God, but after he sinned he was afraid and hid himself from the Lord.⁴⁴⁷ He was now separated from God. His close relationship with God was broken and he died spiritually. The outworking of this spiritual death would then later take its toll on his body 930 years later. Now despite the fact that Adam most probably repented, we read all the way through Genesis 5 that he and his offspring all “*died.*”⁴⁴⁸ This death in Genesis 5 was not spiritual but physical. Consequently we can agree with Paul's statement that “*the wages of sin is death,*” and is not an inherent aspect of the generation of life.⁴⁴⁹ That the Lord has chosen the death of Christ to enable resurrection life, is a great miracle which undoes the introduction of death into the world by Adam's sin.⁴⁵⁰

The Saviour saves from death.

There are a number of Scriptures which indicate that God is concerned to rescue from death, including physical death. Consider these two Scriptures, for example:

For I have no pleasure in the death of one who dies,” says the Lord God. “Therefore turn and live!”⁴⁵¹

Our God *is* the God of salvation; and to God the Lord *belong* escapes from death.⁴⁵²

Or what of Jonah's deliverance from the big fish? When he declared that “*salvation is of the Lord*” as he languished in the fish's belly, the Lord caused the fish to vomit the prophet onto dry land. Jonah's experience is used by the Saviour to depict His death and burial in the grave.⁴⁵³ This mission of Christ to save is reported throughout the New Testament. Christ came to save and give His life a

he long deferred the punishment? For then was Adam consigned to death, and death began its reign in him, until supervening grace should bring a remedy.”

“Genesis”. Commentary by John Calvin. Banner of Truth. P127,128.

446 Genesis 2:17.

447 Compare Genesis 2:18f with Genesis 3:7,8.

448 I assume that Adam repented on the basis that he called his wife “Eve,” which name means “mother of all living” pointing to the future hope as prophesied by the Lord in Genesis 3:15, from the fact that Adam and Eve were covered in animal skins by God passing on such knowledge of sacrifice to his sons, and, from the fact that he called his third son “Seth” which means substitute – pointing to Christ. See Genesis 5:5,8,11,14,17,20,27,31.

449 Romans 6:23.

450 Romans 5:12.

451 Ezekiel 18:32; 33:11.

452 Psalm 68:20.

453 Matthew 12:39-41; Luke 11:29-32.

ransom for many.⁴⁵⁴ He came to make known exactly whom God was and is.⁴⁵⁵ But then also He came to destroy the works of the devil.⁴⁵⁶ In fact whilst the devil was a murderer from the beginning, the Lord has come to destroy death and the terror of death. We have already noted that death is described as an “*enemy*” which will be “*destroyed*” finally.⁴⁵⁷ However we also read that death will be “*cast into the lake of fire*” and will be thus be destroyed eternally.⁴⁵⁸

Now, if this is the fate of death, why should we accept theistic evolution with its insistence on death as an element in creation and life?

Christ's death a pattern for life?

Sadly a great deal of confusion has been generated by theistic evolutionists when they misuse the fact that Christ's death brings eternal life. All believers do most assuredly inherit eternal life through the death of Christ. However, theistic evolutionists argue that if this is how we inherit eternal life (through Christ's death), then surely the same concept can be asserted for life in a physical sense? Since death (i.e. Christ's death) is the portal through which life is inherited, what is wrong with assuming that physical death is a natural part of creation generating more life? However this is not a transferable notion. Just because Christ's death brings life we cannot make the leap to say that original creation involved physical death. Paul wrote in Romans 6:23 that “*the wages of sin is death,*” and this is contrasted in the second part of that verse with what the Lord brings in, namely, “*the gift of God*” which is “*eternal life.*” Clearly we have a contrast. Adam's sin issued in death (both spiritual and physical as we have observed), but Christ comes to bring life. Now if Christ comes to bring life in the gospel and this is contrasted with death, how can it be that when He originally created all things He did so using death as a component?

Christ's death effectively undoes so-to-speak all that Adam brought in by his act of disobedience. Christ's spiritual death (His being forsaken by the Father) had to happen through the means of His physical death (crucifixion). But if, as theistic evolutionists claim, physical death is natural, why then did Christ have to die physically if all that is necessary is a spiritual awakening? Surely the Father could have poured out His wrath on Christ without Him going to the cross to die physically, if physical death is a natural part of life? The very fact that the atonement requires the shedding of blood leads us to understand the connection between spiritual and physical death.

454 Matthew 20:28; Mark 10:45; Luke 19:10.

455 John 1:18; 17:6,8.

456 Hebrews 2:14,15; 1John 3:8.

457 1Corinthians 15:26.

458 Revelation 20:14.

All from Adam are already dead spiritually.

The trouble with the idea that death is actually a part of creation comes from a misunderstanding of the nature of man and his relation to God. At the current time (and this has been true ever since Adam sinned), all people everywhere are in fact born “*dead*.” What I mean by this is seen in Paul's letter to the Ephesians where we read:

1 And you *He made alive*, who were dead in trespasses and sins, 2 in which you once walked according to the course of this world, according to the prince of the power of the air, the spirit who now works in the sons of disobedience, 3 among whom also we all once conducted ourselves in the lusts of our flesh, fulfilling the desires of the flesh and of the mind, and were by nature children of wrath, just as the others. 4 But God, who is rich in mercy, because of His great love with which He loved us, 5 even when we were dead in trespasses, made us alive together with Christ (by grace you have been saved).⁴⁵⁹

Now if we can describe all people since Adam as “*dead in trespasses and sins*” how then should we understand all the Biblical references where we find mention of death? Theistic evolutionists want us to see these as indicating *spiritual* death and not physical death. The problem with this view is that people are already dead spiritually the moment they are conceived. Listen to David's testimony:

Behold, I was brought forth in iniquity, and in sin my mother conceived me.⁴⁶⁰

Consequently David was born “*dead in trespasses and sins*” just as everyone has been since Adam sinned. It makes no sense then to take references to death in Scripture as meaning death in a spiritual sense because this is already the state mankind is in.

Why raise from the dead?

One of the most remarkable aspects of Christ's ministry is the fact that he raised people from the dead. In the gospel accounts we have three separate accounts. First there is the raising of Jairus' daughter. When Jesus was first approached by Jairus it was to come to heal her from sickness for she was at death's door.⁴⁶¹ The Lord was delayed by a woman who needed healing so when He arrived at Jairus' house the twelve year old had just died. However the Lord raised her to life again.⁴⁶² The second instance recorded concerns a widow of Nain whose son had died. We do not

459 Ephesians 2:1-5.

460 Psalm 51:5.

461 Mark 5:23; Luke 8:42.

462 Mark 5:41-43; Luke 8:54-56.

know the man's name, but what we do know is that he was just about to be buried because Jesus met the cortège as they were leaving the city gate.⁴⁶³ In this case they would probably have already washed and dressed the body because it was being carried in a coffin to its final resting place. Thus the man had probably been dead for enough time for there to be certainty of his demise. Jesus walked up to the coffin, touched it, and commanded the man to arise, and to the great joy of his mother the dead man obeyed!⁴⁶⁴ The last instance of raising from the dead concerns someone Jesus knew well, Lazarus. In this case the Lord specifically delayed going to visit Lazarus and his two sisters so that he could demonstrate His power over (physical) death.⁴⁶⁵ It is also on this occasion where we read about the Lord's attitude to physical death, for when he approached the grave where Lazarus had been buried four days, we read that "*Jesus wept.*"⁴⁶⁶ Physical death caused the Saviour deep sorrow. Why should it if physical death was a natural part of His creation as theistic evolutionists claim? And so clearly the Lord's attitude to physical death is that it needs altering. Why bother to raise these three (and many others unrecorded) if physical death were a natural and normal part of creation? It makes little sense to assert that the Creator, (Jesus Christ), used death as a part of creation and then, weeping for His friend, raises him to life. What would be the point? If Christ had created by means of evolution would He not have let all who died physically remain in that state?

Christ the Creator.

Apart from raising people to life again, Christ demonstrated His claim to deity by other miraculous works. He made water into wine, fed 4000 and 5000 on separate occasions, stilled the storm, and He walked on water. Such miracles demonstrate clearly that He had power to create and order creation. Indeed they point us to the fact that He was the Creator of all things. They point us back to Genesis 1 where God spoke and it was so. If God had actually used evolution as the mechanism for creation and Christ was then attempting to make a claim to being God, why didn't He use some form of evolutionary mechanism to show forth His greatness? We ought also to ask how theistic evolutionists understand the work of God in the new creation. Are people born again through some evolutionary means? Will the new heavens and earth come to pass through some form of evolution?⁴⁶⁷ The answer is, of course, no! Christ's actions whilst He was on this earth

463 Luke 7:12.

464 Luke 7:14,15.

465 John 11:14,15.

466 John 11:35.

467 There are some theistic evolutionists who do speak in such terms. **John Polkinghorne** the Anglican Priest and physicist is a case in point, as is the biologist turned Anglican Vicar **Arthur Peacocke**.

demonstrate clearly the idea of an instantaneous creative work just as displayed in the original creation and summed up by these words in Psalm 33:

For He spoke, and it was *done*; He commanded, and it stood fast.⁴⁶⁸

Life or death?

There is a great contrast between *life* and *death* in Scripture.⁴⁶⁹ These two act in opposition. Death is effectively a separation. It is a breaking up of what was once united. Physical death is separation of soul from body. Spiritual death is the separation of the soul from God. The opposite would, I think, have to be holiness or sanctification (or possibly consecration/dedication). In other words, the idea of separation from sin and the world, and separation to God constitutes life, for life is truly knowing God.⁴⁷⁰ The idea expressed by Paul at the end of his letter to the Galatians seems to sum this concept up well:

But God forbid that I should boast except in the cross of our Lord Jesus Christ, by whom the world has been crucified to me, and I to the world.⁴⁷¹

Now everyone automatically assumes that the contrast between life and death, is that between *physical* life and *physical* death. That spiritual aspects must be included all Christians would surely agree. However that death in the Old Testament Scriptures can **only** refer to *spiritual death*, as theistic evolutionists would claim, is straining the limits of credulity as we have already established above. When Christ said that He came that we might have life in all it's abundance He was speaking to people who were alive physically, and He wanted them to come alive spiritually as well, because all are "*dead in trespasses and sins*," as we have already observed.⁴⁷² We might say that they were half alive. He contrasts what He came to do with what the enemy of souls, namely, Satan does. He came to destroy and to kill. We note though that the devil does not have the power to destroy the soul in hell (only the Lord can do this).⁴⁷³ So in what sense does the devil kill or destroy? He was a murderer from the beginning as he separated Eve from God and so caused her spiritual death which resulted in her physical death.⁴⁷⁴

468 Psalm 33:9.

469 Deuteronomy 30:19; Jeremiah 21:8; John 10:10.

470 John 17:3.

471 Galatians 6:14.

472 John 10:10; Ephesians 2:1.

473 Matthew 10:8.

474 John 8:44.

Evolution and Christ.

Although we have outlined a number of areas where evolution affects the Christian faith, we will not do this subject full justice until we consider how it affects the Saviour and His work in a little more detail.

The life of faith is a wonderful journey but that it is in fact a journey needs to be made clear. I do not want to be misunderstood here. If the reader thinks that I am saying that there are many roads to God, then be assured that this is not what I mean. There can only be one way to the Father (God), and that is through Christ Jesus who described Himself with these words:

I am the way, the truth, and the life. No one comes to the Father except through Me.⁴⁷⁵

However the particular experiences and circumstances of life that each of us go through to come to a knowledge of the Saviour is unique. Psalm 33:15 tells that God makes each heart individually, and because we each occupy a unique space and time, our journeys differ. The parents we have may be shared, but no sibling gets exactly the same treatment, and each has different experiences. As we grow up each have different struggles brought about because we have different personalities. An anxious child may tremble at going to a new place whilst a gregarious one cannot wait. We do not all do the same job or career. Even those who do share careers do not get the same experiences. Whilst there are many things we do share together, such as watching a film together, the effect on our minds and hearts will not be identical. We may all laugh at the joke being told, but sometimes for different reasons. Well enough has been said (I trust) to show what the reader already knows, that we are indeed unique.

Receiving the implanted word.

Now when a person becomes a Christian a miracle has occurred. The Lord Jesus spoke about this to one of the leaders of Israel, Nicodemus. Jesus told Nicodemus that it was essential that a person be “*born again*.”⁴⁷⁶ This is miraculous because it is a “*new creation*” as Paul puts it.⁴⁷⁷ As part of this new creation, the Lord imparts the word of God to the new born babe. We learn of this in the letter of James. It is worth looking at this in a little detail so here is how James instructs us:

16 Do not be deceived, my beloved brethren. **17** Every good gift and every perfect

475 John 14:6.

476 John 3:3,7. See also 1Peter 1:23.

477 2Corinthians 5:17: Galatians 6:15.

gift is from above, and comes down from the Father of lights, with whom there is no variation or shadow of turning. **18** Of His own will He brought us forth by the word of truth, that we might be a kind of first fruits of His creatures. **19** So then, my beloved brethren, let every man be swift to hear, slow to speak, slow to wrath; **20** for the wrath of man does not produce the righteousness of God. **21** Therefore lay aside all filthiness and overflow of wickedness, and receive with meekness the implanted word, which is able to save your souls. **22** But be doers of the word, and not hearers only, deceiving yourselves. **23** For if anyone is a hearer of the word and not a doer, he is like a man observing his natural face in a mirror; **24** for he observes himself, goes away, and immediately forgets what kind of man he was. **25** But he who looks into the perfect law of liberty and continues *in it*, and is not a forgetful hearer but a doer of the work, this one will be blessed in what he does.⁴⁷⁸

James is concerned that his readers clearly understand that anything which can truly be described as “good,” really comes from God who does not change. We can apply this to the idea of evolution which purports to be a truth or the reality of how everything has come to be and continues to change. Is this realisation of how reality is something that the “*Father of lights*” has given to us? We shall leave the answer to that a while and continue with what James is saying here. Verse 18 tells us that the new birth takes place in a person “*by the word of truth.*” What is this word of truth? Well clearly, from the general presentation of Scripture, it is God's word.⁴⁷⁹ When God speaks, good gifts come! We can see this coming to bear immediately on the first page of the Bible, for when God speaks creation is born and it is all “good,” and “*very good.*”⁴⁸⁰ Now James uses these truths, that good gifts come from the Father above who has caused a believer to be born again through His word, to teach us how we ought to respond in all situations involving others. We must not rush in but we must be slow to speak because swiftness of speech is not helpful as it leads to wrangling and wrath. The wrath of man does not promote what is good from God, namely righteousness. Then in verse 21 James tells his readers they have to divest themselves of what is natural and part of the old man, and receive what God has planted within them. By indenting different clauses we can arrange the text of James 1:21 to show the force of what James is teaching:

Therefore
 lay aside
 all filthiness
 and overflow of wickedness,
 and receive with meekness
 the implanted word,
 which is able to save your souls.

478 James 1:16-25.

479 See, for example, Isaiah 55:10,11; Psalm 19; Psalm 119; Romans 10:17; 1Peter 1:23,25.

480 Genesis 1.

The “*therefore*” shows that what is about to come (in verse 21) is consequential or derivative from what went before. What went before verse 21 can be summarised as follows:

- We are not to be deceived.
- Good things come from God who does not change.
- God caused us to be born again by means of His word (a reminder of Genesis 1).
- We must be slow in speech and avoid wrath because that does not promote righteousness.

Therefore a believer must do two things. First he must actively lay aside the temptation inbuilt in the old man to be filthy or wicked. Then second, he must humbly welcome “*the implanted word*” which is the only thing that can bring salvation. Now that phrase “*the implanted word*” is very important. What is being taught here is that the word of God is literally deposited within the true born again believer. We know that the Lord Jesus Himself said that He would never leave us, and further that He Himself with the Father and the Holy Spirit would make their abode with us. That is what we read in John.⁴⁸¹ So God Himself is with us! Now the Lord Jesus also promised that the Holy Spirit (the Spirit of truth) would come to us and remind us of all the things that the Lord spoke about.⁴⁸² How could the Holy Spirit do this? Aside from the fact that God can do anything, it is clear from what the Lord Jesus taught, that He intended us to receive from the Holy Spirit the understanding of His word. Remember, when the risen Lord Jesus met the two on the road to Emmaus and then later with the disciples, He taught them all from the Scriptures things concerning Himself.⁴⁸³ The Lord who is the Word of God (the very communication of God) has placed the word of God within us. As we read and study God's word (the Bible) the Holy Spirit illumines it to us pointing us to Christ.

Breaking up our fallow ground.

Then also consider Christ's parable of the sower (or soils).⁴⁸⁴ The whole point of that parable is the need to have a good heart where the word of God can be sown and allowed to grow. We can take it in the sense that only a person with a good heart can receive the word and be born again. Others may receive it to a degree but then fall away. These are the ones who do not have good

481 See John 14:16-18,21,23.

482 John 14:25,26.

483 Luke 24:25-27; 44-47.

484 Matthew 13:3f.

hearts. However we can also take it in a personal sense. I have received the word of God for salvation in a good heart because the Lord has caused me to be born again. But along life's journey there are areas where my heart is still hard, or there are certain cares which cause trouble. These need dealing with by the word of God. Will I receive with meekness the implanted word and allow it to grow? Or will I stifle it and shout forth with gusto to demand what I want? Thus even though a person may be born again and have the word of God implanted within, they may not have allowed the seed of that word to grow much at all. They may still have thorns that need uprooting, or hard areas which need digging up and the stones removed from them in certain areas. To a degree this picture describes all of us. We are on this journey of being sanctified. We are justified by faith – declared innocent before God because Christ has paid the price and imputed righteousness to us – but we are being sanctified. We are being conformed to the image of Christ. This path is one which the Lord has made for us. But the problem is that there are deceivers and those being deceived. There are those who start out and seem to be the real deal – a true born again Christian, but then they depart and are nowhere. They may return, but they may not. And at any given time we have this mixture. There are those who are born again and are flourishing – receiving the implanted word with meekness and growing strong. There are those struggling over the implanted word and wrestling with its implications. There are those who have given up and who carry on outwardly appearing as believers but inwardly are rotten through and through. Then there are those who are true deceivers who want nothing more than to vaunt themselves and push their opinion, and will present in any way just to be heard. All of this describes what we observe in the world of faith (loosely interpreted) today. How do we deal with all of this? How do we respond to the great differences we observe between people? Well we receive the implanted word with meekness!

The growth of the word or a fight for survival?

A born again believer has the word of God implanted within. The word of God has been sown within them. Will it grow? Well that depends on whether it gets the sun and enough water. Again the Scriptures teach us that the word of God is the water and the sun.⁴⁸⁵ These are the external applications of the word of God. When we hear good preaching, when we read and study the Scriptures ourselves or with others, when we hear a testimony of how someone has walked with God, or when we meet in true fellowship with other born-again believers, these are all the sun and rain of God poured out onto the soil of our hearts.

Now this minor digression into the letter of James was intended merely to show that the

⁴⁸⁵ Psalm 19:4; Isaiah 55:10,11.

believer, a born again new creation of God, has the word of God within them. Perhaps we ought to put it like this. A new born believer has the Father, Son and Holy Spirit dwelling within them. The Son has promised such an one that the Holy Spirit will guide and lead them into all truth. How will He do this? By opening Scripture and showing them Christ in all His beauty, fullness and glory. The Scriptures are the word of God fully. They show us the Word of God. Now this will take time, but we progress from one degree of glory to another as God leads and is pleased to bless.⁴⁸⁶

Given the above, how does evolution sit with the process by which we are changed from glory to glory becoming more like Christ? Evolution is development through death, struggle, and fighting for survival. The Christian walk is one of submission, meekness and even weakness.⁴⁸⁷ Evolution is characterised by death. The Christian walk is one of life. Although the Christian is in a battle and a fight of faith, it is by no means the battle for survival. It is a battle for the mind. Paul puts it like this:

3 For though we walk in the flesh, we do not war according to the flesh. **4** For the weapons of our warfare *are* not carnal but mighty in God for pulling down strongholds, **5** casting down arguments and every high thing that exalts itself against the knowledge of God, bringing every thought into captivity to the obedience of Christ.⁴⁸⁸

One of those things that must be brought down is the idea that all things are evolving from simpler to complex. Whilst there is change in the world, this change cannot be described by evolution. In the mercy of God much remains the same even though the general direction is one of decay and death.

Christ the agent of creation.

How else does evolution colour a person's view of Christ Jesus? Well there are several ways in which the Jesus of an evolutionary world view differs from the one presented in Scripture. In the first place we note from the New Testament that Christ is, in point of fact, the very agent of creation. All things were made by Him and through Him and nothing was ever created except through Him. These thoughts are summary statements of what the apostle John tells us in the first chapter of his gospel and what Paul tells us in his letters.⁴⁸⁹ Thus we are entitled to look at Genesis 1 and conclude that where we read "*and God said,*" this is none other than the creation of all things

486 2Corinthians 3:18.

487 1Corinthians 15:43.

488 2Corinthians 10:3-5.

489 See John 1:1f; Romans 11:36; 1Corinthians 8:6; Colossians 1:16.

through the agency of Christ. The work of Christ, the Creator, is seen directly when it comes to the creation of man and woman in Genesis 2. Now we need to connect this truth with the work that Christ came to do after the incarnation. It is not a difficult matter to discover because the Lord tells us at the beginning of His ministry what He intended to do. We read in Luke's gospel that after His temptation He spoke in the synagogue in Nazareth reading from Isaiah 61:1,2a:

18 “The Spirit of the Lord *is* upon Me, because He has anointed Me to preach the gospel to *the* poor; He has sent Me to heal the broken hearted, to proclaim liberty to *the* captives and recovery of sight to *the* blind, *to* set at liberty those who are oppressed;**19** to proclaim the acceptable year of the Lord.”⁴⁹⁰

Then, after reading the passage He had selected, when He had sat down He began to speak to them saying: “*today this Scripture is fulfilled in your hearing.*”⁴⁹¹ The list of things the Lord came to do included a variety of miraculous works such as healing the “*broken hearted,*” releasing the “*captives,*” giving “*recovery of sight*” for the blind, and deliverance for the “*oppressed.*” When John the Baptist began to doubt whether Jesus was the Christ, asking “*are You the Coming One, or do we look for another?*”⁴⁹² the Lord told John's disciples to report what they had seen and heard. He states:

Go and tell John the things which you hear and see: **5** *The* blind see and *the* lame walk; *the* lepers are cleansed and *the* deaf hear; *the* dead are raised up and *the* poor have the gospel preached to them.**6** And blessed is he who is not offended because of Me.⁴⁹³

The Lord, in demonstration of His Messiahship and deity, points John to the works of miracles that He came to do. In this case the Lord is more explicit. Now Christ's miracles can be organised into four types as shown in table 7 below.⁴⁹⁴ When Christ healed people, delivered them from evil spirits and raised them from the dead, all of these occurred at Christ's will and command, and were instantaneous. Now we do not know at all *exactly* how Christ managed each of these miracles. Take, for example, the man with the withered hand. All Jesus said was “*stretch out your hand*” and the man did so and his hand was healed. What did Christ actually do to the hand? Did He grow bone, muscle and tissue in place of an atrophied hand? Or did He instantaneously recreate a new one? We do not know! What we know is that Christ made the man's hand as good as new.

490 Luke 4:18,19.

491 Luke 4:21.

492 Matthew 11:3.

493 Matthew 11:4b-6.

494 This table does not include all the miracles that Christ did.

Table 7: The miracles of Christ categorised.

Type of miracle		Reference
[1] Healing	Lepers	Matthew 8:1-4; Mark 1:40-45; Luke 5:12-14; 17:11-1
	Paralytic	Matthew 9:1-8; Mark 2:1-12; Luke 5:17-26.
	Man with withered hand	Matthew 12:9-14; Mark 3:1-6; Luke 6:6-11.
	Woman with issue of blood	Matthew 9:20-22; Mark 5:25-34; Luke 8:42-48
	Blind	Matthew 9:27-31; 20:29-34; Mark 8:22-26; 10:46-52; Luke 18:45-53; John 9:1-12.
[2] Deliverance (from evil spirits)		Mark 1:21-27; Luke 4:31-36; Matthew 8:28-33; Mark 5:1-20; Luke 8:26-39. Matthew 15:21-28; Mark 7:24-30; Matthew 17:14-20; Mark 9:14-29; Luke 9:37-43.
[3] Raising the dead		Matthew 9:18,23-26; Luke 7:11-17; Mark 5:21-24,35-43; Luke 8:40-42,49-56; John 11:1-45.
[4] Creation miracles	Changing water into wine	John 2:1-11
	Calming the storm	Matthew 8:23-27; Mark 4:35-41; Luke 8:22-25.
	Feeding 5000 and 4000	Matthew 14:13-21; Mark 6:30-44; Luke 9:10-17; John 6:1-15. Matthew 15:32-39; Luke 8:1-13.
	Miraculous catch of fish	Luke 5:1-11; John 21:4-11.
	Walking on water	Matthew 14:22-33; Mark 6:45-52; John 6:16-21.
	Withering of fig tree	Matthew 21:18-22; Mark 11:12-14.

Or what about the man born blind as told in John 9? On this occasion the Lord told the man who was blind from birth to wash the clay paste that He had daubed His eyes with in the pool of Siloam. The moment He did so, the man born blind could see. Again the action was instantaneous. But did the Lord Jesus create new eyes? Or did He somehow repair whatever had been damaged or missing? Again we have no idea. However the point is clear. Jesus Christ did this because He was God. But leaving these miracles and skating over the deliverances and the raising from the dead, we must consider the miracles of creation. The Lord Jesus made pure water into wine. The two

substances are not the same. The water may have contained minerals, of course, but it did not contain alcohol, nor grape juice. These had to have been created on the spot. All Jesus actually did was to offer two simple instructions:

1. Fill water-pots with water.
2. Take some of that water and give it to the master of the feast to drink.

When the master of the feast drank from the water-pots it was not water but wine. Now here there is definitely some direct creation of material going on. This is undeniable. You cannot pass water off as wine. The two are entirely different. The same situation arises when we consider Christ's feeding of the 5,000 and the 4,000. In both cases all they had to hand was barely enough for a few. But in both cases a very large number of people ate a full meal, and after they were all satiated there was a lot left over. You cannot explain away such an event. It definitely included the Lord creating new matter, in this case bread and fish. The other creation miracles mentioned indicate Christ's power over all things made. He could direct fish at will, He could command the weather, and He could organise matter in such a way that He could defy gravity and the normal response of water.

All of these miracles served to show that Jesus Christ was God, because only God could act in such a way. Now in mentioning all of these things, I have two points that I want to make. First it is abundantly clear that in doing these works Christ was directing people to Genesis 1. Just as God with a word created all things in the beginning, so now Jesus Christ was commanding the weather, raising the dead, walking on water and creating wine and food. Surely the link is obvious? But the second point I want to raise is that those who accept evolution have a real problem with these miracles of Christ. What are they to do with them? How do these fit into their view of how things came to be? If God was directing evolution, as they claim, how then do they explain these miraculous occurrences? Accepting the miracles as works of the Sovereign Lord over creation is one thing. But would the God who brought everything to be through a long and torturous process of death and destruction demonstrate His power by doing miracles? What is the point? An evolutionary back-drop to our universe and miracles of creation do not really mix. The miracles jar and seem awkward in such a world view. For the Bible believer who sees creation in six days some 6,000 years ago followed by the curse imposed because of sin, the miracles are an immense boost to faith. They speak of the Creator's appearance again bringing in new creation. This is the sticking point. If Christ's miracles indicate new creation, what does that say about the first creation? Surely it was done in a similar way? If God made all things by evolutionary processes, Christ's coming to

do miracles doesn't really make sense. If He were to demonstrate His power as the God who created through evolution what would convince people that He was the Creator who used evolution?

The new heavens and earth.

Now these thoughts bring us to a consideration of the new heavens and the new earth. If God created all things by the process of evolution as theistic evolutionists claim, then is He to do the same thing for the new creation? Well if we look at the evidence of Scripture what does it tell us? Any objective reading of the many texts that talk of that great event must conclude that this is not going to be a long process! Take, for example, the Lord Jesus' teaching on this event. In Matthew 25 He told the parable of the ten virgins at the wedding. There were five wise and five foolish. The moment when the bridegroom came they were to be ready. The five wise were ready and went in, but the five foolish were not ready and were shut out. The Lord concludes with these words:

Watch therefore, for you know neither the day nor the hour in which the Son of Man is coming.⁴⁹⁵

The coming of the Bridegroom (the return of Christ) is limited, at the least, to a day and an hour. Elsewhere we read of the Lord coming like a thief in the night, all of a sudden, indicating again a very speedy event!⁴⁹⁶ Then also we could look at those texts where we read of the Lord's appearing, or of His being revealed. These are not gradual and drawn out processes. Read through the following examples and ask yourself if these would fit an evolutionary scheme for the new creation?

When Christ *who is* our life appears, then you also will appear with Him in glory.⁴⁹⁷

I charge *you* therefore before God and the Lord Jesus Christ, who will judge the living and the dead at His appearing and His kingdom.⁴⁹⁸

Finally, there is laid up for me the crown of righteousness, which the Lord, the righteous Judge, will give to me on that Day, and not to me only but also to all who have loved His appearing.⁴⁹⁹

495 Matthew 25:13.

496 1Thessalonians 5:2; 2Peter 3:10.

497 Colossians 3:4.

498 2Timothy 4:1.

499 2Timothy 4:8.

Looking for the blessed hope and glorious appearing of our great God and Saviour Jesus Christ.⁵⁰⁰

So that you come short in no gift, eagerly waiting for the revelation of our Lord Jesus Christ.⁵⁰¹

That the genuineness of your faith, *being* much more precious than gold that perishes, though it is tested by fire, may be found to praise, honour, and glory at the revelation of Jesus Christ.⁵⁰²

Therefore gird up the loins of your mind, be sober, and rest *your* hope fully upon the grace that is to be brought to you at the revelation of Jesus Christ;⁵⁰³

Now lest some might think that Christ's appearing or His being revealed could somehow come over a drawn out period of time, consider what the angels told the disciples when they had witnessed the ascension of Christ into heaven:

9 Now when He had spoken these things, while they watched, He was taken up, and a cloud received Him out of their sight. **10** And while they looked steadfastly toward heaven as He went up, behold, two men stood by them in white apparel, **11** who also said, "Men of Galilee, why do you stand gazing up into heaven? This *same* Jesus, who was taken up from you into heaven, will so come in like manner as you saw Him go into heaven." ⁵⁰⁴

Christ's return will be "*in like manner*" as His ascension. The disciples witnessed the Lord Jesus rising on the clouds and going out of this universe into the heavens where God dwells. When He returns, those who will be on the earth at that time will see Him come back just as suddenly. We could prolong this discussion by considering other statements made about Christ's return and the judgement which will follow, but enough has been said to show without any doubt that there is no thought nor room for any evolutionary schemes. Since this is obviously so, what place does evolution have? I am rather nonplussed as to why theistic evolutionists do not deal with this issue.

The incarnation.

Before we conclude this treatment of how evolution is incompatible with Christ, I want to make some reference to the Lord's first appearing, that is, the incarnation. Now if evolution were true, how does the incarnation fit in? The repost that Christ's incarnation is simply a matter of His

500 Titus 2:13.

501 1Corinthians 1:7.

502 1Peter 1:7.

503 1Peter 1:13.

504 Acts 1:9,10.

entrance into the world in comparison to normal conception and birth will not wash. I say this because Christ is not simply another man entering into the world. He is the second and last Adam.⁵⁰⁵ If the first Adam came through an evolutionary process, then surely the second Adam should come in the same way? Or to turn this on its head, since Christ clearly came by the power of the Holy Spirit, then surely the first Adam came in a similar instantaneous manner? Well that is what we find in Genesis 2:7! To sum these thoughts up, evolution does not fit at all well with the doctrine of Christ.

Why do some Christians accept evolution?

We arrive at a crucial crossroads in our discussion. Thus far I have outlined the nature of evolution and have described how opposed the essence of this teaching is to the Christian faith. However there are still many who argue tooth and nail that it is possible to be a true Christian and believe in evolution. How can this be?

Evolution is a big deal in modern life. The reader may object and reply that for them it isn't such a big deal. They don't even think about it on a day-to-day basis. Well that really is my point. We do not think about it that often because it is such an embedded concept in our society. We have repeatedly referred to the National Curriculum in the course of this work. Since 1988 evolution has been the central feature of the requirements for all science teaching (biology, chemistry and physics). Since the National Curriculum is the product of a secular society, it is arguably true that all subjects have some evolutionary basis. As another example to show that evolution is a big deal, think of the many programmes aired on the TV that cover the "natural world." Even that term and its more oft used cognate, "Nature," indicate the point that evolution is a big deal. How do people generally view the universe that God created? They think of it more naturally (I mean from their upbringing and surroundings) as something that has come about over many millions of years through a gradual process of evolution. And they do not think of it as having come directly from the right hand of God, the Agent of Creation – Jesus Christ. That is, quite simply, tragic and appalling.

Thus we are bathed in a culture which takes evolution for granted just as more than two hundred years ago people took for granted that God created all things very recently. Now in such a climate it is difficult to swim against the tide. This becomes more of a problem if your livelihood or reason to exist touches directly on the whole issue. Anyone wanting to engage in science studies will find that they must come into line with the universally accepted view that evolution is true. The militant atheists and secular humanists keep everyone in line by heckling, badgering, and even

⁵⁰⁵ 1Corinthians 15:45,47.

persecuting anyone who dissents. If a person wants to study biology and yet finds evolution anathema how will they fare? They will have clashes with their lecturers and professors, of course. But what about the topics they are actually studying? To what extent are these grounded upon and infused with the doctrine of evolution? Is it possible to redirect the study of biology with a godly foundation? I think it is very possible. It will be very hard, but it is surely possible.⁵⁰⁶ Now the problem for any aspiring student is that they cannot do that whilst they are studying. All they can do is study the subjects offered which have godless foundations and work through the issues with the Lord as they go along. Such a task is monumental.⁵⁰⁷ The person must study hard to understand difficult concepts grounded on a false base. On top of this they must seek the Lord in His word and be guided to re-direct the subject fit for a godly person to engage in. In short it is a doubled task. And all the while such godly students are attempting this they will be persecuted and vilified for daring to challenge the orthodoxy. Sadly it will even be many misguided Christians who have compromised on evolution who will be protesting the loudest.

The above picture that I have painted is not a figment of my imagination. Although I studied Materials Science and then Chemistry for my degrees I have gone through the experience of seeking to grasp the science I was taught whilst at the same time seek the Lord for His view and position. It has been a life-long expedition which is far from over (God willing) and it has not been easy. I have taught all three sciences in schools attempting also to re-direct them to a godly base but in large part have not succeeded. Now given all of this, it is not surprising that people opt for theistic evolution. There are four general reasons why people opt for theistic evolution with any of the many alternative ways of viewing Genesis 1-11. These are:

1. Lack of thought.
2. Fear.
3. Misguided.
4. Weary or tired out.

I never thought about it!

When I was a student at university a few of us would go into the centre of our town and hand out gospel tracts. We would seek to engage passers-by in conversation about Christ and the

⁵⁰⁶ I make this assertion tentatively here based on the idea that observational or experimental science is concerned with the here and now. Experiments or observations done today may be checked tomorrow. The issue with regard to explanations and theory formation is a little more complex because this involves the mind and human thought. To do science in a godly way will require a mind that is being transformed.

⁵⁰⁷ I speak from experience.

gospel. One of the things this experience taught me was that life for the multitudes is quite harsh. In general, the most frequent response (when I actually managed to tell someone about the gospel and ask them about life and death) was: "I haven't really thought about it." I say that for many life is harsh not to make any political point. It is merely an observation. People are so busy trying to make ends meet, that the time they may have off is usually consumed with keeping relatives and acquaintances happy and drowning in entertainment to dull the heart-aches and pains of life. That is the reality. We have a plethora of diversions which are getting increasingly varied and pushing the boundaries. It is rather like our supermarkets. You don't just see a shelf with some tins of tomatoes, you see several shelves with tins of tomatoes crushed, chopped, whole, with garlic, with herbs, with chillies and so on. Entertainment is the same. Such an environment is dulling, passive, and controllable by the authorities. If the masses are fed their regular diet of silly past-times and entertainment they will be happy enough. Again I am not making a political point here. It's just that our culture leads people to passivity and this leads people to a laziness in thought.

If a person works within a profession which links somehow with evolution it is a very hard thing to do to think deeply about it and how it impacts the gospel. It is not surprising that many do not even bother. They should! Of course they should! The gospel energises the mind. Think of the many exhortations in Scripture to *remember*, to *consider*, to *think*, to *meditate*, or to *work things out*. I do not mean to say that a Christian is merely an intellectual. Not at all. However a Christian is one who is being renewed in mind.⁵⁰⁸

Fear.

Well perhaps those who go in for science careers are not likely to be amongst the unthinking. Sadly I have to report that I have seen many Christians duped into wayward paths because they did not test out what they were being offered by false prophets and false teachers. Such as may fall in this way do so often because they lack courage. They fear. Now fear is actually a good thing, but it must be directed in the right way. The beginning of wisdom is the fear of God, so fear directed towards God is, in point of fact, what we desire (or ought to).⁵⁰⁹ However our fear can be directed in selfish ways. Fear has a range of expressions from outright terror to reverence and respect. In essence we ask: what do we esteem? What is it that we value? What do we put first? If we put God first in all things, it would be natural then to look to Him and His word for His view on what to do. This applies whether we think of an attitude of heart, a course of action to take, a life journey we should embark upon, or on anything which concerns our time, our work and our family.

508 Romans 1:1,2; Ephesians 4:23.

509 Psalm 111:10; Proverbs 1:7; 9:10; 15:33.

However if we do not direct our reverence, respect and fear towards God, we will direct it elsewhere.

We may fear man. We might fear a particular man (or woman) or a particular group of men or women. These may be ones who hold authority or influence like those in modern science. So we might say, for example, these folk who have donned their white coats and worked hard at university must be listened to surely? After all so many cannot be wrong can they? We ought to give respect to every man, woman and child. We ought to listen and be respectful. That is a given because we are all made in the image of God and are all born from Adam. That isn't what I'm talking about here. What I mean is that people respect and defer to groups such as modern science, doctors or other professionals because they have learning. The type of fear expressed is often linked to the tendency for people to be lacking in thought. They are unthinking often because they have not studied or gained the qualifications and so feel inferior in some way. Along comes a respected scientist who presents some information and so the fearful person defers to this, not giving it much thought because of a lack of confidence and a great respect for another's prowess. Now depending on the situation, this fear may be rather passive and dismissive. Or it may be much more than that. It may be that a person fully respects anyone who claims to be a scientist or someone in authority and simply lets them say or do what they will. We see this with all those horrible scams and fraudulent activities that seem to be increasing in our day. Someone phones us up and informs us that there is something wrong with our computer or our internet connection or with our bank account and they have called to make things good. We didn't know we had a problem, but these people sound so convincing we respect them and ... Well I do not need to spell this out. It is rather horrible that it happens. I have heard many face these terrible criminals. The fear of man. It can be connected with an unthinking attitude. But it often leads to disaster. Men (and woman) who induce fear are bullies.

Alternatively it might be an inner fear of losing something. This really is pride. A person who defers to the prevailing attitudes that they might consider to be wrong fears that they may lose face or reputation. Sadly I think that many professionals (theologians or scientists) who accept evolution do so simply because they do not want to lose face, have their reputation ruined or seen as the odd-ball. What happens when a person starts out this way and who lacks courage to stand against the trend and tide, is that they then move to convince themselves of their acceptance of a wrong idea. They may have started out tentatively but because they have not objected they begin to rationalise and then adopt its tenets despite any evidence to the contrary. Sometimes people who go in this direction end up as militant evangelists for their compromised views. At one point they may have thought: "If I oppose this I will lose my career," but then having kept silence they move into a

situation where they adjust their thinking to comply with the prevailing views. If they continue in this way they may end up violently in support of what they once thought dubious. This all stems from pride.

Misguided.

Then there are those who are misguided in some way. In many ways most of us are in this camp at one time or another. We are all swamped with information and view points much of which really leaves a lot to be desired. I was brought up in a strict Roman Catholic setting where I was taught that I came about through a process of evolution that somehow God directed. The details of this connection were never explained to me, and because of the way in which the priests taught at the school, I ended up rejecting anything to do with religion and Christianity and opted to believe in the science I was taught.⁵¹⁰ Many today are being taught things which ought never to have seen the light of day. All children at state schools are being taught that evolution is fact and that Genesis is myth. No state school would dare to teach otherwise. And so people are being misguided. They may be deeply thinking people, but their experience and what they are being offered is limited. If they continue in such a path and become more exposed to the modern scientific views, without any contradictions or objectors, it is almost certain that they will be deeply entrenched in them too. Now some folk who are in such a way may come to faith at some point in their lives. This is eminently possible. None of us ever come to faith with things fully corrected before we come. So the scenario I have just described is not only likely, but certain given our current situation. Such a person when confronted with Genesis may well throw up their hands in despair, they may go through an agonising process of re-adjustment, or they may opt for a compromise. In my brief experience there were times when I could not answer the many compromises on offer. I intuitively accepted recent instantaneous creation, but I was puzzled by the various alternatives on offer. It is only because I have spent some time on each that I can offer some guidance in this work. But many may simply not have the time and having been misguided for so long, then opt for a compromise simply because it seems to make sense to them at that time.

Some people are misguided with respect to how they have been taught either science or theology. Imagine a person who suddenly comes to faith in Jesus Christ. They hear a sermon or listen to a testimony and they recognise their own sinful nature. At the same time they see Christ offering forgiveness because of His death and life through His resurrection. The Spirit moves on this person and they are born again. Now it may be that such a person has been misguided on

⁵¹⁰ The fact of the matter was that these teachers were not priests whom I feared. The scientists I also feared but not in the same way and science gained my utmost respect.

several issues. One of the things that the Spirit of God will do over time is to train such a person to come away from those things they were once taught. But then imagine the same person being fed week by week by someone who has compromised either with respect to Scripture or science. What happens then? Well there are limitless possibilities but one of them is that they may well continue being misguided and might even end up in a worse situation than when they started. Another possibility is that the witness of the Spirit within leads them out of such a place in search of better food! Sadly there are so many churches today which offer all sorts of view points both on Scripture and on science. Some suggest a weak view of inspiration. The Bible is only concerned with matters of faith and how we practice faith. How you conduct your career in a professional manner is up to you and your profession (as long as you do it in a godly way). That is the way many churches operate. They may say they believe in the inspiration of the Scriptures but in practice they limit the scope of Scripture to matters of the inner being! Other churches may state that science is simply the truth gleaned from nature. If that is the case it is no wonder that members will take on board the compromises on offer. Such a naïve view of general revelation – that science simply reads from the universe undeniable truths – is extremely sad not to say highly worrying.

Exhausted.

Then there are those who are simply far too overwhelmed to do anything at all. They are oppressed or hounded, persecuted or over-worked in some way. In the dim and distant past there were those folk whose lives were hard and short. The miners of the nineteenth century worked six days a week and during winter never saw the light of day. When they had finished work they simply cleaned up and went to bed. You may be surprised to find that there are such people today. I think of the mothers who have large families and who work for a living as well. Then there are those whose responsibilities are overwhelming. They may have elderly and younger dependants who need daily, if not hourly attention. These have not the time through sheer exhaustion to consider things in any depth. Consequently, if they are believers, they give up and go with the flow. Now to such I dare not say that they ought to review their life style. In some cases this may be the problem. Over work due to concentrating on making money rather than following God is one example. But in other cases they cannot but work and provide for families and meet other obligations. What should I say to them? Well, even though you may be exhausted, this does not mean we should give up thinking and fear science or whatever the pressing influence may be. I can think of none more stressed than the Saviour who on occasions was so hard pressed even when He withdrew for peace and quiet was still

inundated with public duties.⁵¹¹ What did He do about this? Well in this case He carried on ministering. Now His pattern was to rise up in the night to pray!⁵¹²

I do not want to come across without compassion. I recognise that life can be hard for many, and time precious. Nevertheless each of us needs to be clear about our life pattern under God. If there is not time to settle the issue because of exhaustion we have to ask ourselves both what we can do to seek the Lord on it, and how we ought to re-organise our time.

Consider this.

In these ways (and perhaps others), many fall into the trap of accepting theistic evolution. But once it has been pointed out to us both that such a view point is wrong, and that our motive for accepting it has not been correct, it is time to do some re-thinking. This, in essence, is all part and parcel of the walk of faith, the life of a Christian. We are challenged by sin or wrong thinking, convicted of the truth, and then come to make a change. We repent. We change our mind. We engage with God again in faith. Perhaps at this point it would be worth asking the question: have I compromised? Am I guilty of not giving this issue some serious thought? May the Lord richly bless you dear reader as you seek to follow the Lord in truth and by faith.

511 Mark 6:31-34.

512 Luke 6:12.

Chapter 5: Evolution and the Bible.

(How should we understand all things?)

At some point in our discussion of evolution we need to consider how the Bible fits in. How do we interpret what it says, and how does this connect with everything else?

How then shall we know?

How then can we know anything? By what means ought we to judge the things we come up against? How do we make decisions? What is our standard? Well unless the Lord Himself reveal such things to us we cannot know, we cannot judge, we cannot decide. How often do we hear the expression “God alone knows” when we are at a loss as to what to do? Although this phrase is often meant in a scathing way, it is, in point of fact, true! In fact it is much more true than we care to imagine. We carry out life as though we own it and rule it, but we are dependent upon the Lord (even if we don't believe in Him). God alone truly knows. He is the “*Rock*” and the “*I am*,” the “*Fountain of life*,” and the Creator of all things.⁵¹³ Any attempt at seeking true knowledge must start with these truths. We must start with the fact that God is omniscient, knowing everything. But how do we come across a knowledge of God? The only answer to that question is: the Bible.

The Bible displays the character of God.

The Bible is God's word. It is the revelation of God to human beings. As such it partakes of the very character of God. Now God is described in numerous ways for us in His word. For example, we know that:

The Lord God is good.⁵¹⁴

The Lord God is great (mighty, awesome, a rock etc.).⁵¹⁵

The Lord God is true and faithful.⁵¹⁶

The Lord God is righteous.⁵¹⁷

The Lord God is a just judge and lawgiver.⁵¹⁸

513 Exodus 3:14; Deuteronomy 32:4; Jeremiah 2:13.

514 Psalm 34:8; 73:1; 100:5; 135:3; 145:9; Jeremiah 33:11; Lamentations 3:25; Nahum 1:7.

515 Deuteronomy 10:17; Job 36:26.

516 Jeremiah 10:10; John 3:33; 1Corinthians 1:9; 10:13; 2Corinthians 1:18; 2Thessalonians 3:3.

517 Exodus 9:27; 2Chronicles 12:6; Psalm 11:7; 92:15; 129:4; 145:17; Lamentations 1:18; Daniel 9:14; Zephaniah 3:5.

518 Psalm 7:11; 75:7; Isaiah 30:18; 33:22.

The Lord God is gracious and merciful (God is love).⁵¹⁹
 The Lord God is one (unique).⁵²⁰
 The Lord God is holy.⁵²¹
 The Lord God is light.⁵²²
 The Lord God is keeper, a shade, a shield, a refuge, a defence.⁵²³
 The Lord God is king over all (God of gods and Lord of lords).⁵²⁴
 The Lord God is salvation.⁵²⁵
 The Lord God is spirit.⁵²⁶
 The Lord God is helper.⁵²⁷
 The Lord God is in/from heaven.⁵²⁸
 The Lord is the God of knowledge.⁵²⁹
 The Lord God is shepherd.⁵³⁰
 The Lord God is a consuming fire.⁵³¹
 The Lord God is jealous.⁵³²
 The Lord God is wise.⁵³³
 The Lord God is God of the living.⁵³⁴

These qualities are not exhaustive, but are put so that we might gain some insight into the awesome majesty of God. He is the definition of what is meant by the term *good*. With God alone belongs infinite power and wisdom. None is like Him, for He alone is pure and holy, righteous and true. God is faithful, a very present help in trouble. He is also jealous and a consuming fire, but equally He is the just judge. God is great, gracious, glorious as well as being good. But on top of all these qualities He is above and beyond this created order, that is, He is from heaven and He is spirit. These two qualities indicate that He is not of this world, (and certainly not definable using materialistic terms), and that He is truly the only one who can be objective. He alone is outside of our existence, because He created all things, which statement includes the invisible as well as the visible.⁵³⁵ Now given that God is true, that He cannot lie, that He is the creator of all things, that He is holy and right, and that He is truly objective, it follows as a matter of sheer certainty that

519 Numbers 14:8; Deuteronomy 4:31; 2Chronicles 30:9; Psalm 103:8; 111:4; 116:5; 145:8; 1Peter 2:3; 1John 4:8,16.
 520 Deuteronomy 6:4; Zechariah 14:9; Mark 12:29; Galatians 3:20.
 521 Psalm 99:9; Isaiah 6:3.
 522 Psalm 27:1; 1John 1:5.
 523 Genesis 15:1; Deuteronomy 33:27; Psalm 14:6; 28:7,8; 46:1; 59:9,17; 62:8; 84:11; 121:5.
 524 Exodus 18:11; Deuteronomy 10:17; Psalm 10:16; 47:7; 74:12; Isaiah 33:22; Daniel 2:47; Zechariah 14:9.
 525 Psalm 27:1; 68:20; Isaiah 12:2; Jeremiah 3:23.
 526 John 4:24; 2Corinthians 3:17.
 527 Psalm 54:4; Hebrews 13:6.
 528 Genesis 24:7; Deuteronomy 4:39; 1Kings 22:19; Psalm 11:4; 14:2; 33:13; 115:3; Ecclesiastes 5:2.
 529 1Samuel 2:3.
 530 Genesis 49:24; Exodus 34:11; Psalm 23:1.
 531 Exodus 24:17; Deuteronomy 4:24; 9:3. Hebrews 12:29.
 532 Exodus 20:5; 34:14; Deuteronomy 6:15; Nahum 1:2.
 533 Exodus 36:1,2; 1Kings 5:12; Job 9:4; Psalm 104:24; Proverbs 2:6; 3:19.
 534 Jeremiah 10:10; 23:36; Matthew 22:32.
 535 Colossians 1:16.

whatever He says or causes to be written down for us must, of necessity, be the standard by which we measure all things. Do we want to know what is true? Then appeal to God who has spoken nothing but truth and has given it freely to us:

And now, O Lord God, You are God, and Your words are true...⁵³⁶

Into Your hand I commit my spirit; You have redeemed me, O Lord God of truth.⁵³⁷

For the word of the Lord *is* right, and all His work *is done* in truth.⁵³⁸

For the Lord *is* good; His mercy *is* everlasting, and His truth *endures* to all generations.⁵³⁹

1 Praise the Lord, all you Gentiles! Laud Him, all you peoples! **2** For His merciful kindness is great toward us, and the truth of the Lord *endures* forever.⁵⁴⁰

The entirety of Your word *is* truth, and every one of Your righteous judgments *endures* forever.⁵⁴¹

Sanctify them by Your truth. Your word is truth.⁵⁴²

Then He who sat on the throne said, "Behold, I make all things new." And He said to me, "Write, for these words are true and faithful."⁵⁴³

Then he said to me, "These words *are* faithful and true." And the Lord God of the holy prophets sent His angel to show His servants the things which must shortly take place.⁵⁴⁴

Do you want to be right and do right? Are you keen on true justice? Well God alone is righteous and He alone is the true judge! If we need assurance of truth and what is right, the only sure place to find such is to go to God who is by very nature true, faithful and wonderfully righteous.

Now many will be saying at this point that the Bible may say all these things about God but how do we know that the Bible is fully God's word? The answer to this question is simple and yet profound. It is simple because God has revealed Himself in the most wonderful of ways. It is profound because we will never stop seeing new insights into what God has done for us. In short,

536 2Samuel 7:28.

537 Psalm 31:5.

538 Psalm 33:4.

539 Psalm 100:5.

540 Psalm 117.

541 Psalm 119:160.

542 John 17:17.

543 Revelation 21:5.

544 Revelation 22:6.

we know that God has spoken because He sent us His Son.⁵⁴⁵ To begin with we need to recognise that Christ Jesus, the second person of the holy trinity, came down from heaven into this broken and failing world. The story of Christmas tells of the incarnation which the apostle John sums in in these words:

And the Word became flesh and dwelt among us, and we beheld His glory, the glory as of the only begotten of the Father, full of grace and truth.⁵⁴⁶

The “*Word*” has already been described for us by John at the start of his account:

1 In the beginning was the Word, and the Word was with God, and the Word was God. 2 He was in the beginning with God. 3 All things were made through Him, and without Him nothing was made that was made. 4 In Him was life, and the life was the light of men. 5 And the light shines in the darkness, and the darkness did not comprehend it.⁵⁴⁷

And so we discover that John writes about the Saviour using an Old Testament term to describe Him, namely that He is the “*Word*” of God.⁵⁴⁸ The sources for John's designation for the Lord Jesus can be found in many Old Testament Scriptures.⁵⁴⁹ In using this title it is clear that John intends us to understand that God is willing to communicate to the world. This is made all the more clear by the summary statement at the end of the prologue:

No one has seen God at any time. The only begotten Son, who is in the bosom of the Father, He has declared *Him*.⁵⁵⁰

It is not possible to see God because God is Spirit. Consequently the second person of the holy trinity took on human form in order that we might have knowledge of God. He stepped down from heaven into this world and declared or explained the Father. In His high priestly prayer the Saviour refers again to this declarative work:

545 Hebrews 1:1-4.

546 John 1:14.

547 John 1:1-4.

548 John 1:1,14.

549 The “*word of the Lord*” who came to Abram in a vision then brings Abram outside of his tent to observe the stars, Genesis 15:1,4,5. We discover that the “*word of the Lord*” came to Elijah when he was in a cave despondent, and then we read that “*He*” (that is “*the word of the Lord*”) spoke directly to Him, 1Kings 19:9. The “*word of the Lord*” came to Jeremiah and spoke to him and then we discover that the Lord “*put forth His hand and touched*” Jeremiah's mouth, Jeremiah 1:4,7,9.

550 John 1:18.

6 “I have manifested Your name to the men whom You have given Me out of the world. They were Yours, You gave them to Me, and they have kept Your word. **7** Now they have known that all things which You have given Me are from You. **8 For I have given to them the words which You have given Me;** and they have received *them*, and have known surely that I came forth from You; and they have believed that You sent Me. ... **14 I have given them Your word** ... **17** Sanctify them by Your truth. Your word is truth. ... **26 And I have declared to them Your name, and will declare it,** that the love with which You loved Me may be in them, and I in them.”⁵⁵¹

Then after His resurrection Christ demonstrated to His disciples that the Old Testament supremely spoke of Him and His work.⁵⁵² Thus by His actions in coming to the earth, in teaching and doing wonders, in dying for sin and rising for new life, Christ demonstrates the love of God, and all this is prophesied in the Old Testament, and revealed to us in the New Testament by faithful witnesses. Since God has clearly spoken (and has spoken clearly) in and through Christ, should we not believe Him and follow His lead?⁵⁵³

Christ demonstrated in the clearest possible ways that He is God incarnate. Not only does He show us whom the Father is (as we have discussed briefly), we also see His divinity in both His teaching and through His miracles whilst He walked this earth (see table 7). However we see His divine nature supremely in the amazing work that Christ achieved. He came for the express purpose of dying on the cross to pay for the sins of the world. John the Baptist publicly declared Christ as God's perfect sacrifice.

29 The next day John saw Jesus coming toward him, and said, “**Behold! The Lamb of God who takes away the sin of the world!** **30** This is He of whom I said, ‘After me comes a Man who is preferred before me, for He was before me.’ **31** I did not know Him; but that He should be revealed to Israel, therefore I came baptizing with water.” **32** And John bore witness, saying, “I saw the Spirit descending from heaven like a dove, and He remained upon Him. **33** I did not know Him, but He who sent me to baptize with water said to me, ‘Upon whom you see the Spirit descending, and remaining on Him, this is He who baptizes with the Holy Spirit.’ **34** And I have seen and testified that **this is the Son of God.**” **35** Again, the next day, John stood with two of his disciples. **36** And looking at Jesus as He walked, he said, “**Behold the Lamb of God!**”⁵⁵⁴

To realise the profundity and immense impact of these statements made by the last Old Testament prophet, who himself was prophesied of, it is important to consider the whole sweep of Old

551 John 17:6-8,14,17,26.

552 Luke 24:27,44-47.

553 Amos 3:8.

554 John 1:29-36.

Testament teaching.⁵⁵⁵ We will not do that here, of course, suffice to remind the reader that all of the Old Testament sacrifices and imagery in the temple and tabernacle were pointers to the One coming, namely Jesus Christ. We find the first reference to one who would rescue from sin in Genesis 3:15, and there are many other pointers along the way.⁵⁵⁶ However I want to highlight just one to make the point that sacrifice was intended as a signpost to what Christ achieved when He died on the cross. During his pilgrimage the Lord tested Abraham to prove his faith. You can read the account in Genesis chapter 22. God asked Abraham to offer up as sacrifice his one and only son. Would Abraham obey such a strange command? He knew that murder was wholly wrong and yet we find him walking in perfect obedience to the message he had received. As Abraham and Isaac were on their journey, Isaac asked his father where the lamb for the burnt offering was.⁵⁵⁷ Abraham knowing that he was asked to sacrifice Isaac by the Lord, responds with these words:

And Abraham said, “My son, God will provide for Himself the lamb for a burnt offering.” So the two of them went together.⁵⁵⁸

Was this evasive or deceptive? I think not. We should note that when Abraham builds the altar and made everything ready, he then “*bound Isaac his son and laid him on the altar.*”⁵⁵⁹ Abraham was over 100 years in age at this point whilst Isaac was a young man with greater strength, and yet Isaac was a willing sacrifice offering no resistance. The writer of the letter to the Hebrews suggests that Abraham believed that God would raise Isaac to life:

... concluding that God *was* able to raise *him* up, even from the dead, from which he also received him in a figurative sense.⁵⁶⁰

Then at the moment when Abraham was ready to plunge in the knife, the Lord stops him and provides a ram caught in a thicket by its horns.⁵⁶¹ The words which the Lord used to stop Abraham are significant:

And He said, “Do not lay your hand on the lad, or do anything to him; for now I

555 John the Baptist was referred to as a prophet by the Saviour in Luke 7:28, and was prophesied of in Isaiah 40:3f and Malachi 3:1.

556 Seth as an appointed substitute, Noah as the one who would bring rest, the ark as a type of Christ which suffered the judgement of the flood whilst the eight survivors were safe inside and so on.

557 Genesis 22:7.

558 Genesis 22:8.

559 Genesis 22:9.

560 Hebrews 11:19.

561 Genesis 22:13.

know that you fear God, since you **have not withheld your son, your only son,** from Me.”⁵⁶²

Isaac was Abraham's only true son by his wife Sarah. This type of language is found in reference to the Lord Jesus. He is the **Only** begotten Son of God the Father.⁵⁶³ A short while later, after Abraham sees the sacrifice that God had provided and offers this in place of Isaac, we read that the Lord blesses Abraham for not withholding Isaac, is only son, from God:

15 Then the Angel of the Lord called to Abraham a second time out of heaven, **16** and said: “By Myself I have sworn, says the Lord, because you have done this thing, and **have not withheld your son, your only son**— **17** blessing I will bless you, and multiplying I will multiply your descendants as the stars of the heaven and as the sand which *is* on the seashore; and your descendants shall possess the gate of their enemies. **18** In your seed all the nations of the earth shall be blessed, because you have obeyed My voice.”⁵⁶⁴

In the New Testament we read of the Son of God being offered for sin. To start with we have a text which includes (perhaps) one of the most well know verses of all time:

14 And as Moses lifted up the serpent in the wilderness, even so must the Son of Man be lifted up, **15** that whoever believes in Him should not perish but have eternal life. **16** For God so loved the world that He gave His only begotten Son, that whoever believes in Him should not perish but have everlasting life. **17** For God did not send His Son into the world to condemn the world, but that the world through Him might be saved.⁵⁶⁵

Jesus points back to an incident in Israel's history as a prophecy of His great act.⁵⁶⁶ Once again, then, we see that the Old Testament is the signpost to Christ and His work. But the main point of this text for our purposes is that God (the Father) gave “*His only begotten Son,*” just as Abraham had so long ago in type. Now God did not spare His Son because He was to redeem mankind by being the “*Lamb of God,*” that is, the perfect atonement for sin.

In order to see that Christ's great work of dying and rising again is proof that God is to be trusted, consider how Paul expresses this work:

6 For when we were still without strength, in due time Christ died for the ungodly. **7**

562 Genesis 22:12.

563 John 1:18; 3:16,18; Hebrews 11:17; 1John 4:9.

564 Genesis 22:15-18.

565 John 3:14-17.

566 See: Numbers 21:4-9.

For scarcely for a righteous man will one die; yet perhaps for a good man someone would even dare to die. **8** But God demonstrates His own love toward us, in that while we were still sinners, Christ died for us.⁵⁶⁷

Who would die in the place of another? There have been examples throughout history of self-sacrifice, but no one has ever done what Christ did. He placed Himself as the guilty one despite having no sin or fault within Him at all.⁵⁶⁸ In such a place He stood condemned on our behalf. Christ died for the ungodly. Is this not remarkable? Is this not the very height of love? Christ willingly took upon Himself the guilt and punishment that was due to sinners. Paul then goes on to point out that if God did not spare His Son to be condemned in our place, then surely such love is no mere aberration? Will not God do more for us?

31 What then shall we say to these things? If God *is* for us, who *can be* against us? **32 He who did not spare His own Son, but delivered Him up for us all, how shall He not with Him also freely give us all things?** **33** Who shall bring a charge against God's elect? *It is* God who justifies. **34** Who *is* he who condemns? *It is* Christ who died, and furthermore is also risen, who is even at the right hand of God, who also makes intercession for us. **35** Who shall separate us from the love of Christ? *Shall* tribulation, or distress, or persecution, or famine, or nakedness, or peril, or sword? ⁵⁶⁹

God has demonstrated beautifully and most demonstrably that He loves. He has sent His only begotten Son, the second person of the holy trinity, into this world to make the perfect sacrifice for sin. In effect Christ has brought salvation. He has done what no one else, nor what any system, philosophy, thought, ideal or scheme could ever do. He has reconciled us to God! Isn't such an act proof enough?

To ratify what Christ did on the cross in paying for our wrongdoing, the Saviour was raised to new life. By being raised from the dead, Christ demonstrated that all that He had done was accepted by the Father.⁵⁷⁰ Without Christ's resurrection we would never be sure that what the Lord had done succeeded. But since He was raised, we learn that the payment has been made and everlasting life is assured. In fact, if Christ had not been raised all hope would be lost.⁵⁷¹ Peter in his sermon at Pentecost declared how the resurrection demonstrated the Father's ratification of His work. We discover that it was not actually possible for Christ to be held by death because He paid the penalty for sin in full and had no need to die Himself since He was sinless.⁵⁷² When God raised

567 Romans 5:6-8.

568 See: John 8:46; 18:38; 19:4,6; 2Corinthians 5:21; Hebrews 4:15; 1Peter 2:22.

569 Romans 8:31-35.

570 Romans 1:4.

571 1Corinthians 15:13-17.

572 Acts 2:24.

Christ from the dead, He ensured that there were many witnesses to this amazing event, and then exalted the Lord Jesus to the very highest place of all, “*the right hand of God.*”⁵⁷³ As a consequence the Lord, (as He had promised His disciples the night before He died), could send the Holy Spirit onto the church.⁵⁷⁴ The people to whom Peter was speaking witnessed this outpouring, just as the numerous disciples had witnessed Christ's resurrection. Consequently Peter concludes that the risen Saviour was indeed the Messiah (Christ) and that He was God.⁵⁷⁵

God has spoken in Christ and ...

When things were tough and many deserted Christ because of the hard teaching He was offering, the Lord asked His disciples whether they too would leave. Peter responds:

Lord, to whom shall we go? You have the words of eternal life.⁵⁷⁶

As we noted earlier, the apostle John opens his gospel account by describing the Lord Jesus as the great communicator. He is the “*Word*” and He brings light to men. At the end of his prologue John tells us that the “*only begotten Son,*” Jesus Christ has explained whom the Father was.⁵⁷⁷ The Son has made known, or expounded, the Father. The night before His death He taught the disciples that if they had seen Him they had seen the Father also, and He promised that they would be lead into all truth.⁵⁷⁸ In His high priestly prayer the Lord declared that He had spoken openly to His disciples about what the Father had revealed to Him.⁵⁷⁹ Thus, it is the Lord Jesus alone who can reveal the truth to us. He alone is “*the way, the truth, and the life,*” and none can come to God the Father except they come through Him.⁵⁸⁰

However there is a great problem because the Lord Jesus having been in the world through the incarnation, and having suffered death and being raised again, has now departed this world through His ascension.⁵⁸¹ He is seated at the right hand of the Father having dealt with the problem of sin.⁵⁸² So how now do we receive the truth? How can we know? Well the answer is not difficult to fathom because it can be summed up in these three words: “*God has spoken,*” which phrase

573 Acts 2:33; Hebrews 1:3.

574 John 14:26; 15:26; Acts 2:33.

575 Acts 2:36.

576 John 6:68.

577 John 1:18.

578 John 14:9; 14:17; 15:26; 16:13. See also John 17:17.

579 John 17:6,8,14.

580 John 14:6.

581 The ascension is recorded at the end of Luke and the beginning of Acts, although it is referred to in many other places too.

582 Hebrews 1:3.

comes 5 times in the NKJ.⁵⁸³ The parallel phrase, “*the Lord has spoken,*” is more frequent and occurs 28 times in the NKJV.⁵⁸⁴ A look through these texts would pay great dividends but we shall limit ourselves to the only New Testament reference where we find the phrase “*God has spoken,*” namely Acts 3:21. The context of this reference is the occasion where Peter addresses the people after the lame man was healed at the temple gate known by the name “*Beautiful.*”⁵⁸⁵ Peter uses this opportunity to preach the gospel. He states unequivocally that it is through faith in the name of Jesus, whom they had “*delivered up,*” “*denied,*” and “*killed,*” but whom was also “*the Prince of life whom God raised from the dead,*” that the lame man was healed.⁵⁸⁶ Then Peter goes on to demonstrate that what they had done, was done in ignorance but was foretold long ago. The things that came to pass, of which they were all witnesses, where:

... those things which God foretold by the mouth of all His prophets.⁵⁸⁷

After calling them to repentance for the forgiveness of sins, he then outlines what was going to happen from that time. There would be “*times of refreshing,*” (periods of revival) before Christ's ultimate return when all things would be restored. At this point he tells us that these events were all foretold and this is how he puts it:

... which God has spoken by the mouth of all His holy prophets since the world began.⁵⁸⁸

Notice two important things here. First that God speaks “*by the mouth of all His holy prophets.*” This is very clear. When the (true) prophet spoke, then it was God speaking. But second please note that God has in point of fact spoken “*since the world began.*” This is an extremely important point and often missed by many who accept evolution. Since the world was made in the beginning, God has spoken through His holy prophets. This means that we are not to consider the Bible as a late-comer on the scene as though it owes its existence to the ANE cultures. No! God has spoken since the time He made all things.

Since God has spoken through His holy prophets we are at once guaranteed true knowledge,

583 Psalm 60:6; 62:11; 108:7; Amos 3:8; Acts:21.

584 Genesis 24:51; Exodus 19:8; Leviticus 10:11; Numbers 15:22; Deuteronomy 6:19; 2Samuel 3:18; 1Kings 13:3; 14:11; 2Kings 19:21; Psalm 50:1; Isaiah 1:2,20; 16:13,14; 22:25; 24:3; 25:8; 31:4; 37:22; 40:5; 58:14; Jeremiah 9:12; 13:15; 27:13; 48:8; Joel 3:8; Amos 3:1; Obadiah 1:18. Note that nearly 40% of these occur in Isaiah.

585 Acts 3:2,12.

586 Acts 3:13-16.

587 Acts 3:18.

588 Acts 3:21.

for God cannot lie.⁵⁸⁹ The Bible is the record of what God has said. Now it is extremely significant that the very first page of Scripture starts with creation through the word. Ten times we read “*and God said,*” followed by the announcement that what He had spoken immediately came to pass.⁵⁹⁰ There is no doubt that the apostle John used this text (among others) to demonstrate that Christ Jesus was the Word of God.⁵⁹¹ Thus right from the start God has spoken to us. Obviously the first speech of God was His very creation, and this still speaks to us as Psalm 19 and other texts demonstrate. The great problem with general revelation is that this word from the Lord is easily misunderstood if we do not pay heed to the Lord's *spoken* word. We will need to consider the question of interpretation, called hermeneutics, in some detail shortly. For now we are merely demonstrating that God has spoken openly and right from the very beginning of time. Chiefly He has spoken through “*His holy prophets,*” and what they have written is the very word of God. Such an assessment has always been the belief for true Christian faith.

The entire Bible has always been considered as precisely that which God wants us to know. In it we have recorded statements made by God, statements made by all sorts of people and even statements made by the demons and the devil himself. Nevertheless it is always been the view amongst godly believers that *every single word* in the Bible is that which God “authored” for our benefit. The liberal notion that the Bible contains the word of God is hopeless heresy. A moments reflection will establish this truth. If we have a Bible which only *contains* the word of God and has alongside the words of men (originated from men and not from God), then we are at a loss to know which are God's words intended and which are men's. Such a state leads us to look for another standard by which we may look into Scripture to discern which is God's word and which is man's. Some use their own judgement. Others use such tools as science or academic consensus. In vogue today is to look at Genesis 1-3 through the interpretive screen of ANE cultures. But wherever the Bible is considered as only containing the word of God you will end up with some other source as the standard by which things are judged.

For the true believer the Bible is entirely the word of God, so that all the words in it are those which God has determined to be there. This means that the Bible is our standard for *all things*. Within the Bible come the very means by which the Lord wants us to understand His word. Or, to put it more precisely, the Bible contains the hermeneutical tools we are in need of to hear what God has said. This truth is not often accepted today for many are rushing to use the tools that

589 Titus 1:2; Hebrews 6:18.

590 Genesis 1:3,6,9,11,14,20,24,26,28,29.

591 He probably drew on the idea of the Messiah being the “word of the Lord” from such texts as Genesis 15:1; 1Kings 6:11; 19:9; Jeremiah 1:4,9,11.

the secular world employs. This is a great and grave mistake and it is, I believe, one of the reasons for the great confusion there is over Scripture, especially when it comes to Genesis.

A question of interpretation.

The Bible itself gives us the tools to comprehend what God has said. These are not difficult to discover, for much of the Bible is clear and easy to understand, *if you are a true believer*. Those last words I have written in italics are in fact a pointer to the first type of “tool” we need, which are really better described as dispositions or characteristics. Unless we are born again, we have no hope of hearing what God has said. So in the first place there are what we may call the *personal* dispositions, or the things about us which must be true before we can receive what God has said. I will discuss these personal characteristics under the heading “*you must be born again*” which phrase comes from Christ Jesus Himself spoken to Nicodemus in John chapter 3.⁵⁹² Then apart from these personal dispositions there are also the more technical tools, or aids to understanding which the Scriptures teach us. I will refer to these under the general heading of “*rightly dividing the word of God*” which phrase comes from Paul's second letter to Timothy.⁵⁹³ These tools are the spanners, pliers, pincers and scalpels we need to unpack the treasures we have been freely given in Christ! We add here that the task is not limited to an intellectual grasp of truth. Our aim and purpose is to know God, (Father, Son and Holy Spirit). We cannot come to know God personally unless we know truths about Him, (and so the intellectual apprehension is important – we need doctrine), but to stop at simply knowing truths is fatal.

You must be born again (personal characteristics).

Broadly speaking there are four key *personal* characteristics that we need in order to receive what the Lord has spoken. These are:

1. You must be born again (the need for regeneration).
2. All are taught of God (personal encounter).
3. Humble yourself.
4. True Christian fellowship.

[1] You must be born again (the need for regeneration).

The very first thing we need to understand is that without a true conversion we simply

⁵⁹² John 3:7.

⁵⁹³ 2Timothy 2:15.

cannot begin to comprehend anything that God has said. Now anyone may be able to read the text and have a good grasp of the grammar and syntax, of course, but they will never grasp the real meaning if they are still in a state of darkness and sin. We can demonstrate this both from several Scriptures which teach this idea directly, and from a consideration of the nature of true conversion. In John 3 the Lord taught Nicodemus (and us too) that without new birth we “*cannot see the kingdom of God,*” and we “*cannot enter the kingdom of God.*”⁵⁹⁴ The very concept of being born again (often called regeneration) teaches us that all things have become new.⁵⁹⁵ The only way you can become a citizen of the New Jerusalem is by being born there.⁵⁹⁶ Then we have some direct teaching about the need for new birth from the apostle Paul who (under divine inspiration) informs us that:

... the natural man does not receive the things of the Spirit of God, for they are foolishness to him; nor can he know *them*, because they are spiritually discerned.⁵⁹⁷

Immediately before these words the apostle Paul had said that the wisdom of God was “*a mystery,*” which was “*hidden*” and which “*none of the rulers ... knew*”⁵⁹⁸ Now God had revealed this hidden wisdom to the apostles through the Spirit, and, as a result, to all who likewise are filled with the same Spirit.⁵⁹⁹ The teaching of God comes from the Holy Spirit who leads us in a spiritual way and understanding, for “*we have the mind of Christ.*”⁶⁰⁰

But we can demonstrate the importance of new birth to understand God's word from a look at what has happened to those who are converted. Take, for example, Paul's description in Colossians chapter 1 where we read that:

He has delivered us from the power of darkness and conveyed *us* into the kingdom of the Son of His love.⁶⁰¹

There are two kingdoms and between them lies an enormous gulf or separation. You are either a citizen of one, or of the other. The language and customs of the heavenly kingdom are unknown by those who inhabit this world alone. Before our conversion we are described as being “*dead in trespasses and sins,*” but afterwards, we are made “*alive together with Christ,*” raised with Him

594 John 3:3,5.

595 See also 1Peter 1:3,23; James 1:18.

596 See Psalm 87 where we discover that some from “*Rahab,*” “*Babylon,*” “*Philistia,*” “*Tyre,*” “*Ethiopia,*” along with Israelites would be “*born in her [Jerusalem],*” thus pointing to the gospel expansion following Pentecost.

597 1Corinthians 2:14.

598 1Corinthians 2:7,8.

599 1Corinthians 2:10-12.

600 1Corinthians 2:13-16.

601 Colossians 1:13.

and seated with Him “*in the heavenly places.*”⁶⁰² Similar in force and understanding is the idea Paul presents to the Corinthians where we find that we are a “*new creation*” and therefore not part of the old order which is perishing.⁶⁰³ Finally we should consider the whole concept of being adopted into the family of God and therefore no longer aliens and strangers but citizens of God's household.⁶⁰⁴

Without the new birth, without having our eyes opened, we cannot see nor enter the kingdom of God, and therefore we cannot grasp whatever the Lord may be saying. But once we are born again, then we are freely given all things from God. This first principle stands as priority for all because without this nothing else has any significance.

[2] All are taught of God (personal encounter).

It follows from what we have just been saying, that as newborn babes we are all taught of God ***individually***. It is necessary to highlight this ***personal*** reception of truth and the knowledge of God because there is much that works against it. Later we shall add that we also need to be amongst other believers, but here we establish the fact that unless a person individually receives from the Lord then all is to no avail. No one else can come to the truth and to a knowledge of God on your behalf. Others might be able to help along the way providing insight and pointing us in the right direction, but we ourselves must do the spade work! We must seek the Lord personally.

Now such a teaching of the need for a personal encounter we find clearly in the Scriptures. First we see it prophesied in Jeremiah:

33 But this *is* the covenant that I will make with the house of Israel after those days, says the Lord: I will put My law in their minds, and write it on their hearts; and I will be their God, and they shall be My people. **34** No more shall every man teach his neighbour, and every man his brother, saying, ‘Know the Lord,’ for they all shall know Me, from the least of them to the greatest of them, says the Lord. For I will forgive their iniquity, and their sin I will remember no more.”⁶⁰⁵

Each and every person who is born again of God, is part of the new covenant, and thus has the law of God in their minds – they have the mind of Christ. Thus it will no longer be necessary for one to go to another whom has received from the Lord because “*they all shall know Me, from the least of them to the greatest of them.*” Isaiah also speaks about this too:

602 Ephesians 2:1,5,6.

603 2Corinthians 5:17; 2Peter 3:10f.

604 John 1:12,13; Ephesians 2:19; Philippians 3:20.

605 Jeremiah 31:33,34.

All your children *shall be* taught by the Lord, and great *shall be* the peace of your children.⁶⁰⁶

Interestingly, this Old Testament Scripture in Isaiah is referred to by the Lord Jesus Himself

It is written in the prophets, ‘and they shall all be taught by God.’ therefore everyone who has heard and learned from the Father comes to Me.⁶⁰⁷

The Lord Jesus told Peter when he confessed Christ as the Son of God that he had been taught of God:

Jesus answered and said to him, “blessed are you, Simon Bar-Jonah, for flesh and blood has not revealed *this* to you, but My Father who is in heaven.⁶⁰⁸

The apostle John speaks of this too, and highlights the work of the Holy Spirit who indwells all those born again:

But you have an anointing from the Holy One, and you know all things.⁶⁰⁹

Now such a truth (personal encounter) is vital because there are many who say that such direct communion with God is not for everyone. The Roman Catholic organisation perpetuates this error by its insistence on a priesthood. Scripture tells us that we have only One Mediator, Christ Jesus, and we have no need for priests, canons, cardinals and popes to intervene. However many so-called evangelical churches have unwittingly fallen into a similar hierarchical trap. How many times do we hear about certain gifted speakers and writers whom must be consulted before we come to Scripture? Or what of those bodies which have a priesthood or a presbytery that acts as a gate-keeper? Then also some place other barriers between the Bible and the believer such as modern science, psychology, business practice or worldly wisdom. Such things are, at the very least, not good. Godly preaching and godly leadership ought to encourage this idea that each and every believer has **direct** access to God Himself through Christ Jesus.⁶¹⁰ After all isn't the purpose to know God? To be His child, truly?

Now even though we all have the same access to the Father through Christ Jesus and His

606 Isaiah 54:13.

607 Jeremiah 31:34,35.

608 Matthew 16:17.

609 1John 2:20.

610 Ephesians 2:18; 3:12; Hebrews 10:19.

blood, it is true that believers progress at different rates so that some are “*babes*,” or “*little children*,” others are “*young men*,” and still others are “*fathers*” in the faith.⁶¹¹ Consequently there are different degrees of understanding. Such a truth ought to be borne in mind by all believers at whatever stage they have reached. The young in the faith may not yet have come to a complete or full appreciation of what they believe by instinct. The fathers (and mothers) in the faith will have proved the Lord's word repeatedly, and will have been exercised in faith in a great range of experiences. These differences must be appreciated. The young ought to show respect to the older in the faith. The older in the faith ought to be patient and gracious to those who are younger. All ought to show forbearance and love to all. But what is essential is that we as individuals have this pursuit of God within us. We are not simply wanting to be part of a club or in tune with a company of people. Our heart and desire is to know the true living God.

[3] Humble yourself.

A third vital principle for true understanding in the Scriptures is to come in a humble and receptive way. We may be born again of the Spirit, but if we approach God's word with a proud spirit we will not learn from the Lord. Listen to what the Lord says through Jeremiah:

Hear and give ear: do not be proud, for the Lord has spoken.⁶¹²

Note that the Lord was speaking to ***His people***, here, not to strangers or Gentiles. Our heart attitude then, is to be receptive, as little children around their mother or father. The Psalmist David tells us that:

The humble He guides in justice, and the humble He teaches His way.⁶¹³

Further, it is only those who truly reverence the Lord who will receive wisdom and truth:

The secret of the Lord *is* with those who fear Him, and He will show them His covenant.⁶¹⁴

What the Lord requires of us is to “*do justly, to love mercy, and to walk humbly with your God.*”⁶¹⁵

611 1Corinthians 3:1; 1Peter 2:2; 1John 2:12-14.

612 Jeremiah 13:15.

613 Psalm 25:9.

614 Psalm 25:14.

615 Micah 6:8.

And this attitude of heart and mind is one that James teaches his readers too:

Therefore lay aside all filthiness and overflow of wickedness, and receive with meekness the implanted word, which is able to save your souls.⁶¹⁶

We can only receive the word of God if we come humbly, with reverence and fear towards God. If we approach Him in any other attitude then the Lord will not suffer His pearls to be thrown before us.⁶¹⁷ God actively resists the proud but He readily pours out His grace on the humble.⁶¹⁸ This may be why some do not progress, or why at some times you do not seem to be growing in grace and faith. Ask yourself: have I resisted the Lord and acted in a proud way? Each time we come to the word of God we ought to remember what it is that we are reading. It isn't just some mere book. It is not just the words of men. It is the very word of the living God given for us and our instruction:

The secret *things belong* to the Lord our God, but those *things which are* revealed *belong* to us and to our children forever, that *we* may do all the words of this law.⁶¹⁹

Along with this need to humble ourselves to receive from the Lord, we need also to note that in our teaching, sharing and witness to the truth we have received, we need the other virtues which come from being indwelt by the Holy Spirit. I am thinking chiefly here, of gentleness and patience. The apostle Paul instructed Timothy on being a good servant of the Lord. In his second epistle Paul warns about the dangers of quarrelling over the truths, or of being diverted to vain and idle things.⁶²⁰ These are the two precipices we traverse as we seek the Lord for His truth. The first danger is that having received great things from the Lord we rush headlong towards others with a harsh and vehement spirit which has the tendency to develop into quarrelling and argumentation. We ought rather to hold our peace and step carefully in peace and gentleness. Yes the truths we have received from the Lord in seeking Him are wonderful! And yes, often they are rejected by the world and even by Christians. But this is all the more reason to be patient and gentle. We ought to hold firm to what we have received (assuming it is truly from the Lord), and offer it with patience and humility. The second danger occurs when we are wrestling with truths assailed by many. We can easily get diverted into studying peripheral things. Paul mentions genealogies as a serious danger in those days.⁶²¹ He does not mean the Biblical genealogies, for these are the revealed and inspired word of

616 James 1:21.

617 Matthew 7:6.

618 Psalm 138:6; James 4:6-10; 1Peter 5:5-7.

619 Deuteronomy 29:29.

620 2Timothy 2:14,16.

621 1Timothy 1:4.

God. What he is referring to are the extra-Biblical ones which have no warrant from God. Anything that is in Scripture is always profitable, Paul tells Timothy, but that which is outside is without the seal of approval from God.⁶²² That doesn't mean we may ignore it completely, but there is no reason to worry over it and debate it. The study of evolution is a modern case in point. How far do we go along with what evolution considers important? We may study these to show how the Lord responds from His word, but if we go too far we may end up debating things for which there are no sure answers.⁶²³ The two things to aim for are gentleness and a firm hold on the Saviour. We are to be “*not moved away from the hope of the gospel.*”⁶²⁴ Instead we must be firmly planted on “*the Rock,*” holding firm to all that He has said and delivered, not being tossed to and fro by every wind of doctrine.⁶²⁵

[4] True Christian fellowship.

The word of God is accessible to all who are born again, because all know the Lord and are taught of Him by the Spirit of God who indwells them. The Spirit guides His people into all truth by means of the word of God, the Bible. I mention this obvious truth here because many think that the Holy Spirit will speak to them personally and directly *aside* from Scripture. Now I want the reader to be quite clear here about what I am teaching. Unless a person is born of the Spirit and has the Spirit within, they cannot receive the word of God. That is one thing. But a person who is born again of the Spirit cannot expect to receive what God has said *unless* they go to Scripture. Let not the true believer think they can receive a word from the Lord if they neglect the word of God, the Bible. The word of God (the Bible) is that word which is “God-breathed” or inspired of the Spirit of God.⁶²⁶ A believer who thinks that they can receive an immediate word from the Lord without any attention to the Bible is deluding themselves. Having said this, do not for one minute think that the Lord by the Spirit cannot bring to remembrance the words of God previously read, studied and meditated upon! The Spirit of God may often bring to mind Scriptures or even principles which are the essence of the word of God. This is another thing. We look to the Lord for His word. We look into Scripture to hear what He has to say. We come humbly to the Lord to His word. We read, study, meditate and act upon it. If we have feasted on the Lord in His word frequently and often, the Holy Spirit will have much to work with as we walk through this world. At times He will prompt us and

622 2Timothy 3:16.

623 The reason that there may well be no answers is because evolution has charted a course it should never have begun and comes up with questions that have no answer because they are illegitimate questions. If we get involved in these and are held to account for them we may end up in all sorts of trouble.

624 Colossians 1:23.

625 Matthew 7:24; 2Timothy 1:13; Titus 1:9; Hebrews 3:6; 4:14; 10:23; Ephesians 4:14.

626 2Timothy 3:16.

remind us of what we have studied and read. This is the leading of the Spirit. And it is a glorious thing to know!⁶²⁷

But then also we learn from the word of God that in His wisdom the Lord has given us teachers and leaders. These do not act as mediators or form a hierarchy through which we must approach the Lord.⁶²⁸ However, those who have laboured in the word by diligent study and the exercise of faith may have some insights and helps that those younger in the faith may need. Moreover, each believer in his or her experience will have been taught by the Lord in a unique way.⁶²⁹ Therefore each of us has a unique insight from our experience of the Lord to bring to others.

For those who are teachers, a number of things ought to be borne in mind. First, not many ought to be teachers because such will face “*a stricter judgement.*”⁶³⁰ It is an immense privilege to teach and an incredible responsibility. None should enter the office of teacher without careful thought beforehand. Then second, those who teach ought to pay attention to Paul's instructions on how to teach. For example, he wrote to Timothy these important words:

Now the purpose of the commandment is love from a pure heart, *from* a good conscience, and *from* sincere faith,⁶³¹

The aim, purpose or goal of teaching, instruction or issuing commandments is to generate and encourage love. But it isn't simply love, but love from a new heart expressed in three separate statements (“*pure heart,*” “*good conscience*” and “*sincere faith*”). In other words true teaching draws a believer closer and closer to the Lord Jesus.

Now, in essence, what we are discussing in this section is **true** Christian fellowship. We all hear and receive from the Lord as we read and study Scripture. We are all to encourage one another in what we have learned and experienced. Some who are further on in the faith may aspire to teach and guide others in the word of truth. But all of this activity centres on our receiving humbly from the Lord and what He has spoken. The word “*fellowship*” occurs 15 times in the New Testament. Fellowship is described as being “*the fellowship of His Son,*” so that our fellowship is with other believers and “*with the Father and with His Son.*”⁶³² Our fellowship is “*in the gospel,*” and “*in the*

627 Matthew 10:16-20.

628 Neither are we barred by such things as modern science, psychology, business practices or other worldly wisdoms so-called.

629 It has been my privilege and delight to witness brothers and sisters in Christ whose walk with the Lord has shone the light of truth to me in great effectiveness. Brethren who walk with the Lord illuminate the truths contained within Scripture, and become a living letter or “*an epistle of Christ*” (2Corinthians 3:2,3).

630 James 3:1.

631 1Timothy 1:5.

632 1Corinthians 1:9; 1John 1:3,7.

Spirit.”⁶³³ Now fellowship involves “*ministering to the saints,*” and is also described as the “*fellowship of His sufferings,*” as we share in the reproach of Christ.⁶³⁴ Finally, it is impossible for our fellowship to be with lawlessness or darkness.⁶³⁵ Thus this last “personal” principle is to recognise that whilst we all individually receive directly from the Lord, (we are all taught of God), nevertheless we cannot operate or live without fellowship for we need other believers to aid us in our journey.

Rightly dividing the word of God (technical tools for understanding).

The personal characteristics are all essential as starting points but these do not guarantee that a believing person will grasp the truth or come to an experience of Christ (truly knowing God). In the grace of God the Lord does give us His word with understanding on a regular basis, but if we neglect the means and methods that God has provided in His word we will find that sometimes the Lord will withhold blessings as a father does to an errant or misbehaving child.

Under this heading we have eight principles as follows:

1. God has spoken!
2. Its all about Christ Jesus.
3. Be a doer!
4. Scripture is the only standard.
5. The purity of God's word.
6. Rightly divide the word of God.
7. A question of theology.
8. Study and effort is required!

[1] God has spoken!

Our first (technical) principle for a correct understanding of what the Lord has spoken may seem to be rather obvious, especially as we have already elaborated on the theme earlier. However it is necessary for us to state and expand it again for a very good reason. To state that “God has spoken,” may seem to be rather trite but the essence of such a statement is awesome when we remember exactly whom this “God” is. God is without rival, omnipotent, eternal, infinite, all-knowing, holy, righteous, true, perfect and many other things beside. Such an One has spoken. If

633 Philippians 1:5; 2:1.

634 2Corinthians 8:4;

635 2Corinthians 6:14; Ephesians 5:11; 1John 1:6.

such an awesome person has spoken, ought not we to hear and listen with great attention? Now further, given that God is perfect and all-knowing, when He speaks He has no need of adjusting what He says or of adding addenda or codicils. The perfect One has only to speak once because He alone is pure and perfect. David wrote:

God has spoken once, twice I have heard this: that power *belongs* to God.⁶³⁶

God has spoken once, but we need to hear what He has said at least twice! Such considerations lead us to the idea that God's word must be complete and it must be the only standard. What else could compete with what God has to say? God has only written one book and (as we shall shortly discuss) it is about the Word of God, namely Christ, who alone is the Son of God. If God has so revealed His truth which is primarily about His Son, what else can be said alongside? The Old Testament prophesied His coming and the New expounded His appearance:

1 God, who at various times and in various ways spoke in time past to the fathers by the prophets, 2 has in these last days spoken to us by *His* Son, whom He has appointed heir of all things, through whom also He made the worlds; 3 who being the brightness of *His* glory and the express image of His person, and upholding all things by the word of His power, when He had by Himself purged our sins, sat down at the right hand of the Majesty on high, 4 having become so much better than the angels, as He has by inheritance obtained a more excellent name than they.⁶³⁷

Anything else that pretends to be a word from God, or anything which acts to control or augment the word of God is anathema and ought never to be tolerated. Traditions, further revelations (be they from Muhammed, Joseph Smith or whomever), essential wisdoms, superior philosophies or worldly folklore – all must be discarded in favour of God's word. To be supreme in authority is insufficient. Scripture stands as sole authority. There can be only one standard. Imagine the chaos that would ensue if the weights and measures authorities operated by two differing standards! If even this teaches us there is just one standard why do we add to, or take from, the word of God? Those who esteem what modern science says add their worldly insights and take authority from God's word. Those who accept Roman Catholic traditions demean what the Lord has said. They are just like the Pharisees whom the Lord rebuked by saying that they had made “*the word of God of no effect through ... tradition.*”⁶³⁸

636 Psalm 62:11.

637 Hebrews 1:1-4.

638 Mark 7:13.

[2] Its all about Christ Jesus.

As a second principle or Biblical tool, we remind ourselves that the Scriptures speak primarily of Christ. We learn this from our Lord Himself at various points in His ministry. In John 5 the Lord had occasion to correct and rebuke the Jewish leaders because of their intent to kill Him for the sake of their rules concerning the Sabbath and their misunderstanding of His nature.⁶³⁹ The Lord told them that they did not have the word of God *living* within them, and even though they searched the Scriptures they were doing so in a hopeless way because they couldn't see the main object and focus, namely the Lord Himself.⁶⁴⁰ Whilst the Scriptures testify of Christ, the Jews were not willing to come to the Lord about whom the Scriptures gave so eloquent testimony.

Then, after His resurrection the Lord taught the disciples that the Scriptures taught not just about His person, but equally about His work. He spoke to the two on the Emmaus road with these words:

25 Then He said to them, “O foolish ones, and slow of heart to believe in all that the prophets have spoken! **26** Ought not the Christ to have suffered these things and to enter into His glory?” **27** And beginning at Moses and all the Prophets, He expounded to them in all the Scriptures the things concerning Himself.⁶⁴¹

And then later that same day before all the disciples we find a similar lesson being taught:

44 Then He said to them, “These *are* the words which I spoke to you while I was still with you, that all things must be fulfilled which were written in the Law of Moses and *the* Prophets and *the* Psalms concerning Me.” **45** And He opened their understanding, that they might comprehend the Scriptures. **46** Then He said to them, “Thus it is written, and thus it was necessary for the Christ to suffer and to rise from the dead the third day, **47** and that repentance and remission of sins should be preached in His name to all nations, beginning at Jerusalem.”⁶⁴²

And thus we observe that the central focus is Christ and Him crucified. It is no wonder that such was Paul's boast.⁶⁴³ Furthermore, we recall again that in Christ, and in Him alone, are to be found “*all the treasures of wisdom and knowledge*.”⁶⁴⁴ These treasures cannot be found in modern science, philosophy, tradition or other worldly ideals and broken cisterns, for the Lord our Fountain is the

639 John 5:16,18.

640 John 5:38-40.

641 Luke 24:25-27.

642 Luke 24:44-47.

643 Galatians 6:14; 1Corinthians 2:2.

644 This text is, I believe, a fundamental truth which needs to be heralded repeatedly in our day. Colossians 2:2,3.

only source of life and truth.⁶⁴⁵ Why would anyone want to look elsewhere for wisdom and truth? As Peter says: “*Lord, to whom shall we go? You have the words of eternal life.*”⁶⁴⁶ There isn't anywhere else we can go for truth and “*words of eternal life.*”

Now we have laboured the point that the Scriptures speak of Christ, and that nowhere else can we read or discover Christ and His wonderful work. But we need to go further. Our reading, study and meditation of God's word is not merely to gain knowledge and wisdom. Rather it is to meet with the Lord Himself. The apostle Peter has something rather wonderful to say about this in the first chapter of his second letter. I have organised the text by indenting various phrases or clauses in such a way so as to elucidate its meaning.

2 Grace and peace be multiplied to you
 in the knowledge
 of God and
 of Jesus our Lord,
3 as His divine power
 has given to us all things that *pertain to*
 life and
 godliness,
 through the knowledge of Him who called us by
 glory and
 virtue,
4 by which
 have been given to us
 exceedingly great and
 precious promises,
 that through these you may be
 partakers of the divine nature,
 having escaped the corruption *that is* in the world
 through lust.⁶⁴⁷

Now the wonderful thing is that the Lord is concerned not just to reveal truth to us, but rather He is wanting us to enter into real communion with Him. Notice that it is the Lord's “*divine power*” which has given us two things. First, in verse 3, we discover that He has given us (remarkably) “*all things*” needful and necessary for “*life and godliness.*” Now such a thing is wonderful and beautiful. There is nothing beside the Lord that we need. He has given us everything necessary to lead a godly life here on earth. That includes strength and ability to do whatever work the Lord has set for us, (whatever work that may be). We ought to rejoice in this! But second, verse

645 Jeremiah 2:13.

646 John 6:68.

647 2Peter 1:2-4.

4 tells us that the Lord has given us infinitely more. Not only do we have all we need practically to live life on earth in a godly way, but He has given us His “*exceedingly great and precious promises,*” or, in other words, His word! And then “*through these*” we have the wonderful experience of communing with the Lord Himself (we are “*partakers of the divine nature*”). As we read, study and meditate upon His word we are communing with the Lord Himself. I do not mean here that the mere reading or deep analysis of the text is the pinnacle for us. Not at all! What I mean is that through our acceptance of these great truths in Scripture, somehow, we meet truly with the Lord. There is an assurance, a witness, a stirring, a moving, a meeting of the heart with God Himself. Sometimes we may hear an application of the truth specifically for us. At other times there will be a rebuke or admonishment from the Lord just as a father corrects his son. Sometimes there is overwhelming love or an energising to action. At other times there is great delight and pleasure, or joy and dancing in the presence of the Lord. We need to remember that it is God who has spoken! Should we not tremble at His word?⁶⁴⁸

[3] Be a doer!

Having reached the point where we have heard what God has to say, and having communed with the Lord, we will not really have listened properly if we do not then go on to obey what we have heard. Our third Scriptural principle, then, is to be a doer of the word. James makes this point clear:

22 But be doers of the word, and not hearers only, deceiving yourselves. **23** For if anyone is a hearer of the word and not a doer, he is like a man observing his natural face in a mirror; **24** for he observes himself, goes away, and immediately forgets what kind of man he was. **25** But he who looks into the perfect law of liberty and continues *in it*, and is not a forgetful hearer but a doer of the work, this one will be blessed in what he does.⁶⁴⁹

True saving faith **works**. The apostle Paul made this clear by a statement concerning the nature of faith found in Ephesians 2, and by a phrase he uses on two occasions, namely, “*your work of faith.*”⁶⁵⁰ The classic statement of the origin and nature of faith is given in Ephesians 2:8-10 which we quote in full:

For by grace you have been saved through faith, and that not of yourselves; it is the

648 Ezra 9:4; Isaiah 66:2,5.

649 James 1:22-25.

650 1Thessalonians 1:3; 2Thessalonians 1:11.

gift of God, not of works, lest anyone should boast. For we are His workmanship, created in Christ Jesus for good works, which God prepared beforehand that we should walk in them.⁶⁵¹

Verse 10 is frequently left out but it is a vital part of the whole teaching. Whilst faith is a gift given by God's grace, it nevertheless produces "*good works*." It is not possible to say that you believe in Christ and that you believe in the gospel, without actually trusting it and acting on what you believe. True saving faith is evidenced by action. Thus as we read and study God's word we will need to read it with an eye to doing what we are commanded by the Lord. We ought to have the attitude of a servant to his master:

Behold, as the eyes of servants *look* to the hand of their masters, as the eyes of a maid to the hand of her mistress, so our eyes *look* to the Lord our God, until He has mercy on us.⁶⁵²

The servant vigilantly looked towards the hand of their master waiting for his signal. Perhaps the master had several signals each indicating different commands. Do we look to the Lord in His word in such a way? We are, after all, His ambassadors, and as we represent Him we can only do as He has requested. Imagine an ambassador who runs rogue and starts doing what he wants instead of representing his home country? He would soon lose his commission and maybe also forfeit his life into the bargain.

One thing we must never do is to be an arbiter or judge over the word of God. We ought never to pit the word of God over against some other system, so-called "truth," or philosophy and come to a decision using self-wisdom. This is always a danger and instead we must seek to come under the authority of the word and be ready to submit to it to do what the Lord says.

[4] Scripture is the only standard.

As we read Scripture, commune with the Lord and seek to obey, it is vital that we recall the fact that nothing else is necessary. Thus our fourth principle is to establish that Scripture is the only standard for the believer.

The thing that needs to be emphasised and established here is that there can really only be one standard. Imagine the confusion if there were rivals! As an example take the boxing championships. When I was young there was only one organisation that held the world title, but nowadays there are four! To be the undisputed world champion you need to have won all four

651 Ephesians 2:8-10.

652 Psalm 123:2.

championships. People always say that surely the various bodies ought to get together so that there is no confusion, but the reality is that human sin and pride gets in the way.

The standard is the baseline by which other things must be measured. In the rise of modern science exactness in measurements was required across those engaged in research. As another example, imagine that there existed various different standards for the length we know as a metre. Which one do you adhere to? Which one is seen as the most reliable? This takes discussion away from the standard itself to people's judgment and opinion. Clearly this leads again to confusion and arguments and so on. People working in one country need to be sure that those in another were measuring things using the same scale. A metre should be the same wherever it would be measured. So in the course of history a standard metre length of a precious metal was placed in a secure setting to ensure that the metre was defined and fixed for one and all. Now such is fine for all the different measures and procedures that may be employed, but what about the standard for morality or the standard for ultimate truth? Well with regard to the standard by which God wants us to be measured in all things, the Bible alone is the one standard. Anything which offers itself as a rival must be rejected. What then are these rivals to the one standard for the Christian?

There are, of course, many pretenders to the title "truth," but do these stand examination? We have, I hope, demonstrated that the Bible being God's word is unsurpassed. God has not spoken in any other document, although He has indeed revealed Himself through creation and in providence. One such pretender to truth is modern science and this is the main problem with those who favour theistic evolution. It is often assumed that what modern science discovers is simply that which God has revealed through creation. The trouble with this naïve assessment is that it fails to recognize at least two important facts. First, we need to remember that the mind of man who is set apart from God is dark, futile and vain. Second, creation does not speak clearly. In order to understand creation properly we need to have the right interpretive tools at our disposal. These two points, it seems to me, have been overlooked so it will be worthwhile to consider them in a little more detail here.

The mind of man is dark.

It has not been appreciated how much damage secularism has done to modern Christian thought. Secularism prides itself on being the default and neutral stance to which other philosophies and world views must bow the knee. Thus, for example, when people think of modern science or of modern scientists, they automatically assume that what they have to say must be accepted because, after all, all they are doing is *reading the book of nature* and making known their discoveries. But

such a way of referring to what they do is heavily loaded with presuppositions. As a Christian I do not accept the modern concept of nature as an autonomous beast governed by natural law. I believe in a Creator who made all things and sustains them. Whilst creation does indeed declare the glory of God, it does not do so to those who reject God in the first place. We say this because in order to interpret creation correctly we have to accept what God has said about it first. If we ignore what God has said and let creation lead us where it will, what we are effectively doing is following our own predispositions and beliefs. We look at creation with veiled or bespectacled eyes. We view nothing without some form of world view.

If I told you that I found a cavern in some remote place and described it to you showing photographs you are probably likely to believe what I report if you judge me to be faithful. Of course I could be lying and I might be trying to con you. But if you went to the place for yourself and confirmed my statements the matter would be settled. Modern science comes across like this. Scientists report what they have discovered and, because they are generally esteemed as a group, their pronouncements are taken as gospel truth. In the case of many of their statements and findings, these can be checked, like in the illustration I gave about the newly discovered remote cave. However when it comes to discussing things that happened in the past we have no such luxury. In fact even when it comes to things done in the present it is not always possible to check these. Take for example the experiments done at CERN with the large hadron collider. None but an expert who is part of the team at CERN can repeat these experiments, and so we must take the findings as they are offered.

Given the fact that we operate with some kind of world view, and given that modern science is viewed with a degree of privilege we need to understand that man set apart from God has a mind that is vain, futile and dark. These three adjectives are selected on the basis of God's assessment. The apostle Paul sought to exhort the Ephesian Christians in their walk with the Lord. He writes the following instructions about how they should live:

17 This I say, therefore, and testify in the Lord, that you should no longer walk as the rest of the Gentiles walk, in the futility of their mind, **18** having their understanding darkened, being alienated from the life of God, because of the ignorance that is in them, because of the blindness of their heart; **19** who, being past feeling, have given themselves over to lewdness, to work all uncleanness with greediness. ⁶⁵³

These words are certainly not politically correct! Let us unpick what Paul is stating. The Christians once walked (lived) as Gentiles but they are no longer to do so. Paul describes this way of life

653 Ephesians 4:17,18.

(walk) first as a “*futility of ... mind.*” The Greek word rendered as “*futility*” by the NKJV is *mataiotēs*, which comes from the word *mataios*, which has the following meanings:

- Devoid of force, truth, success, result.
- Useless, of no purpose.

The basic idea of the word is vanity or emptiness. The Gentile mind, that is all minds outside of those that are “in Christ,” are devoid of truth and are of no purpose. This is not generally understood. But Paul is not content to leave the matter at simply saying Gentiles have minds full of false notions that are of no purpose, because he carries on to say that they have their “*understanding darkened.*” Anything of Gentile minds which comes under the heading of “understanding” (and surely that includes modern science amongst other intellectual pursuits) is described by Paul as being “*darkened.*” What does this word signify? Well it is put clearly in opposition to the concept of light. It signifies that which obscures or hides things. You do not do things you don't want people to see in broad daylight, but under the cover of darkness. Earlier we had recourse to discuss exactly what Christ came to do, to make the Father known and to declare His word. This feature of Christ's mission is presented in the opening chapter of the gospel of John with the figure of light, which John uses from a reading of Genesis 1. Thus just as the opening chapter of God's book tells us that God created light, so John informs us:

1 In the beginning was the Word, and the Word was with God, and the Word was God. **2** He was in the beginning with God. **3** All things were made through Him, and without Him nothing was made that was made. **4** In Him was life, and the life was the light of men. **5** And **the light shines in the darkness, and the darkness did not comprehend it.** **6** There was a man sent from God, whose name *was* John. **7** This man came for a witness, to bear witness of the Light, that all through him might believe. **8** He was not that Light, but *was sent* to bear witness of that Light. **9** That was **the true Light which gives light to every man coming into the world.**⁶⁵⁴

Later on we discover the Lord's claim to be “*the Light of the world.*”⁶⁵⁵ Christ came to speak truth, to reveal the Father, to show us the way. We all “*like sheep have gone astray*” and we cannot find the way.⁶⁵⁶ We have minds that are darkened, that is, are covered over and ignorant. In the book of Romans the apostle Paul shows that unbelief is characterised by a mind that is not only dark but is willingly so. He writes that, even though what may be known of God is clearly manifest in creation,

654 John 1:1-9.

655 John 8:12; 9:5.

656 Isaiah 53:6.

nevertheless, in their ungodliness and unrighteousness men: “*suppress the truth in unrighteousness.*”⁶⁵⁷ Instead of giving God glory for His creation, men “*became futile in their thoughts, and their foolish hearts were darkened.*”⁶⁵⁸ Thus once again we have the same idea expressed, that is, that an unbeliever has a mind which is “*futile*” or empty, vain and vacuous, and that their inner most beings were dark. Unbelievers become fools even though they profess to be oh so very wise.

In Psalm 94 we read a similar assessment of the mind of man. In this instance the context is an appeal for the Lord to judge the wickedness of the earth. The proud and wicked boast and speak “*insolent things,*” that is, arrogant or defiant things.⁶⁵⁹ They attack the people of God and act with no thought of God in their minds at all.⁶⁶⁰ As such the Lord declares these people as “*senseless*” because they fail to recognise the origin of their own physical senses!⁶⁶¹ What a charge! Modern man with his insistence on only believing what his physical senses tell him is, in truth, senseless! How can this be? Well to ignore the spiritual sense, to ignore conscience, to ignore God's word is senselessness in the extreme. The final assessment comes in verse 11:

The Lord knows the thoughts of man, that they are futile.⁶⁶²

The Hebrew word for “*futile*” here is *hebel*, and it is a word we find frequently in the book of Ecclesiastes.⁶⁶³ The word essentially means “empty” or “transitoriness.” It is similar to the idea of a mere breath or vapour which is gone in a flash. The concept is that which has no weight or substance and is vacuous and empty. Such is the term used to describe man's “*thoughts*” in all their wide-ranging nature, from the merely superficial gossip, to the profound science and literature.

These ideas about the vacuous and pointless nature of man's thoughts can be found throughout Scripture. They are expressed, for example, in the days before the flood, whilst Paul uses thoughts from the prophet Isaiah to make his point that what man thinks as wisdom and of worth is utter foolishness.⁶⁶⁴ One particular phrase in Paul's assessment of the contrast between the gospel and man's wisdom is worth a little more attention. It is found in verse 21 of 1 Corinthians chapter 1:

657 Romans 1:18-20.

658 Romans 1:21.

659 Psalm 94:4.

660 Psalm 94:5-7.

661 Psalm 94:8-10.

662 Psalm 94:11.

663 Ecclesiastes 1:2(x5),14; 2:1,11,15,17,19,21,23,26; 3:19; 4:4,7,8,16; 5:7,10; 6:2,4,9,11; 7:6,15; 8:10,14(x2); 9:9; 11:8,10; 12:8(x3).

664 Genesis 6:5; 1Corinthians 1:18f.

For since, in the wisdom of God, the world through wisdom did not know God, it pleased God through the foolishness of the message preached to save those who believe.⁶⁶⁵

It is important to remember here that Paul contrasts two types of wisdom: the wisdom of this world, and the wisdom of God. But note here that through its pursuit of “*wisdom*” this world did not end up by coming to a knowledge of God. No man ever came to a knowledge of God in the pursuit of a worldly form of intellectual pursuit. Many have come to know God despite their intellectual endeavours, but no amount of secular study and the pursuit of worldly wisdom (science, philosophy, the arts and so on) ever resulted in the knowledge of God. This in itself ought to warn us that accepting this world's intellectual fruits is not a good idea. Paul is not content to leave us at this point, however, because in his letter to the Colossians he spells out clearly that we should avoid the philosophies and sciences that this world has to offer:

6 As you therefore have received Christ Jesus the Lord, so walk in Him, **7** rooted and built up in Him and established in the faith, as you have been taught, abounding in it with thanksgiving. **8** Beware lest anyone cheat you through philosophy and empty deceit, according to the tradition of men, according to the basic principles of the world, and not according to Christ. **9** For in Him dwells all the fullness of the Godhead bodily; **10** and you are complete in Him, who is the head of all principality and power.⁶⁶⁶

The great contrast here is between Christ Jesus as Lord, in whom “*all the fullness of the Godhead*” is to be found in bodily form, and worldly wisdom, characterised as “*philosophy*,” “*the tradition of men*,” and as “*the basic principles of the world*.” I am not sure how Paul (and thence God) could be any more clear. Worldly wisdom (of whatever form – science, philosophy, religion, old wives tales etc.) is not to be countenanced.

General revelation does not equate with modern science.

We shall look at this subject in a little more detail in chapter 6. However, the story of the rise of modern science is really a story of the decline of the influence of Scripture on modern culture. Part of this tale involves how man has viewed creation and Scripture and their relationship. One of the popular notions used to discuss this is the idea that God has “Two Books,” the book of Scripture, and the book of nature. As modern science increased in influence, the book of nature was seen increasingly as more readily accessible. Even though the early reformers fought hard to

665 1Corinthians 1:21.

666 Colossians 2:6-9.

establish the plain fact that Scripture is plain and readily understood, man-made arguments and battles over Scripture's meaning (fuelled by heresy) lent ammunition to those who sought to declare Scripture difficult to grasp and irrelevant.

Isaac Newton is credited with suggesting that the process of scientific discovery is no more nor less than a boy picking up pebbles on a beach and scrutinising their beauty, form and composition.

*"I do not know what I may appear to the world; but to myself I seem to have been only like a boy playing on the sea-shore, and diverting myself in now and then finding a smoother pebble or a prettier shell than ordinary, whilst the great ocean of truth lay all undiscovered before me."*⁶⁶⁷

Such an image leads to the idea that in order to “read” the book of nature all one has to do is go and collect the relevant facts. In modern times many have fallen into accepting this naïve view, and have thence equated general revelation through creation with the pursuit of modern science. However this will not do. We have already considered the nature of modern science, and enough has been said also about the need for a careful approach to understand Scripture. The hermeneutical principles outlined here are easily grasped for they come directly from God's word. But how are we to grasp what creation displays? To start with we know from Scripture that God created the world and then ceased from that activity completely. Some little time later He placed a curse on the universe subjecting all creation to futility because man sinned. Such plain facts as revealed by God in Scripture are an *essential* basis upon which a true and faithful investigation of the world must proceed. And yet what stance does modern science take? In my early attempts at computer programming as a student I remember hearing the lecturer telling me that if your programme inputs garbage do not expect it to print out the answer you hoped for. If you start out with a good foundation, the house you build will be secure. Modern science has few basic premises. It insists on all being matter-energy only. It rejects as standard any concept of spirit, spiritual and after-life. How then, can such a foundation lead us into any truth?

It ought to be appreciated that even though we might like to characterise modern science as the discipline which seeks facts and data, and then constructs theories to make sense of these data, the two components (data collection and theory formation) are in fact heavily interdependent.⁶⁶⁸ That said, you might reply by saying: “a fact is always a fact.” The word “fact” comes from the

667 **Isaac Newton.** In Brewster. *Memoirs of Newton*. 1855. Volume II. Chapter 27. <http://www.astronomy.ohio-state.edu/~pogge/Ast162/Unit6/>

668 This was discussed in chapter 1.

Latin word which means “made.” The word “data” (singular datum”) comes from the Latin word which means that which is “given.” In other words data and facts ought simply to relate to what is made or given. It is very difficult, however, to simply relate a fact or a datum without referring to some forms of category or idea. For example, speaking as a chemist, I might tell you that adding an acid to an alkali always makes salt and water. This statement can be demonstrated but it really depends upon what is meant by the terms, “acid,” “alkali,” “salt,” and “water.” If we agree that given certain constraints (like defining items etc.), we can establish facts, what is much more difficult is to be certain about how we view those facts (or collection of facts).

Theories are simply ideas or conceptions which man invents to make sense of what he has collected. Two problems arise immediately. First, can the modern scientist be sure that they have collected all the relevant facts? Modern science works on the basis that it is always possible to separate out in isolation that which you study. However this is known to be a false basis. If I isolate a particular species of animal to observe its behaviour my observations will not be truly representative, because they are not gathered in the animals natural habitat. Even if I attempt to go into the animal's habitat it may not be truly representative, because by going in I have altered the conditions. How has the animal's behaviour been affected by my presence? Of course, today we have many sophisticated remote techniques (cameras, satellite observations and so on), but even so by actually seeking to do an investigation I must remember that I am a part of what is being investigated. Thus it is not possible to isolate the subject of enquiry perfectly and we cannot be sure that other influences are not having an affect for which we have no data. A second problem is that as human beings we are severely limited by our brain power and by our sense apparatus. The models and analogies we use to form theories are all gathered from the slice of the universe we exist in. For many years the basic constituents of matter have been described as extremely tiny balls (atoms). But models to describe “atoms” have changed throughout the years. From billiard balls to a plum pudding model, to the solar system model, to a model based on probabilities and so on. At each juncture theorists have resorted to everyday objects or things that man can perceive. But does this get to the kernel of truth? Obviously not because we keep changing the models and illustrations we use. Each model may have its use, but each is deemed unsatisfactory by succeeding generations. This idea that man in his theorising is limited is not the only problem modern science has to deal with. A more serious problem is to ask where the ideas come from. This may seem an odd question but it must be appreciated that if modern science is not guided by belief in God, and does not want to base its work on seeking within God's framework (as it ought to), we then need to ask on what basis and from where does it actually proceed? From the Christian point of view there are really

only two options. We can show this with reference to the nature of salvation. We have already referred to Paul's statement in the first chapter of Colossians, where he speaks about being conveyed from "*the power of darkness,*" into "*the kingdom of the Son of His love.*"⁶⁶⁹ A believer has thus been "*delivered*" (conveyed, translated, carried over into) from the one (characterised by darkness) into the other (characterised by love). The apostle John in his first epistle tells us that: "*the whole world lies under the sway of the wicked one.*"⁶⁷⁰ We have already seen that unbelieving minds are dark, futile and vain, and this is because, surely, such unbelievers are under the influence of the evil one.

Harsh as it may sound, the devil influences the thoughts and ideas of man. He has been doing this from the very beginning. He deceived Eve in the garden and his strategy has not changed.⁶⁷¹ If we look at the history of ideas we ought never to view these as independent great thoughts by inspired geniuses. We ought to remember that behind the scenes lies a being bent on separating mankind from God. Small wonder that the ideas that flourish among men have their ultimate origin in the pit of hell. Think of Christ's parable of the soils (sometimes called the parable of the sower). The Lord sows the seed of His word amongst the various soils (representative of hearts prepared or otherwise to receive truth). Those who have hardened hearts discover that what they hear is very soon snatched away by the birds which are representative of the wicked one.⁶⁷² Or take the parable of the wheat and the tares. Whilst the Lord sows good seed, the devil sows bad. God brings goodness and wholesomeness through His word, but the devil sows seeds of discord, disunity, disobedience, disaster and dismay.⁶⁷³ James writes asking the question of the origin of war and disagreement. His response is to say that such comes from sinful and wicked desires, because friendship with this world's order means enmity with God. He instructs his readers to submit to God and to resist the devil, for the devil is the author of confusion of murder and sin.⁶⁷⁴ All who follow this world's ways with its lying and so on, are effectively following in their father's footsteps. Listen to the words of Christ spoken to people who claimed Abraham as their father:

You are of *your* father the devil, and the desires of your father you want to do. He was a murderer from the beginning, and does not stand in the truth, because there is no truth in him. When he speaks a lie, he speaks from his own *resources*, for he is a liar and the father of it.⁶⁷⁵

669 Colossians 1:13.

670 1John 5:19.

671 Genesis 3:1f.

672 Matthew 13:19.

673 Matthew 13:24f.

674 James 4:1-10; 1John 3:8.

675 John 8:44.

If a mind is darkened and bent on going away from God, what alternative source is there for thoughts except the devil? Is man capable of independent original thought of a neutral form? I think not because we are either in God's kingdom or we are in the kingdom of this world which is *"under the sway of the wicked one."*⁶⁷⁶

[5] The purity of God's word.

Given that God's word displays God's character, we need to add two important points which stem from this important truth. The word of God is pure, and the purity of God's word derives first from the fact that it is impossible for God to lie.⁶⁷⁷ Such a statement seems redundant because the concept of God lying is inconceivable, and yet we have four clear statements which establish this. First in Numbers we read that: *"God is not a man, that He should lie ..."*⁶⁷⁸ Then second, we learn from the prophet Samuel that: *"the Glory of Israel will not lie or change His mind; for He is not a man that He should change His mind."*⁶⁷⁹ Third, the writer of the letter to the Hebrews sought to establish the unchanging nature of God's promise which was based on two factors. First the promise itself, but second the fact that: *"... it is impossible for God to lie ..."*⁶⁸⁰ Finally, we learn from Paul writing to Titus that: *"... God, ... cannot lie ..."*⁶⁸¹ Given this unassailable truth, then whenever God speaks, or whenever what God has spoken is written, neither can ever be characterised by the word "lies"! It follows from this that we can derive our fifth principle, namely, that there can be no contradictions or errors in Scripture. The purity of the word of God, and the fact that God cannot lie, leads to this inescapable conclusion that God's word is error free. This fact extends to all of the word of God. Whether the Scripture speaks of history, or of science, or of whatever subject, it is pure and without error. Such a thought can also be established from considering this from the reverse perspective. If there were errors in the Bible (of science or history) then how could we know? By what standard would we judge such to be an error of fact? The situation would become impossible and hopeless. The Scriptures are either 100% accurate in all subjects that it discusses, or it is not. If it is not 100% true and pure then it has no value whatever. All that man does and writes has this variable quality. Things we write are never pure. But God's word cannot have this human frailty. We note in passing that there are important Scriptures which teach the purity of God's word which the reader would do well to meditate upon.⁶⁸²

676 1John 5:19.

677 Psalm 12:6; 119:140; Proverbs 30:5; 1Peter 2:2.

678 Numbers 23:19.

679 1Samuel 29:15.

680 Hebrews 6:18.

681 Titus 1:2.

682 Psalm 12:6; 119:140; Proverbs 30:5; 1Peter 2:2.

[6] Rightly divide the word of God.

The phrase that forms our heading comes from Paul's second letter to Timothy which reads as follows:

Be diligent to present yourself approved to God, a worker who does not need to be ashamed, rightly dividing the word of truth.⁶⁸³

The phrase at the end of this verse is rendered by the NIV as “**correctly handles the word of God,**” and by the ESV as “**rightly handling the word of truth.**” The Greek word used at the beginning of this phrase (*orthotomeō*) which is rendered as: “*rightly dividing,*” has the following meanings:

- To make a straight cut.
- To dissect.
- To hold a straight course.

The last part of the phrase should be rendered as the NKJV or ESV does, namely, “*the word of truth.*” Thus Paul wants Timothy to handle the word of truth, God's word, in the right way. In order to do that it needs to be sliced up or dissected correctly. In other words we need to be analytical and this forms the basis of our sixth principle, the need to do diligent and careful study. We need to approach Scripture with the intention of understanding how all the various parts are connected and how they fit together.

There are two main approaches we must adopt when we come to look into Scripture. But before we launch into these, we remind ourselves that whilst we are speaking about analysis, what we are always doing is taking in those things which God has spoken and those things which God wants us to know. The danger of analysis is that we can get carried away with the research, or absorbed by the method and technique, and we must avoid that at all times. We do this by constantly being in a state of prayer. As we do the work of analysis we ought to be seeking the Lord for the Holy Spirit's aid. The opposite to this is a loose carefree approach. In such cases Scriptures are often taken out of context leading to error.

Given the need for a devotional heart (we want to know God and do as He says), we must start by viewing the big picture or wide scope of the Scriptures. We need to be those who grasp the whole scheme of the Bible from beginning to end. This does not come easily and it is perhaps not the first thing a young believer may do. However it is an important thing to do. The reason for this

683 2Timothy 2:15.

is that by looking at the big picture of the whole story we can grasp the detail much better. Then also we need to look closely at the detail. This is much easier to do, of course, and we shall elaborate on this in a moment. However what I would propose is that the reader adopt a dual approach. Try to read comprehensively – the whole of Scripture – to gain the big picture. At the same time look in detail at a particular part. The one approach will help with the other, and by doing this continually you will find that your grasp of what God is saying becomes clearer and clearer. This is an iterative procedure.

To begin let us imagine you wanted to study a particular letter of Paul's, let us say Colossians. Let us further assume that you have some grasp of the overall context. Paul was a leading Pharisee who came to faith after Pentecost, and His writing of this letter falls at some time in his ministry all of which we can read about in Acts. You may well have some grasp of the history of Israel and the ideas of sacrifice, and salvation. These will be useful as you study the detail. As we approach a text to look at the detail we can always break off at times to examine the bigger and wider picture. Now we get to the detail. First you might want to read the whole letter to get a feel for its message. Next you want to look for repeated words and phrases. One particularly helpful thing to look out for is the titles or descriptions used of God. These repeated phrases or words sometimes inform us of the structure of the passage under consideration. As you progress you begin to see the letter develop from one subject or theme to the next. At this point it is worth slicing the letter up into its main themes. Remember we are seeking the Lord Jesus here, and this process can always be adjusted as we do further analysis.

Once we have decided on some form of structure or outline, we can then turn to consider each sentence that makes up the passage under view. The next stage is to consider each word on its own. In many cases the meaning is straightforward and needs little consideration. However it is always good to consider how that word is used elsewhere. So the use of a good concordance or search engine will help in seeing the use of the word throughout the Bible.⁶⁸⁴ This work is actually essential. We believe that God is the Author of the entire Bible. Although He has used various men through whom to speak and on each occasion uses their personalities, nevertheless what is found in Scripture originates not in the human writer but in God. Consequently the teachings found throughout Scripture are unified and coherent. Having said this it is important to remember that words have a semantic range. For example, the word “child” may indicate a baby, a young person, an offspring, or something very dear to a person. In other words the application or intent of the word varies in its use. Sometimes also words have two distinct meanings or applications. For

⁶⁸⁴ The two search engines I frequently make use of are: Bible Gateway (www.biblegateway.com) and Blue Letter Bible (www.blbclassic.org OR www.blueletterbible.org).

example the noun “bat” can either represent a piece of sports equipment or a flying mammal, and the word “down” can indicate soft fluffy feathers, or it may suggest a low emotional feeling (depression). By doing such Bible-wide word studies it will be helpful in ascertaining the precise use of the word in the passage under consideration.

The next stage is to look at all the words you have studied or understood in the context of the phrase or sentence. In some instances word order is important.⁶⁸⁵ In Biblical Hebrew the usual form is: verb-subject-object. In Biblical Greek the normal word order is: conjunction, verb, subject, object, and modifiers.⁶⁸⁶ So when word order is altered it may be because there is some emphasis being stressed. Translators try to take account of emphasis in their work but this is not always possible. If you are studying in English then make a note of what seems to be stressed in the phrase or sentence. Next look for the various parts of a sentence by focusing on the conjunctions that split up the sentence. It will be helpful to illustrate this by indenting text. As an example consider the following sentence from Colossians 1:9-12.

9 For this reason we also, since the day we heard it, do not cease to pray for you, **and** to ask **that** you may be filled with the knowledge of His will in all wisdom **and** spiritual understanding; 10 **that** you may walk worthy of the Lord, fully pleasing *Him*, being fruitful in every good work **and** increasing in the knowledge of God; 11 strengthened with all might, according to His glorious power, for all patience and long-suffering with joy; 12 giving thanks to the Father who has qualified us to be partakers of the inheritance of the saints in the light.

We shall not analyse this text completely but will simply show a method that brings out the construction of the sentences. This long sentence has a number of conjunctions which have been highlighted in **red**. We can arrange the text to show the effect of these conjunctions (see next page).

By arranging the text in this way we can see the various clauses and how they are related. We can see at once that the passage is a continual prayer of Paul for the Colossians (“*to pray for you*”). But this prayer is not a general one, for it has specific requests (“**and** to ask”). The requests fall under two main headings signalled by the conjunctions “**that**.” The first request is for the possession of a wise and spiritual knowledge of God's will (“**that** you may be filled”). The second request is that the Colossian Christians may live in a manner pleasing to God (“**that** you may walk worthy”). This second request has five separate parts. Now the above is simply a beginning point to help in understanding the text.

685 We must be very careful here because this is not always a hard and fast rule.

686 <https://www.billmounce.com/monday-with-mounce/normal-sentence-order>

9 For this reason we also, since the day we heard it, do not cease
 to pray for you,
 and to ask
 that you may be filled with the knowledge of His will in all
 wisdom
 and spiritual understanding;
10 that you may walk worthy of the Lord,
 fully pleasing *Him*,
 being fruitful in every good work
 and increasing in the knowledge of God;
11 strengthened with all might,
 according to His glorious power,
 for all
 patience
 and long-suffering with joy;
12 giving thanks to the Father
 who has qualified us to be partakers of the inheritance of the
 saints in the light.

Once we have engaged in the above analysis and have done our word studies we can begin to see the details of the passage under consideration. Remember that as we do this our heart's aim is to seek the Lord and to hear what He has to say and to follow His guide. The two approaches outlined here, namely looking at the detail of the words in context, and looking at the whole sweep of Scripture, ought to be engaged in repeatedly.

[7] A question of theology.

Our seventh principle is one many would seek to neglect. The mention of the word “theology” is often off-putting to many. However the word simply means the study of the things of God. Essentially, then, good Bible study is theological. However there are different forms of theology as follows, and each are worth some attention:

- Biblical theology
- Systematic theology
- Historical theology

Biblical theology is the study of particular themes or topics in Scripture as they progress through time. For example, seeing how the gospel story unfolds from its first mention in Genesis 3:15 after the fall of man, and then develops with more light being shed as we progress through Scripture and time. Tracing what has been termed as “the scarlet thread of redemption” in this way

is a very useful exercise. In focusing on the great texts which point us to the Saviour and His work we can see the flow of God's revelatory redemptive history. If we have this in our minds and hearts it helps when we come to meditate upon a particular passage. Biblical theology is also concerned with the smaller topics as well. For example, tracing the development through time of the idea of the priesthood. It may be tempting to look at this subject simply by referring to the Levitical priesthood found in Israel. However we discover that there existed a priesthood prior to the Levitical form which is extremely important for our understanding of the Saviour.

Systematic theology is comprehensive. Its aim is to look at what the Bible teaches about specific topics in their entirety. Often a work of systematic theology starts with the doctrine of God and then follows with treatments on each of the persons of the trinity, before going on to consider revelation, salvation and all the main topics the Bible focuses on. Systematic theologies reflect the times they were written in. They are useful because they bring together large swathes of Biblical teaching on the vital subjects. Often many good Christian books are works of a systematic nature.⁶⁸⁷ We ought also to mention the study of the theology of individual books. Sometimes a book may have a particular emphasis. Remember that God is One and He changes not, so the theology of all the books of the Bible are the same in so far as they relate to the whole faith ("*the faith* ").⁶⁸⁸ For example the book of Isaiah uses the title "*the Holy One (of Israel)*" in reference to God more than any other book. Isaiah is speaking on behalf of the same God that Jeremiah, Abraham and Moses worshipped but there is this emphasis in Isaiah of holiness.

Historical theology is more concerned with interpretation. The focus on this form of theology is to consider what true believing Christians have understood on various themes and topics throughout time. Each era has its particular battles to fight. In the earlier days of the Christian faith there was much debate on the nature of God, the trinity and the person of Christ. At the reformation the focus was on the work of Christ. In our day there seems to be a focus on creation and the nature of man. Now it is not that Christians in the earliest days did not consider the atonement or creation but that the need of their hour was to establish truth from Scripture clearly for all to grasp concerning the doctrine of God. This aspect of theology encompasses the discipline of church history. It also teaches us the vital importance of the church as a whole. Although we are all 'taught of God' as we noted earlier, nevertheless we need one another to truly see and know the Lord. By reading what our brothers and sisters have written about their meditation of God we will be greatly blessed!

687 For example, **J. I. Packer**. Knowing God. 1973. Hodder and Stoughton.

688 Acts 6:7; 16:5; Romans 1:5; 4:16; 16:26; 1Corinthians 16:13; 2Corinthians 13:5; Ephesians 4:13; Philippians 1:27; Colossians 1:23; 2:7; 1Timothy 1:2,19; 3:9; 2Timothy 4:7; Titus 1:13; James 2:1; 1Peter 5:9; Jude 1:3.

To be practical, I would like to suggest the following course of action for the reader.

[1] Read the Bible:

[a] Systematically (there are good reading plans available).⁶⁸⁹

[b] Devotionally (concentrate on speaking to the Lord as you read).

[c] Specifically (read a whole book in one sitting).

[d] Meditatively (*study* it in detail as outlined above).

[2] Get hold of a good systematic theology.⁶⁹⁰

[3] Do regular studies on selected themes through Scripture over time.

[4] Read widely from believers both of the present and of the past.

All works of systematic theology will have been written by a person who is not perfect and may well have certain influences. However the work of gathering together information on the main topics of the Bible into a systematic whole is a monumental task and we benefit from other believers who have done this. Reading the works of Christians from other eras will enable us to come out of our modern *bubble*. It is so very easy to get convinced that everything we experience in our time is exactly the same for all other periods, but it isn't! That isn't to say that it is alien or totally different. After all, godly writers of former times are indeed our brothers and sisters.⁶⁹¹ Their experiences and battles may not be ours, but how they seek the Lord and live for Him will be instructive. Of course the Christian faith is not all about reading and study. It is about walking with God. And so when you come to read Scripture or read a book, your aim ought always to be: how can I draw nearer to the Lord both in spirit and in deed. The process of reading, of study, of meditation done in an attitude of prayer is iterative. When you read a book written centuries ago by a brother in Christ it may well trigger thoughts that connect with something you have read in Scripture or an attitude of heart you know only too well. This might help you as you seek to understand what God has said in Scripture and may lead you to avenues of investigation in His word you may never have thought of before. Sometimes you may be disturbed by what you have come across in some work. Something doesn't quite ring true. But this may then be the means or trigger for your further study of the word of God. You seek the Lord in His word to see if what was

689 See, for example: <https://createdisciples.com/>

690 I have benefitted from these two: **Louis Berkhoff**. Systematic Theology. 1996. Wm. B. Eerdmans Publishing Co. **Herman Bavinck**. Reformed Dogmatics (abridged). 2011. Baker Publishing Group. They must be read with care because human writing is always subject to error.

691 I am assuming here that the older writers are indeed true believers. There are many who are not, of course, and so it is always good to be cautious as you read ancient works, and it is sometimes advisable to get recommendations from other contemporary believers.

said by the writer is indeed the case, in which case your thinking needs adjusting, or if what was claimed was false, in which case you will be armed with reasons to counter such an idea. In all things have in view what you have gleaned thus far. You learn about God and His nature, about Christ and His work and so on. And these truths which are precious to you because you know of whom they speak are your tools for further seeking. Thus you get deeper into the word of the living God to learn more of His wonderful beauty. We do not, therefore, come with a blank slate as we read and study the word of God, for we are not the judge of the word. No, we come armed with what we have learned so far and seek to be trained and renewed as we go deeper into His word to know God. Other believers help, through what they have written or through contemporary experiences. All of these things help us as the Spirit moves upon the church drawing us closer to the Lord.

[8] Study and effort required!

The thoughts we ended the last section with form the essence of this one. First we need to return our thoughts to the words Paul wrote to Timothy which we shall quote again here:

Be diligent to present yourself approved to God, a worker who does not need to be ashamed, rightly dividing the word of truth.⁶⁹²

Paul instructs Timothy in handling Scripture correctly and this involves being “*diligent*” and being a “*worker*.” These two concepts lead us to understand that we cannot simply imbibe the word of God. We cannot simply let things wash over us. What is required is effort, work, and diligence. This forms the basis of our eighth principle. It may be thought as a repetition of the sixth principle where we encouraged the pursuit of analysis (with prayer) in a diligent and robust way. However here we are thinking along the lines of motivation and heart. It is one thing to be careful in the selection of tools for the job, but quite another in the wielding of those tools! Unfortunately sinful human minds hate the idea of work and effort, especially in our day. The Lord is looking for those who are serious in the pursuit of Him.

Another way of looking at this is to consider the word “seek.” This is a very important Biblical word. In fact it ought to form a part of our very lives:

But seek first the kingdom of God and His righteousness, and all these things shall be added to you.⁶⁹³

692 2Timothy 2:15.

693 Matthew 6:33.

In what follows I want to outline what it means to truly seek the Lord. I will select just a few passages where this word “seek” is found and seek to apply them. The reader is encouraged to pursue further this concept of seeking for themselves.

Our first text comes from the book of Proverbs. The book of Proverbs is composed (in the main) of pithy statements or little parables spoken by a father to his child. As such they are given to us as words from the Father Himself to us as His adopted children. Consider then these words as coming from God the Father to you His child.

1 My son, if you receive my words, and treasure my commands within you, 2 So that you incline your ear to wisdom, *and* apply your heart to understanding; 3 Yes, if you cry out for discernment, *and* lift up your voice for understanding, 4 If you seek her as silver, and search for her as *for* hidden treasures; 5 Then you will understand the fear of the Lord, and find the knowledge of God.⁶⁹⁴

Consider how the Father approaches the child here. He begins by saying “*if*” which reminds us that seeking is a voluntary action. What then is being asked of the child? Well he is first to “*receive*” the Father's words. This is why reading, study and meditation of God's word in a prayer mindset is so necessary. At the beginning of the book of Proverbs we learn that the starting point to true knowledge is the “*fear of the Lord*.”⁶⁹⁵ That is, a right perception and disposition towards God must come first. We humble ourselves before the mighty God who is willing to speak to us! Hence we “*receive*” his words.⁶⁹⁶ We listen carefully to what He has to say. But listening to what the Lord says is just step one. Step two is to “*treasure*” the instructions given within (our innermost being). This thought has two implications. First it signifies the value we place on what God says (it is treasure), and second it shows us that we must guard what we hear safely, because it is in danger of being snatched away if we are not careful.⁶⁹⁷ Next we see that the child is expected not just to receive and consider of great worth the father's commands and words, but is then to “*incline*” his ear to them, and also to “*apply*” his innermost being to their meaning and outworking. In other words, we are to give great attention and thought to the things heard so as to put living flesh on the instructions. We are to embody them. This, clearly, takes some thought. Such a task is, in fact, beyond us. That is why in the next part we discover that the child is to “*cry out*” and to “*lift up*” their voice. Here we see the great need of prayer and calling out for aid and help. We receive the word of God and we treasure it but how can we live it? Please Lord come and help us! Notice that

694 Proverbs 2:1-4.

695 Proverbs 1:7.

696 We do not “*receive*” the words of men but test them. See: 1John 4:1, for example.

697 See: Matthew 13:19.

the plea for help is for “*discernment*” and “*understanding*.” Thus we pray that we may fully understand in order that we may truly do, for as a man “*thinks in his heart so is he*.”⁶⁹⁸ In New Testament terms we need to be renewed in our minds and thinking.⁶⁹⁹ Paul prays this for Christians on several occasions:

15 Therefore I also, after I heard of your faith in the Lord Jesus and your love for all the saints, **16** do not cease to give thanks for you, **making mention of you in my prayers:** **17 that the God of our Lord Jesus Christ, the Father of glory, may give to you the spirit of wisdom and revelation** in the knowledge of Him, **18 the eyes of your understanding being enlightened;** that you may know what is the ...⁷⁰⁰

For this reason we also, since the day we heard it, do not cease to **pray for you**, and to ask **that you may be filled with the knowledge of His will in all wisdom and spiritual understanding** ...⁷⁰¹

Consider what I say, and **may the Lord give you understanding** in all things.⁷⁰²

So the child is to bend their own ears and apply their own hearts but at the same time cry out and lift their voice for help! Then next we see an illustration. The child is to “*seek*” this treasure as one would look for silver, and he is to “*search*” for treasure that is “*hidden*.” How did people seek silver and search for treasure that was hidden? Well at the very least they used effort and ingenuity! We get a small insight into the task of finding silver from the book of Job where we read these instructive words:

1 Surely there is a mine for silver, and a place *where* gold is refined. **2** Iron is taken from the earth, and copper *is* smelted *from* ore. **3** *Man* puts an end to darkness, and searches every recess for ore in the darkness and the shadow of death. **4** He breaks open a shaft away from people; *in places* forgotten by feet they hang far away from men; they swing to and fro.⁷⁰³

Obviously these words include mining of metals in general. However it is clear that it was not an easy task to get metals from the earth. The precious metals silver and gold may be found in their native state (i.e. uncombined with other elements in the form of compounds), but they still had to be separated from the rocks that encased them. To get at the seams containing these metals man had to search “*every recess*” in the darkest of places. These would be mines dug deep in the ground or

698 Proverbs 23:7.

699 Ephesians 4:23; Romans 12:1,2.

700 Ephesians 1:15-18a.

701 Colossians 1:9.

702 2Timothy 2:7.

703 Job 21:1-4.

maybe from cliffs and fissures in the earth where men dangled on ropes or platforms to work the seams. In short, it was hard and difficult work. Mining using hand tools in the depths of the earth is no walk in the park. It is this level of effort in thinking and prayer that is required. Now God is no harsh taskmaster for later we read that:

6 For the Lord gives wisdom; from His mouth *come* knowledge and understanding; 7 He stores up sound wisdom for the upright; *He is* a shield to those who walk uprightly; 8 He guards the paths of justice, and preserves the way of His saints. 9 Then you will understand righteousness and justice, equity *and* every good path.⁷⁰⁴

The Lord is a wonderful Father because He graciously gives us all that we need. However the Lord simply does not give in the sense of throwing out His treasures willy-nilly like an entertainer throws sweets to a crowd. He is concerned to teach and to train His children. All the while the Lord protects and guides as a good father does. Thus He calls them to be diligent students and to attend to their lessons! Notice that in verses 5 and 9 we are told of the consequences of God's gracious giving and the child's trusting efforts:

Then you will understand the fear of the Lord, and find the knowledge of God.⁷⁰⁵

Then you will understand righteousness and justice, equity *and* every good path.⁷⁰⁶

The outcome of truly seeking that uses effort and much prayer relying on the Lord, is that the seeker will indeed come to a true knowledge of God, and this will be seen equally in their grasp of the way of righteousness and their traversing of that path.

There are many other passages worth studying in connection with this idea of seeking, but I want to consider just two more.⁷⁰⁷ First we need to remember that seeking the Lord presupposes that the seeker is one of faith as the following verse from Hebrews makes clear:

But without faith *it is* impossible to please *Him*, for he who comes to God must believe that He is, and *that* He is a rewarder of those who diligently seek Him.⁷⁰⁸

Coming to God in the first place requires faith, for otherwise none would come.⁷⁰⁹ But that is just the start for we are informed that God rewards those “*who diligently seek Him.*” We get this same

704 Proverbs 2:6-9.

705 Proverbs 2:5.

706 Proverbs 2:9.

707 See for example, Isaiah 51:1f; 55:6f; Amos 5:4f; 8:12; Matthew 7:7f.

708 Hebrews 11:6.

709 Psalm 14:2,3; 52:2,3; John 1:12,13; Romans 3:11; Ephesians 2:8.

concept of pursuit of God in many Psalms.⁷¹⁰ Then our second Scripture comes from the New Testament:

1 If then you were raised with Christ, seek those things which are above, where Christ is, sitting at the right hand of God. **2** Set your mind on things above, not on things on the earth. **3** For you died, and your life is hidden with Christ in God. **4** When Christ *who is* our life appears, then you also will appear with Him in glory.⁷¹¹

In this text we learn that the call to *seek* is only issued to those who have already been translated into the kingdom of the Son of His love, that is, to those who have been born again or “*raised with Christ*.”⁷¹² We who love the Lord are called upon to seek “*those things which are above*,” which are where Christ is at present, seated “*at the right hand of God*.” In order to engage in this pursuit we need to “*set*” our minds on those things which are above. The idea here is to direct thinking. In other words to take control of the mind and make it consider heavenly things. In Peter's words we are to:

... gird up the loins of your mind, be sober, and rest *your* hope fully upon the grace that is to be brought to you at the revelation of Jesus Christ⁷¹³

The figure used by Peter is of one getting ready to run. The long robes worn in Biblical times were not conducive to running, and so they gathered them up and tucked them into their belts so their legs were free to run. In the same way we are to have our minds prepared and organised so that we can *see* the Lord. Thus diligence, effort and thoughtfulness is required. This is diametrically opposed to the magazine or comic style of thinking the current age indulges in, which is scatter brained, minimal and disconnected. What is required is systematic and comprehensive attention to Scripture as the sole standard and the means by which we fellowship with the Lord.

Recalling the fact that Scripture is our sole standard leads to a further thought under this general heading of the need for diligence and effort. That is, we do not look elsewhere to understand Scripture as is common practice in academic and scholarly circles today, for Scripture is the only standard we have. Where a passage is hard to understand we look elsewhere in Scripture for help and aid. Peter reminds his readers that some of Paul's writings were hard to comprehend.⁷¹⁴ But instead of prizing open such tough nuts Paul provides with the tools of secular thought, we ought

710 Psalm 24:6; 27:4, 8; 63:1,9; 105:4f; 119:2,45.

711 Colossians 3:1-4.

712 Colossians 1:13.

713 1Peter 1:13.

714 2Peter 3:16.

rather to let other Scriptures inform us of the teaching to be mined. Sometimes a Scripture is commented on by other writers within Scripture. The New Testament is strewn with quotations and allusions to the Old Testament so that these New Testament Scriptures help us to grasp the Old Testament texts. The prophets of the Old Testament effectively commented on the Law found in the Pentateuch. Understanding this interconnectedness of Scripture will aid in our efforts.

Another aspect of the requirement to be diligent is to be careful to ignore and reject those things which oppose the gospel. The instructions to turn away from, to reject and even to oppose error and false teaching are frequent throughout Scripture.⁷¹⁵ We are not to be “*conformed*” to the way this world thinks, and we must not be “*cheated*” out of following the truth by philosophy, vain deceit and false religion.⁷¹⁶ We are not to be “*unequally yoked together with unbelievers,*” we are not to be thrown this way and that “*carried about with every wind of doctrine by the trickery of men,*” and we are not to continue in life “*as the rest of the Gentiles walk in the futility of their mind.*”⁷¹⁷ Compliance with such injunctions requires diligence and a set mind. It is easy to be influenced especially as the natural inclination is to drift like an untethered boat at a quay.⁷¹⁸

715 1Timothy 1:3,4; 4:7; 6:20; 2Timothy 2:23; Titus 3:9.

716 Romans 12:2; Colossians 2:8,18.

717 2Corinthians 6:4; Ephesians 4:14,17.

718 Hebrews 2:1.

Chapter 6: What about general revelation?

(On the relation between (modern) science and God's creation).

Having looked broadly at the nature of modern science and of evolution, seeking to show that the latter is a false doctrine, we need now to look in more detail at how science may be connected with creation. Since many make the mistake of identifying general revelation with modern science, (which leads towards syncretism), we will need to consider carefully the nature of general revelation.⁷¹⁹ But before this we shall remind ourselves of the importance of special revelation, that is Scripture.

Special revelation.

In the previous chapter our task was to discuss the question of interpreting Scripture, which is the main, and the most important, means by which God has made Himself known. To be clear, we recognise that Christ Jesus is the Word of God, the express image and exact representation of God, and it is He who makes known the Father.⁷²⁰ Further, we recognise that for us today who cannot see Christ, we fellowship with Him by means of the word of God (the Bible) in the power of the Holy Spirit.⁷²¹ This twin approach, making the *right* use of Scripture, and being filled with the Spirit of God, is essential but it is one easily sidestepped. To some the word of God is their main and only focus to the exclusion of the Spirit and humble dependence. We ought to heed the words from Micah:

He has shown you, O man, what *is* good; and what does the Lord require of you but to do justly, to love mercy, and to walk humbly with your God? ⁷²²

The Lord resists the proud but gives grace to the humble.⁷²³ Then equally there are those who disdain the detailed and diligent study of Scripture we have been advocating, to seek the things of the Spirit. Such end up tossed about by every wind of doctrine and are often ripe for being overrun

719 Syncretism – the amalgamation of Christian and secular thought.

720 John 1:1f,14,18; 17:6,26; Hebrews 1:3.

721 1Thessalonians 1:5; Hebrews 1:1-4; 4:12; 1Peter 1:8; 1John 1:1-4.

722 Micah 6:8.

723 James 4:6; 1Peter 5:5.

and subdued by false teaching.⁷²⁴

Apart from this false dichotomy (word or Spirit), there is within all of us (even believers) the Pharisee and the Sadducee. The Pharisee reduces the word of God to that which is palatable and doable from the human perspective. Rather than study God's word, the Pharisee focuses on the writings of mere men who have *simplified* God's word. The Pharisees were guilty of establishing traditions of men which effectively stood as a barrier to the word of God. Then on the other hand the Sadducean spirit is one which denies the spiritual completely! The Sadducees did not believe in resurrection, nor in spirit, nor in the supernatural. With modern science in such dominance today the Sadducean attitude is not hard to detect. We are influenced, then, by these four pressures.

- Study and research of God's word with no devotion or aid of the Spirit.
- Seeking the Spirit's guide with no thought of, or effort in, studying His word.
- Dependence upon man-made systems to comprehend the word of God.
- Rejection of spiritual or other-worldly influence in seeking God and His ways.

To this we might add the Herodian spirit which is also popular today. This spirit places the emphasis on enjoying and indulging in a thoroughly immersive way the pleasures of this world. Of course we do not advocate any form of aestheticism, for God has given us all things to richly enjoy.⁷²⁵ However the tendency towards hedonism and an entertainment culture is not easy to swim against.

Although we need to be aware of these pressures, we ought not worry at all because the word of God is truly living and powerful doing the work which God intends, and God has given us of His Spirit that we might fully enter in to all that God wants for us.⁷²⁶ Let us continue to seek the Lord in His word by the aid and in the power of the Holy Spirit. Our task is to awake afresh each morning accepting the new mercies that God provides and seeking to continue our walk with Him.

General revelation.

General revelation is that unveiling or disclosure of God through His creation. In the same way that an artist is known by the way he paints or builds sculptures, so the Lord can be seen as we look at creation. But exactly how does God speak through creation? Is the message received from our environment and surroundings something that makes a clear and unmistakable sound? Another question we might ask is: what message have people passed on as though from creation?

724 Ephesians 4:14; James 1:6.

725 Colossians 2:20-23; 1 Timothy 6:17.

726 Isaiah 55:10,11; Romans 5:5; 8:1,2,9,26; Hebrews 4:12.

To answer the first two questions we can do no better than to ask God Himself. He has spoken in His word, the Bible, and we have been given both the tools and the indwelling Holy Spirit to help us make sense of it all. We shall do this shortly. To answer the third question would require a major piece of research and would fill many volumes! However we note that modern science is one discipline which has made statements about what creation tells us, and so we shall look at this as well.

What God has spoken.

So what has God said concerning general revelation? In what follows we shall look at a number of texts from the Old and New Testaments which help us in understanding the concept of general revelation.

Psalm 19.

We must start with Psalm 19 which we quote in full below:

1 The heavens declare the glory of God; and the firmament shows His handiwork. **2** Day unto day utters speech, and night unto night reveals knowledge. **3** *There is* no speech nor language *where* their voice is not heard. **4** Their line has gone out through all the earth, and their words to the end of the world. In them He has set a tabernacle for the sun, **5** Which *is* like a bridegroom coming out of his chamber, *and* rejoices like a strong man to run its race. **6** Its rising *is* from one end of heaven, and its circuit to the other end; and there is nothing hidden from its heat. **7** The law of the Lord *is* perfect, converting the soul; The testimony of the Lord *is* sure, making wise the simple; **8** The statutes of the Lord *are* right, rejoicing the heart; the commandment of the Lord *is* pure, enlightening the eyes; **9** The fear of the Lord *is* clean, enduring forever; the judgments of the Lord *are* true *and* righteous altogether. **10** More to be desired *are they* than gold, yea, than much fine gold; sweeter also than honey and the honeycomb. **11** Moreover by them Your servant is warned, *and* in keeping them *there is* great reward. **12** Who can understand *his* errors? Cleanse me from secret *faults*. **13** Keep back Your servant also from presumptuous *sins*; let them not have dominion over me. then I shall be blameless, and I shall be innocent of great transgression. **14** Let the words of my mouth and the meditation of my heart be acceptable in Your sight, O Lord, my strength and my Redeemer.⁷²⁷

The first thing we must stress is that whilst Psalm 19 takes the form of poetry, nonetheless it declares truths which we must take to heart. It is often suggested that poetic writing does not have the force of narrative in conveying **concrete** truths, that is, matters of fact or events as they happened historically. This is not the case. Poetry can convey definite concrete ideas, but sometimes

727 Psalm 19.

licence is taken with regard to the order of the detail, and sometimes details are described metaphorically or graphically. The second thing to note is that the Psalmist (David here) is drawing from his knowledge of Scripture, and in the case of Psalm 19, the first chapter of Genesis. We can say this with some assurance because the word rendered “*firmament*” (*raqiya*) is used for the first time here in Psalm 19 outside of its initial use in Genesis 1.⁷²⁸ There has been a lot debate and much confusion over this term. Its meaning is, essentially, an expanse, hence the atmosphere, space or heaven.

Looking at Psalm 19 as a whole we can see that it naturally divides into two parts. In the first part (verses 1 to 6) we are taught of God's “*speech*” in and through creation. In the second part (verses 7 to 14) there is a series of statements about the efficacy of God's spoken and written word and the effect it should have on the one who heeds it. Thus, before we launch into discussing the nature of general revelation as revealed in the opening verses of Psalm 19, let us pause and recollect that God's word, the Bible, is of greater value. From verses 7 to 9 we are given a sixfold description of this special revelation and its effectiveness (table 8).

Table 8: The word of God as taught in Psalm 19.

<u>Nature of special revelation.</u>	<u>How it is described.</u>	<u>Description of the effect.</u>
The law of the Lord	is perfect	converting the soul
The testimony of the Lord	is sure	making wise the simple
The statutes of the Lord	are right	rejoicing the heart
the commandment of the Lord	is pure	enlightening the eyes
The fear of the Lord	is clean	enduring forever
the judgments of the Lord	are true and righteous altogether	More to be desired are they ...

We do not have time to explore these thoughts in detail suffice to say that **only** God's word (characterised by the terms in the first column, and described by the terms in the second column above) can do those things that are most needed (i.e. the things listed in the third column). Do we need our minds changing? Most certainly! And so the law of the Lord can convert the soul. Do we need wisdom? Of course! And so the testimony of the Lord brings wisdom. The Scriptures also bring joy and delight, and they bring the kind of understanding and comprehension which lasts and fuels further desire for more.

So what of general revelation? Let us consider the opening 6 verses of Psalm 19 in some

⁷²⁸ Apart from Genesis 1 and Psalm 19:1, this word is found on only 7 other occasions at: Psalm 150:1; Ezekiel 1:22,23,25,26; 10:1; Daniel 12:3.

detail. To begin let us arrange the text in indented form to show the relation of ideas.

1 The heavens declare the glory of God;
and the firmament shows His handiwork.

2 Day unto day utters speech,
and night unto night reveals knowledge.

3 *There is* no speech nor language *where* their voice is not heard.

4 Their line has gone out through all the earth,
and their words to the end of the world.

In them He has set a tabernacle for the sun,

5 Which is
like a bridegroom coming out of his chamber,
and rejoices like a strong man to run its race.

6 Its rising is from one end of heaven,
and its circuit to the other end;
and there is nothing hidden from its heat.

In verse 1 David points to just two things in creation, namely the “*heavens*” and the “*firmament*” to make his points. This choice does not exclude any other aspect of creation, for these are chosen as representatives of the whole. Remember that Hebrew poetry uses parallelism and that is what we find in verse 1. The first part of the first couplet tells us that the heavens show forth God's glory, whilst the second part of this first couplet informs us the firmament indicates God's craftsmanship. These are put as reinforcing the simple point that God is the Creator of all things and as a consequence His creation has something of His character. The firmament also declares God's glory and the heavens also show forth God's craftsmanship, as do other aspects of God's creation.

Now David has focused particularly on that which is above, (the “*heavens*” and the “*firmament*”), because the main body that is found there is the “*sun*” which we read of later from the end of verse 4. But to begin with David refers in general to the heavens and the firmament. What does he say of these? Well first that they point us to an unmistakable statement that God is glorious. Only such an One can make such an amazing spectacle! But then also these heavenly scenes shows us that God is the Master Craftsman. We see God's handiwork or, in other words, the work of His hands. When we look at a masterpiece of art, or at a particularly well done piece of carved furniture, we marvel at the skill and ingenuity of the craftsman. The same ought to be our response when we look into space and see the myriad stars or every morning as we see the sun rise.

In verse 2 we learn that such “*speech*” (or sayings) and such “*knowledge*” as revealed by the heavens is continual. It happens “*day unto day*” and “*night unto night.*” The glory of God as displayed by His infinitely beautiful workmanship is evident all of the time. As I write these words

the sun is shining brightly, but even when the days are cold and the sky overcast we are aware of the sun's heat and presence. Imagine what it might be like if the sun had vanished completely! The sun rises and sets day by day as the Lord has promised, and the mercies of God are truly new every morning praise His Name!⁷²⁹ However, not only is this knowledge and speech available daily continually, but it is also accessible everywhere. Verse 3 uses the figure of “*speech*” and “*language*” to represent all the families of the earth. In these words we are reminded of the confusion at Babel and the subsequent scattering of all peoples over the earth as a result.⁷³⁰ Our current division into countries with different languages has a long and chequered history but it began at the tower of Babel. The reversal of that act was accomplished by God at Pentecost where the gospel went out miraculously through the disciples who were moved to speak of the glory of God (“*the wonderful works of God*”) in other tongues.⁷³¹ Here in Psalm 19 the glory and skill of God are known in all the world irrespective of the dialect or language spoken. The same heavens and firmament speak to one and all of God's workmanship, which is so far above anything ever dreamt of or imagined, that it is truly glorious. Verse 4 continues this theme using the figure of a “*line*” suggestive of a measuring implement which gives order to things and brings instruction. Imagine a surveyor measuring out a plot of land and showing his client the plans for the construction that was to be made. That, I think, is the sense here. The Lord's speech from the heavens and the firmament instructs all peoples of His ordered and measured nature. Creation is no haphazard or random affair. It has been designed so that it can be measured, although not completely, as the following Scripture from Isaiah shows:

Who has measured the waters in the hollow of His hand, measured heaven with a span and calculated the dust of the earth in a measure? Weighed the mountains in scales and the hills in a balance? ⁷³²

Nevertheless the universe is capable of being measured. We get a clear sense of this from the challenge God brings to Job:

4 “Where were you when I laid the foundations of the earth? Tell *Me*, if you have understanding. 5 Who determined its measurements? Surely you know! Or who stretched the line upon it? 6 To what were its foundations fastened? Or who laid its cornerstone, 7 When the morning stars sang together, and all the sons of God shouted for joy? ⁷³³

729 Genesis 8:22; Lamentations 3:23.

730 See Genesis 10 & 11.

731 Acts 2:4,11.

732 Isaiah 40:12.

733 Job 38:4-7.

It is this feature of the universe which enabled early modern scientists of the seventeenth century to engage in research. Modern scientists of today would do well to reconsider this fact because atheism and secularism have no grounds for supposing that the universe is an ordered system. The truth of the matter is that even modern science recognises that the ground for all enquiry and investigation is a matter of faith as A. N. Whitehead has written:

*“There can be no living science unless there is a widespread instinctive conviction in the existence of an Order of Things, and, in particular, of an Order of Nature. I have used the word 'instinctive' advisedly. ... We have therefore to trace the rise of the instinctive faith that there is an Order of Nature which can be traced in every detailed occurrence. Of course, we all share in this faith, and we therefore believe that the reason for the faith is our apprehension of its truth. ... Faith in reason is the trust that the ultimate natures of things lie together in a harmony which excludes mere arbitrariness. It is the faith that at the base of things we shall not find mere arbitrary mystery. The faith in the order of nature which has made possible the growth of science is a particular example of a deeper faith. This faith cannot be justified by any inductive generalization. It springs from direct inspection of the nature of things as disclosed in our own immediate present experience”*⁷³⁴

Einstein is credited with stating that:

*“The incomprehensible thing about nature is that it is comprehensible.”*⁷³⁵

In conjunction with another physicist Einstein has made similar statements to those of Whitehead where faith (assumption) is understood as the basis for modern science. However, in this pithy quote he simply draws attention to the fact that man's grasp of the universe (to a degree) is unfathomable from the point of view of secularism or atheism. The Christian knows different. We can understand (to a degree) because God has ordered creation.

At the end of verse 4 the focus moves from the heavens in general to the sun in particular. Of course the sun is not an object of worship but is being used here as a figure or illustration. The opening phrase *“in them He has set”* refers us back to the words of verse 1 which introduces the heavens and the firmament. Hence it is in the heavens, and in the firmament that God has *“set a tabernacle for the sun.”* This latter phrase is a clever use of ideas, for David wants us to think of the tabernacle where God dwells. That a Messianic figure is intended is clear from the similes employed in verse 5, (*“like a bridegroom,”* and *“like a strong man”*). The sun in the heavens is

734 A. N. Whitehead. Science and the Modern World. PP4,5,23.

735 This statement is attributed to A. Einstein. See, for example: Leon N. Cooper. The Limits and Presuppositions of Intellectual Inquiry. Daedalus. Volume 109. No. 2. Spring 1980. PP 1-17.

thus pictured in two ways, as a bridegroom and as a strong man.⁷³⁶ Both figures are used by Christ to point to His own character.⁷³⁷ The sun, then is used as an illustrative picture pointing to Christ. But here the main import of what is being shown is that the sun traverses its course in the heavens from one end to the other and dispenses its heat to one and all. This reference to the heat from the sun is mirrored by the end of the Psalm where we find the prayer of David to be pure in God's sight.⁷³⁸ God displays His glory from the heavens, and the sun radiates its heat all over the world to all. The sun's heat is essential for life. However, too much and it scorches us, too little and we may die of the cold. Now this illustration of the Messiah being the sun which radiates heat for all on earth is picked up by the writer of the letter to the Hebrews where we read that the “*Son*” is the “*brightness of His [God's] glory.*”⁷³⁹

Thus Psalm 19:1-6 teaches us that creation (as exemplified by the heavens and the firmament) speaks to us of God's amazing craftsmanship and shows us that God is glorious. Creation shows us that it is ordered and measurable because God is The Craftsman.⁷⁴⁰ And just as the sun pours forth its heat (and light) so God watches in judgement over all people on the earth.

Romans 1.

A second important text we need to examine in connection with general revelation is found in the first chapter of the letter to the Romans:

18 For the wrath of God is revealed from heaven against all ungodliness and unrighteousness of men, who suppress the truth in unrighteousness, **19** because what may be known of God is manifest in them, for God has shown *it* to them. **20** For since the creation of the world His invisible *attributes* are clearly seen, being understood by the things that are made, *even* His eternal power and Godhead, so that they are without excuse, **21** because, although they knew God, they did not glorify *Him* as God, nor were thankful, but became futile in their thoughts, and their foolish hearts were darkened. **22** Professing to be wise, they became fools, **23** and changed the glory of the incorruptible God into an image made like corruptible man—and birds and four-footed animals and creeping things. **24** Therefore God also gave them up to uncleanness, in the lusts of their hearts, to dishonour their bodies among themselves, **25** who exchanged the truth of God for the lie, and worshipped and served the creature rather than the Creator, who is blessed forever. Amen. **26** For this reason God gave them up to vile passions. For even their women exchanged the natural use for what is against nature. **27** Likewise also the men, leaving the natural use of the woman, burned in their lust for one another, men with men committing

736 The latter phrase could be put as a “mighty man” or as a “champion.”

737 Luke 5:34,35; 11:2-22.

738 Psalm 19:12-14.

739 Hebrews 1:2,3.

740 Proverbs 8:22-1.

what is shameful, and receiving in themselves the penalty of their error which was due. **28** And even as they did not like to retain God in *their* knowledge, God gave them over to a debased mind, to do those things which are not fitting; **29** being filled with all unrighteousness, sexual immorality, wickedness, covetousness, maliciousness; full of envy, murder, strife, deceit, evil-mindedness; *they are* whisperers, **30** backbiters, haters of God, violent, proud, boasters, inventors of evil things, disobedient to parents, **31** undiscerning, untrustworthy, unloving, unforgiving, unmerciful; **32** who, knowing the righteous judgment of God, that those who practice such things are deserving of death, not only do the same but also approve of those who practice them.⁷⁴¹

Paul opens his letter to the Romans by describing the gospel in outline, and he reaches a climax in verses 16 and 17 where he declares that he is “*not ashamed of the gospel*” because “*it is the power of God,*” and because in the gospel, “*the righteousness of God is revealed.*” The gospel, as revealed in Christ and through His word, is the subject of God's special revelation. But then in verse 18 the apostle turns his attention to what people in the world, who may not have yet received this gospel message, may know. I have quoted the reminder of Romans 1 in full because it is necessary to see the consequences of minds and hearts that reject God. However I will not comment on the whole text.

Paul starts by declaring that the situation is desperate because the world is under threat of God's righteous wrath. We know this for many reasons but not least of these is because of Christ's death on the cross. At that stupendous moment God unleashed His perfect and righteous anger upon Christ who bore the sins of the world. God is angry with unrighteousness and ungodliness always, but the unleashing of His wrath against Christ was for our salvation. If we reject this offer we face the full force of punishment ourselves. However the frightening thing about the world (both in Paul's day and today) is that men “*suppress the truth in unrighteousness.*”⁷⁴² They may not have heard the gospel message, but nevertheless they still hold down and ignore the truth that they can clearly see.

In verse 19 we discover that there are things about God which “*may be known*” by all. These things are not far away or difficult to comprehend. This knowledge is, in point of fact, “*manifest*” within people because God has made such truths clear Himself. In other words, certain truths concerning God (His character and work) are self-evident and could not be denied or missed if one tried. The terrible thing is that man in his unrighteousness and propensity for self-rule has actively and continually suppressed such knowledge. But how has God shown the world these things? The answer is that such things have been available from “*the creation of the world.*” When

741 Romans 1:18-32.

742 Romans 1:18.

God created the universe He deliberately placed within it certain aspects which pointed us directly to Himself.⁷⁴³

Verse 20 goes on to speak about what creation shows us of God. Thus we discover that “*the things that are made*” give image to God’s “*invisible attributes*.” General revelation does not tell us that God is Spirit. We need special revelation to know this. However, God’s creation shows us unambiguously that there are things which we cannot see in and of themselves, and that these are made know to us through what has been made. In other words, the things that are made have a significance. They teach us more than what we can simply see. Notice how Paul puts it here. The “*invisible attributes*” of God, are made visible and are “*understood*” by the things God has created. What is found in creation can be understood in terms of God’s invisible attributes. At this point we need to ask the modern scientist: when you look so deeply and carefully into creation, why do you not see God’s invisible attributes? We know the answer of course, because Paul has already informed us. But the remarkable thing is that God has gone to such great lengths to infuse His creation with unmistakeable markers to His divine nature! As believers we are privileged beyond measure to have the blinkers and eye-patches we have forced over our own eyes, removed by His grace and mercy.

Paul goes on to elucidate two invisible attributes of God that are clearly made visible by the things God has made. These are: “*His eternal power*,” and His “*Godhead*.” Eternal power. What a marvellous thing! If we as human beings use the word “power” we need to qualify it. A kettle has a power rating of 2kW. The Large Hadron Collider at CERN has a power rating of 200MW, (200,000 times a normal kettle).⁷⁴⁴ We know how much power objects (small or large) have, or, to be specific, how many joules of energy these objects can deliver each second. (This is how we define power, the rate of change of energy, where energy is the ability or capacity to do work). But God’s power cannot be limited here. We cannot simply define God in terms of a power rating like we can a kettle or a massive machine designed to smash subatomic particles into one another. God’s power is eternal. What does that mean? Well because it is eternal it means that it will never run out. In other words His power is infinite. This quality of God is something we can certainly know “*by the things that are made*.” We have attempted in a small way to show how marvellous creation is and how it

⁷⁴³ It is not often appreciated that Genesis 1 and 2, apart from being historically accurate, also give us aspects of God’s character and nature. For example, God created light first because His desire is for people to comprehend and understand things. He made land for a firm foundation pointing us to the Rock of salvation, which is Christ. He separated light from darkness, and the heavens from the earth by an expanse because He wanted us to discern the heavenly things from the earthly. His creation involves abundance and a plethora of forms because He is the author life (pointing to new life). Many other salvation and loving themes can be found in these formative chapters which detail the early history of this world.

⁷⁴⁴ <https://home.cern/science/engineering/powering-cern>

points us to the Designer (the Master Craftsman) whose power is awesome and beyond our reckoning in earlier chapters. The mention of such projects as the LHC at CERN only reinforces the point that Paul makes that man suppresses the truth about God. How can all these physicists not see that creation demands not just belief in, but worship and fear of the Creator?

The second invisible attribute Paul lists is termed “*Godhead*.” The Greek word (*theiotēs*) translated in this way is only used here, but it comes from the Greek word used for “God” (*theos*) and indicates the notion of “divinity” or, in other words, the idea of a supreme being outside of all creation. In using such a term Paul shows that the very idea of “God” is self-evident within creation. This opens up the possibility that Paul was not being exclusive or limiting here in his choice of invisible attributes. Thus such clear evidence of God's being leaves man, whomever he may be (Jew or Gentile), “*without excuse*.”

Paul then elaborates on the fact that man in his fallen sinful nature suppresses what he clearly knows. Despite the fact that man does indeed know of God, he refuses to acknowledge Him as such, and so becomes “*futile*” (i.e. vain or empty), and “*darkened*” (i.e. devoid of light or understanding), in his thinking, and theoretical constructions.⁷⁴⁵ What then of modern science and its insistence of ignoring and discounting God? Surely the theories and mental constructs of modern science come under this ban? Paul comments that in their professed wisdom men are demonstrating their folly.⁷⁴⁶ He picks this theme up again in his first letter to the Corinthians.⁷⁴⁷ Later on because men refuse to keep hold of the knowledge about God, the Lord gives them over to “*a debased mind*.”⁷⁴⁸ The Greek word used here translated as “*debased*” is that also used of metals that do not pass the test. But what these godless ones do effectively is a switch. They exchange something of infinite good for something which is terribly evil. In short they have swapped the praise due to “*God*” for praise of creation itself. Paul gives us two descriptions of this switch, one of which sums the nature of what is going on. They:

- Changed the glory of the incorruptible God into an image made like corruptible man —and birds and four-footed animals and creeping things.⁷⁴⁹
- Exchanged the truth of God for the lie.⁷⁵⁰

745 Romans 1:21.

746 Romans 1:22.

747 1Corinthians 1:

748 Romans 1:28.

749 Romans 1:23.

750 Romans 1:25.

How remarkable! Why do this? Pride. Pride is the great enemy of our souls. Now as a consequence of this exchange, God gave men and women up to disaster. The details are plain to see both in the rest of Romans chapter 1 but also in society at large in our day.⁷⁵¹

Two texts in Acts.

In the Acts of the apostles we come across two key occasions where the apostle Paul describes further teaching in connection with general revelation.⁷⁵² In the first case we find Paul and Barnabus at Iconium where a crippled man had been healed by the apostle. The result of this action was not at all what Paul intended, but gave him an opportunity to declare the gospel. After the miracle of healing, the people tried to deify Paul and Barnabus, and when the two missionaries discovered this they sought earnestly to disabuse the people of such error.⁷⁵³ Both Paul and Barnabus ran into the multitude and cried aloud for them to stop this folly of hero worship. This is what they said to the people:

15 and saying, “Men, why are you doing these things? We also are men with the same nature as you, and preach to you that you should turn from these useless things to the living God, who made the heaven, the earth, the sea, and all things that are in them, **16** who in bygone generations allowed all nations to walk in their own ways. **17** Nevertheless He did not leave Himself without witness, in that He did good, gave us rain from heaven and fruitful seasons, filling our hearts with food and gladness.” **18** And with these sayings they could scarcely restrain the multitudes from sacrificing to them.⁷⁵⁴

Their opening statements are ones concerning creation and the nature of mankind. They too were mere men just as the people of Iconium were, and they implored the people to stop worshipping “*these useless things*” (the idols they worshipped) but should instead turn to “*the living God,*” who was the Creator of all things. Up to this point in time God had not expected the nations to turn (He knew they could not because they would not) and then the apostles state that God had not left “*Himself without witness*” in His creation. In other words, creation itself is a witness to God. Specifically we learn that God “*did good*” through His giving to all people two things:

- Rain from heaven.
- Fruitful seasons.

751 Romans 1:26-32

752 Acts 14:12-18; 17:16-31.

753 Acts 14:

754 Acts 14:15-18.

God is good and all that He does is good. Such we learn from Scripture.⁷⁵⁵ But from creation the fact that rain comes and enables food to be grown is a remarkable feature which witnesses to a benevolent and supreme being. Think of the wonderful provision of God in the variety of foods we have available. Crops in fields, fruit from trees, nuts and berries, vegetables and all manner of delicious and nutritious foods come from the ground. The remarkable thing is that the tree that gives us apples seems to do so without anything from man! An apple seed falls to the ground and is buried in the soil. The rain falls and soon a shoot emerges. The sun radiates light of the needed colour into the leaves and the shoot grows into a tree. The tree grows and blossoms and before we know it ripe fruits are falling to the ground. These were designed by God for our blessing! Now think of the immense variety there is. We do not have just one type of apple but countless. We do not just have apples and other fruits but all manner of crops. Why should such things exist? God created them for man and for his best good. How marvellous is God! Now some may object and say that far too many people starve in our world and that it takes farmers immense efforts to grow crops against all the disasters of weather and pests. All that is very true but who is to blame? When we strip it all down we know in our hearts that the fact that we have such a vast variety of food and that one apple seed can make a tree that generates tons of apples is something which must surely point us to the Designer Craftsman, that is God. God is a gracious God. He gave us both rain and fruitful seasons. He needn't have. He is not required to do so. But He has. He created all things wonderfully for our blessing. It was sin that led to the curse on creation making it hard to grow food without sweat and toil. Such truth, of course, comes only from the Scriptures.⁷⁵⁶ However the rain and the fruitful seasons, and contemplation of these, ought to show us that there is a God in heaven.

The second instance in the Acts of the apostles occurred whilst Paul was alone in Athens.⁷⁵⁷ Stirred up in spirit for the gross errors he saw in Athens, Paul was heard preaching by various philosophers of an Epicurean and Stoic nature. Epicureanism, was a philosophy that originated with Epicurus (341-270 BC). It involves the following:

- A purpose to human life (happiness, absence of physical pain and mental disturbance).
- A theory of knowledge based in empiricism (sensations, including pleasure and pain, are true and reliable criteria).
- A description of nature based on atomistic materialism.

755 Psalm 119:68.

756 Genesis 3:17-19.

757 Acts 17:16-31.

- A naturalistic account of evolution, from the beginning and formation of the world to the rise of human societies.⁷⁵⁸

Stoicism was a philosophical movement that appeared in the Hellenistic period (320-30 BC). Its origins come from Athens. Part of their belief system involves the suppression or elimination of certain emotions. Roman stoics held that philosophers were immune to misfortune and that virtue was considered to be sufficient for happiness. It also embraced aestheticism.⁷⁵⁹ In Zeno's version of stoicism there were three essential parts:

- Ethics – a moderate version of cynicism.
- Physics – based on Plato's Timaeus – comprising a universe with active and passive principles and a cosmic web of cause and effect.
- Logic – a theory of knowledge based on empiricism and naturalism.⁷⁶⁰

Stoics and Epicureans debated philosophy at Athens, but it is evident that both held to materialistic views of the nature of things. Things could only be accepted which were evident to the senses. Epicureanism also embraced atomism which originated from Leucippus and Democritus in the fifth century BC. Although this idea is not identical to the modern atomic view point, it is nevertheless a materialistic conception of existence.

Given these backgrounds, Paul's preaching of Christ and the resurrection caused commotion and so the gathered philosophers who liked nothing better than arguing and debating, sought him to explain what it all meant.⁷⁶¹ When Paul got his chance to speak he started by pointing to their ignorance. They had an altar with an inscription to the unknown God.⁷⁶²

23 for as I was passing through and considering the objects of your worship, I even found an altar with this inscription: TO THE UNKNOWN GOD. Therefore, the One whom you worship without knowing, Him I proclaim to you: **24** God, who made the world and everything in it, since He is Lord of heaven and earth, does not dwell in temples made with hands. **25** Nor is He worshipped with men's hands, as though He needed anything, since He gives to all life, breath, and all things. **26** And He has made from one blood every nation of men to dwell on all the face of the earth, and has determined their pre-appointed times and the boundaries of their dwellings, **27** so that they should seek the Lord, in the hope that they might grope for Him and find Him, though He is not far from each one of us; **28** for in Him we live and move and

758 <https://plato.stanford.edu/entries/epicurus/>

759 <https://plato.stanford.edu/entries/stoicism/>

760 <https://www.iep.utm.edu/stoicism/>

761 Acts 17:19.

762 Acts 17:23.

have our being, as also some of your own poets have said, ‘For we are also His offspring.’ **29** Therefore, since we are the offspring of God, we ought not to think that the Divine Nature is like gold or silver or stone, something shaped by art and man’s devising. **30** Truly, these times of ignorance God overlooked, but now commands all men everywhere to repent, **31** because He has appointed a day on which He will judge the world in righteousness by the Man whom He has ordained. He has given assurance of this to all by raising Him from the dead.”⁷⁶³

Following this shocking introduction Paul speaks of God as the Creator who gives life to all.⁷⁶⁴ Then Paul notes from his understanding of Genesis and Biblical history, that all of mankind stems from “*one blood*,” and that the nations and their boundaries are set by God in such a way that will allow them to seek God.⁷⁶⁵ Next, Paul refers to something the people of that place and time were familiar with, namely that “*we are the offspring of God*.” This leads Paul to say that God’s “*Divine Nature*,” His essential nature and being, must not be reduced to material things – the basis for both epicurean and stoic philosophy.⁷⁶⁶ Finally Paul brings his sermon to a conclusion by telling these great philosophers that whilst their “*ignorance*” had been overlooked, now they were instructed to repent because judgement day is surely coming.⁷⁶⁷ Thus the Lord left another form of witness to Himself in the form of certain things all people knew by nature, that there is a God over all, and that we have (somehow) come from His hands.

Where can wisdom be found?

Taking a different approach we note that in several places in Scripture the question is asked: where can wisdom be found? Is it within man’s grasp? To begin with we start by looking at some words from the book of Job. You will recall that Job suffered terribly, but during all his illness and misfortune he never blamed God, (although he did moan and groan somewhat). In chapter 28 we come to the middle of a long discourse by Job which stretches from Job 26 to Job 31. In that middle part we see Job grappling with the question: where can wisdom be found? Remember that these are not just the musings of a suffering man, but words God wants us to grasp as coming from Him. The Lord uses Job as His spokesperson who speaks from his own heart, but the words come ultimately from God.

12 “But where can wisdom be found? And where *is* the place of understanding? **13** Man does not know its value, nor is it found in the land of the living. **14** The deep

763 Acts 17:23-31.

764 Acts 17:24,25.

765 Acts 17:26,27.

766 Acts 17:28,29.

767 Acts 17:30,31.

says, ‘*It is not in me*’; and the sea says, ‘*It is not with me.*’ **15** It cannot be purchased for gold, nor can silver be weighed *for* its price. **16** It cannot be valued in the gold of Ophir, in precious onyx or sapphire. **17** Neither gold nor crystal can equal it, nor can it be exchanged for jewellery of fine gold. **18** No mention shall be made of coral or quartz, for the price of wisdom *is* above rubies. **19** The topaz of Ethiopia cannot equal it, nor can it be valued in pure gold. **20** “From where then does wisdom come? and where *is* the place of understanding? **21** It is hidden from the eyes of all living, and concealed from the birds of the air. **22** Destruction and Death say, ‘we have heard a report about it with our ears.’ **23** God understands its way, and He knows its place. **24** For He looks to the ends of the earth, *and* sees under the whole heavens, **25** To establish a weight for the wind, and apportion the waters by measure. **26** When He made a law for the rain, and a path for the thunderbolt, **27** Then He saw *wisdom* and declared it; He prepared it, indeed, He searched it out. **28** And to man He said, ‘behold, the fear of the Lord, that *is* wisdom, and to depart from evil *is* understanding.’ ”⁷⁶⁸

Wisdom cannot be found by searching in any place either deep or high, far or near. In fact, Job tells us, that wisdom “*is hidden from the eyes of all living,*”⁷⁶⁹ However “*God understands its way, and He knows its place.*”⁷⁷⁰ Then Job tells us that to fear the Lord is the starting point for wisdom for man. This is the first time this statement is made in Scripture chronologically. We need to combine these thoughts of wisdom being hidden and the only way for man to reach it is to fear God with the statement Paul makes (to which we frequently refer) in Colossians 2:

... Christ, **3** in whom are hidden all the treasures of wisdom and knowledge.⁷⁷¹

The same basic teaching can be found in the New Testament in the writings of Paul who makes reference to statements made in the Old Testament about the lack of wisdom among men. At the start of his first letter to the Corinthians Paul seeks to remind the Christians of that city that the message they have is foolishness to this world. It is foolishness because man promotes heroes and applauds achievements and so on, whilst the Lord cuts through such failures to send His Son to die on the cross.

18 For the message of the cross is foolishness to those who are perishing, but to us who are being saved it is the power of God. **19** For it is written: “I will destroy the wisdom of the wise, and bring to nothing the understanding of the prudent.” **20** Where *is* the wise? Where *is* the scribe? Where *is* the disputer of this age? Has not God made foolish the wisdom of this world? **21** For since, in the wisdom of God, the

768 Job 28:12-28.

769 Job 28:21.

770 Job 28:23.

771 Colossians 2:2b,3.

world through wisdom did not know God, it pleased God through the foolishness of the message preached to save those who believe. **22** For Jews request a sign, and Greeks seek after wisdom; **23** but we preach Christ crucified, to the Jews a stumbling block and to the Greeks foolishness, **24** but to those who are called, both Jews and Greeks, Christ the power of God and the wisdom of God. **25** Because the foolishness of God is wiser than men, and the weakness of God is stronger than men. **26** For you see your calling, brethren, that not many wise according to the flesh, not many mighty, not many noble, *are called*. **27** But God has chosen the foolish things of the world to put to shame the wise, and God has chosen the weak things of the world to put to shame the things which are mighty; **28** and the base things of the world and the things which are despised God has chosen, and the things which are not, to bring to nothing the things that are, **29** that no flesh should glory in His presence. **30** But of Him you are in Christ Jesus, who became for us wisdom from God—and righteousness and sanctification and redemption— **31** that, as it is written, “He who glories, let him glory in the Lord.”⁷⁷²

Paul quotes from Isaiah 29:14 and makes reference to the questions posed in Isaiah 19:12 and repeated in Isaiah 33:18 in this passage. The wisdom of this world is foolishness because through its wisdom the world “*did not know God*.”⁷⁷³ God's choice of the weak and that which is deemed foolish by this world, is done to show up the utter bankruptcy of this world's (so-called) wisdom.⁷⁷⁴ Only through Christ and what He has done will man reach wisdom. Paul ends the chapter with a reference to Jeremiah which we quote in full below:

23 Thus says the Lord: “let not the wise *man* glory in his wisdom, let not the mighty *man* glory in his might, nor let the rich *man* glory in his riches; **24** But let him who glories glory in this, that he understands and knows Me, that I *am* the Lord, exercising loving-kindness, judgment, and righteousness in the earth. For in these I delight,” says the Lord.⁷⁷⁵

Our glory and delight should come from nothing other than knowing God who is our wisdom.⁷⁷⁶ To reinforce the point he makes Paul repeats some of the sentiments in chapter 3 of 1 Corinthians where he quotes from Job 5:13 and Psalm 94:11:

8 Let no one deceive himself. If anyone among you seems to be wise in this age, let him become a fool that he may become wise. **19** For the wisdom of this world is foolishness with God. For it is written, “He catches the wise in their *own* craftiness”; **20** and again, “the Lord knows the thoughts of the wise, that they are futile.” **21** Therefore let no one boast in men. For all things are yours: **22** whether Paul or Apollos or Cephas, or the world or life or death, or things present or things to come

772 1Corinthians 1:18-31.

773 1Corinthians 1:21.

774 1Corinthians 1:27,28.

775 Jeremiah 9:23,24.

776 My favourite hymn of all time: “Be Thou my vision” stresses this thought wonderfully.

—all are yours. **23** And you *are* Christ's, and Christ *is* God's.⁷⁷⁷

And so we learn that for all his vaunted achievements and boasts, man knows and understands nothing at all, and has no real wisdom. This is demonstrated clearly through the simple fact that for all his effort man just does not come to the knowledge of God. This lack of wisdom is also the main thrust of the book of Ecclesiastes, which teaches that whilst God made man upright, man (in his rebellion) has sought other explanations, and that, whatever he does man cannot discover true truth.⁷⁷⁸

What modern science claims about creation.

Modern science does not believe in the concept of creation and has no time for any theological discussion concerning how God has revealed Himself. Ever since the French scientist and mathematician Pierre-Simon Laplace declared to Napoleon Bonaparte around 1802 that he had no need of God as an hypothesis, modern science has operated on a materialistic basis and from a materialistic framework.⁷⁷⁹ As such it treats reality as an interconnected web of matter-energy that has emerged or condensed in various diverse forms depending upon its local environment. Ultimately all that modern science can offer us is a mathematical approximation, which attempts to sum up the observed ordered data from the universe as perceived by a humanity that has rejected God. The trajectory of human thought does not just lead us away from God and His creation, it does not just distort the truth or manipulate it, it denies it altogether and offers a completely different and complex alternative.

Despite the fact that God has revealed Himself in some ways through creation as Psalm 19 and Romans 1:18f teach us clearly, and that such general revelation is unmistakable, we discover that man is utterly blind, having suppressed the truth to further his own selfish ends. These unassailable facts (demonstrated from Scripture) leave us with no uncertainty. General revelation cannot be simply equated with modern science.

The nature of modern science.

In chapter 1 we made an attempt at characterising the nature of modern science. One of the most important features that came out of that discussion was that modern science is a very human enterprise. Despite the fact that much ink has been spilled by all sorts of people to show the human

777 1Corinthians 3:

778 Ecclesiastes 7:29; 8:16,17.

779 <http://www.scientificlib.com/en/Physics/Biographies/PierreSimonLaplace.html>

and failing nature of modern science, it is still the case that most people, (scientists especially) consider that what they do is merely discovery. This view, that scientists use sophisticated methods and equipment to uncover the *truths* buried within the universe, is naïve. Such a “realistic” view point (that the universe can give us truths if we look hard enough for them) is the one held by the vast majority of modern scientists.⁷⁸⁰ For example take the Science Council's definition of science:⁷⁸¹

“Science is the pursuit and application of knowledge and understanding of the natural and social world following a systematic methodology based on evidence.”⁷⁸²

Such a definition seems to give the impression that the “*natural world*” is simply there for the understanding. If you use a good systematic method from gathered evidence, then you will certainly gain knowledge. But the very phrase “*natural world*” is loaded with meaning and assumptions which (typically) exclude God and the supernatural. However this idea that the natural world will simply reveal truths to the serious enquirer is not one which the philosophy of science accepts as we have already noted in chapter 1.

There were several other features of modern science we discussed which it is important to always bear in mind. Modern science is not static but dynamic and changes with time. This is in stark contrast to the gospel, to Scripture, and to the ways of God. The Lord is often pictured in Scripture as a “*Rock*” signifying His immovability and unchanging nature.⁷⁸³ He cannot change because He is perfect. Consequently what He has said to us (through Scripture) cannot change either because it partakes of His divine nature. We noted that modern science likes to be in authority and this is how it is often perceived by the public. Its goals and aims are to arrive at a complete characterisation of the universe. Such features display clearly its opposition to the Scriptures and to faith in Christ. The Lord Jesus brooks no rivals. We either throw our lot in completely with Him or we go another way. It just isn't possible to mix and match. Christ will have all or nothing at all.

Perhaps a major feature of modern science is its view of creation. Instead of accepting the Biblical view point and commencing investigations from that stance, modern science declares that the universe is physical only and must be understood in an evolutionary-developmental sense. How can such views be accommodated by the Christian? It simply isn't possible. When the Bible tells us

780 A. E. McGrath. *The Foundations of Dialogue in Science & Religion*. 1988. Blackwell Publishers. P154. “*Most practising natural scientists operate on the basis of some form of realism.*”

781 The Science Council is a registered charity that gained its Royal Charter in 2003. Its stated purpose is: “*to promote the advancement and dissemination of knowledge of and education in science, pure and applied.*”
<https://sciencecouncil.org/about-us/our-governance/>

782 <https://sciencecouncil.org/about-science/our-definition-of-science/>

783 Deuteronomy 32:4;

that God created all things in the past over a period of six days and that not very long ago, (about 6,000 years ago), such facts deny the basis and position of the modern scientist. We have learnt also that because it is human, modern science suffers from the many limitations of human frailty, not to mention sinfulness.

Given this very brief recap of our discussions in chapter 1 the question remains: how shall the Christian view modern science? Ian Barbour has suggested four different ways in which people have considered the relationship between modern science and faith (or Scripture as the objective representation of the Christian faith) and we shall consider these in a moment. In part of Barbour's work he also outlined four distinct views of what modern science calls "theory," or the conceptual appreciation of what we observe. I reproduce them here because it will be helpful in assessing both the relationship between faith and modern science, and how the Christian ought to re-formulate a *science* which can be engaged in to the glory of God.

- Theories act as summaries of data, (positivism).
- Theories act as useful tools (instrumentalism).
- Theories are simply mental constructs (idealism).
- Theories represent the real world (realism).⁷⁸⁴

If we look to the modern scientists, it is clear that in general most are realists. There has been some attempt at modifying this naïve realism (such as A. F. Chalmers has suggested), but by-and-large, scientists believe that they are discovering truth albeit a tentative truth!

In thinking about these four views of theory I cannot help but wonder what a Christian response to them would be. We have discussed the idea that as far as the Bible (and thus God) is concerned, man's mind (his thinking) is dark and futile. The Christian does not have an instantly pure mind, but wrestles with the old mind as he (or she) seeks to be renewed and not conformed to this world's ways. Are the ways of thinking Barbour outlines above the only way? I am aware of the fact that historically idealism, empiricism (positivism), and instrumentalism have all been discredited by philosophy and deemed irrelevant by most scientists. However it seems to me at this juncture that considering a theory in terms of its usefulness and connection with observations cannot really be a bad thing at all. As a Christian I accept that when God created all things, we as His people have a joyous duty to engage in what He has created with our minds. In theology it is often the case that we make use of analogy. Ezekiel is a case in point. When he saw the Lord in His

784 **Ian G. Barbour.** Issues in Science and Religion. P162f.

glory he had to make comparisons with everyday objects.⁷⁸⁵ Our Saviour made reference to everyday objects and situations in order to teach the masses, and in describing the kingdom of heaven He too resorted to using the phrase “... *is like* ...”⁷⁸⁶ Given this, is it not possible for the Christian to utilise some form of analogy in thinking when it comes to creation?

How should a Christian view modern science?

From the above we have come to understand that God speaks clearly in and through creation, but man (and specifically the modern scientist) refuses to hear. God's speech in creation does not conflict at all with His word in Scripture. It simply isn't possible that the God of all things would speak in one way through what He has made, and another through His word, for God is One. However, mankind has built for himself another scheme and framework with which to view the universe. Mankind ignores God (often denying His very being), and rejects what God has to say in his pursuit of modern science, using a different foundation from which to explore the universe. Given what we have learnt about modern science and what we understand about the Scriptures, how shall we view their interaction?

Ian Barbour, a physicist and pioneer writer on the issue of science and religion, outlined four distinct ways that these two disciplines have been viewed by various people.⁷⁸⁷ These are shown in detail in table 9. Other writers suggest more categories but these classifications are based on sub-divisions of the four main ones shown here.

From what we have come to understand with regard to modern science and Scripture (from which godly theology may be derived), the only real relationship between modern science and Scripture is one of warfare or conflict. This follows surely because the world hates God, hated Christ and detests Christians. If that sounds too harsh consider the following Scriptures. Remember these are the truths that God would have us known and understand.

... the carnal mind *is* enmity against God ...⁷⁸⁸

Whoever therefore wants to be a friend of the world makes himself an enemy of God.⁷⁸⁹

785 Ezekiel 1:4,5,16,26,28.

786 Matthew 13:24,31,33,44,45,47,52.

787 **Terence Bateman**. The Science-Religion Discourse: Models of Relation beyond Barbour. Indian Journal of Science and Religion. January 1st 2008. See also: **Ian G. Barbour**. Ways of Relating Science and Theology. In R.J. Russell, W.R. Stoeger, G.V. Coyne eds., Physics, Philosophy, and Theology: A Common Quest for Understanding (Vatican City State: Vatican Observatory, 1988), P 21. **Ian G. Barbour**. Religion in an Age of Science. (The Gifford Lectures). 1990. SCM Press. PP 4f, 10f, 16f, 23f.

788 Romans 8:7.

789 James 4:4.

Table 9: The four ways in which modern science is related to Theology..

Way of relation modern science to Theology (Scripture).	Details.
Conflict (Warfare)	modern science and Theology are in conflict and war with one another. Both set the ground and foundation for all things, and both seek an all-encompassing view of all things. The two enterprises look at the world as a whole from very different perspectives and come up with different “answers” to the meaning of life.
Independence (Divorce)	modern science asks different questions, uses a different language and employs different methods to Theology. The two operate in different realms or kingdoms. Both offer “truths” which are distinct and have nothing in connection with one another. modern science speaks of physical things and Theology speaks of spiritual things. The two endeavours do not meet.
Dialogue (Complimentary, Marriage)	modern science and Theology draw “truths” from a single world but viewed with different tools. The information from both must be accepted as true and combined in a complimentary way. Truth established from modern science must be allowed as true and the same is to be said for Theology. Each has its main sphere of influence, but each must respect the other and allow it to contribute to the whole.
Integration (Synthesis, Syncretism)	Information and “truth” from both modern science and Theology must be used to forge a new single integrated world view. Neither modern science nor Theology tell the whole story. Information from both on a particular subject or theme must be combined to tell the ultimate story.

The world ... hates Me because I testify of it that its works are evil. ⁷⁹⁰

And you will be hated by all for My name’s sake. ⁷⁹¹

18 If the world hates you, you know that it hated Me before *it hated* you. **19** If you were of the world, the world would love its own. Yet because you are not of the world, but I chose you out of the world, therefore the world hates you. ⁷⁹²

I have given them Your word; and the world has hated them because they are not of the world, just as I am not of the world. ⁷⁹³

⁷⁹⁰ John 7:7.

⁷⁹¹ Luke 21:17.

⁷⁹² John 15:18,19.

⁷⁹³ John 17:14.

Do not marvel, my brethren, if the world hates you.⁷⁹⁴

Given these statements, is there any wonder that there is conflict between modern science and (true godly) theology? The world is at war with God and hates Christ because He has told the world the truth, “*that its works are evil.*”⁷⁹⁵ This obviously includes the huge enterprise we know as modern science. To those who may object and say that modern science was not around at the time of Christ I suggest that modern science is no more nor less than the current thinking of sinful man. It matters little what era we may pick or consider. Man has thought in schemes and enterprises in opposition to God.⁷⁹⁶ There are other reasons why this conflict model is the clear choice but the above is sufficient for our purposes.⁷⁹⁷

Now for some this model is too harsh. As Christians ought we not strike a note of conciliation? Ought we not sue for peace? Well I think a perusal of the book of Jeremiah should lay that line of reasoning in the dust.⁷⁹⁸ Those who press for peace are often blissfully unaware of the fact that God has made peace only through Christ. Some can see great good in modern science and argue that on that basis we must adopt some form of complimentary view point. Again the problem is that modern science has usurped authority over the realm of knowing. The method of intelligence and the realm of reality are both features all humans everywhere can connect with and display. Modern science does not own either. When we undress the garb and make-up of modern science we see underneath all that is wrong about humankind. Sin, rebellion, self-seeking, denial of God (the very centre of creation), rejection of truth and so on. Why then do we admit it on any front? The facts or data in reality we all observe by virtue of being human and inhabiting this planet, are open to all. It is just a question of the way in which we view them and for what purpose we take note of their presence in the world. None of the other three models for relating modern science with theology (or Scripture) will do. The two are mortal enemies. There can be no marriage because the one will always seek to dominate the other. To some extent the history of modern science since 1600 has shown this to be true. A divorce model will not work either. At the very least the two will fight over custody of the offspring! Not many have accepted a synthesis of the two. There are some, but what they produce is something few recognise either from a Biblical perspective or from a

794 1John 3:13.

795 John 7:7.

796 Ecclesiastes 7:29.

797 The reader might like to consider the whole need for redemption, renewing of the mind and the rescue from sin for starters. When Christ prayed to the Father in the Garden of Gethsemane it was clear that there was no other way except Christ's death on the cross by which mankind could be redeemed. It follows that all of mankind's efforts must have failed. That includes all those subsequent to Christ's coming.

798 Jeremiah 6:14; 8:11. The books of Isaiah and Jeremiah would pay great dividends for any who want to consider the subject of true peace.

secular standpoint.⁷⁹⁹

Now given that modern science has a secular base and eschews a godly foundation, and given that God has revealed Himself purely in Scripture and faithfully in creation, is there not a better way? Is there not the possibility of us drawing from creation with Scripture as a foundation? In the next chapter we shall embark on a quest of considering how the Christian can view the created order from a Biblical world view. We will refer to this as “*Biblical science*.”

799 **Arthur Peacocke**, a biologist and Anglican priest is one, but his views have commanded almost no respect nor influence. See for example: See, for example: **Arthur Peacocke**. *Theology for a Scientific Age*. (Being and Becoming – Natural, Divine and Human). 1993. Fortress Press. **Arthur Peacocke**. *Creation and the World of Science*. (The Bampton Lectures: 1978). 1979. Oxford: Clarendon Press. **Arthur Peacocke**. *God and Science*. (A Quest for Christian Credibility). 1996. London: SCM Press. **Arthur Peacocke**. *From DNA to Dean*. (Reflections and Explorations of a Priest-Scientist). 1996. Norwich: The Canterbury Press. **Arthur Peacocke**. *All That Is*. (A Naturalistic Faith for the Twenty-First Century). 2007. Edited by Philip Clayton, Minneapolis: Fortress Press.

Chapter 7: A Biblical view of “science.”

(How the Christian can explore God's creation).

Having shown that modern science, and in particular, evolution is most emphatically not the way to go, we cannot leave the stage without supplying some alternative. How should we engage in what may be called the scientific endeavour? Should the Christian be engaged in such a pursuit? Now as with our discussion of modern science it will be best to proceed on the basis of several categories which we may form into principles. At the outset we establish that our starting point is not self and man-centred views and ideas as the secularists would use, but God-given ones. We have suggested that there ought not to be a category called “science” as distinct from other subjects because the method of science is, in reality, simply the method of intelligence that all of us use by virtue of the fact that we are humans created in the image of God. We have put the word “science” in inverted commas in the heading simply to show that whilst the Christian is to investigate the world, this does not mean there is to be a separate subject distinct from others. Perhaps it may be considered under the general heading of theology, that is the theology of creation. Such a suggestion at least puts the endeavour in the right framework, for we are looking into **God's** creation, hence we are considering the words of God with respect to His work of creation.

God first.

To begin with we must start with God. Modern science starts with what it calls **nature** but stumbles because man himself is a very part of that nature, and in an effort to separate out sense-impressions from thought has wavered this way and that in an ever meandering and wandering fruitless search for certainty. Instead we begin with God and His thoughts for His are much higher and therefore infinitely better than ours.⁸⁰⁰

But what do we mean when we insist on starting with God? Well in the very first place we recognise Him as He has revealed Himself. The only place we can receive from Him is by means of Scripture. This means that Scripture, not the universe (however we may define it), comes first. To be specific we need a mind and heart that is ready and willing to receive what God has to say on the matters that impinge upon any search for the truth. This means a Biblical and theological approach

800 Isaiah 55:9.

is necessary. But before we launch into a discussion of Biblical doctrines and theology we need to remind ourselves of what we discussed earlier. We are not simply on a quest of intellectual understanding. The mind is important, certainly, but it does not characterise us wholly. We need to be mindful of our relation to God and we need to be willing to follow His lead. Hence a devotional attitude is needed. We do not shy away from the fact that we are created to worship God. so in our seeking to know and discover we are still in an act of worship.

With these introductory thoughts we move to consider some details. To start with, a Biblical approach is the best place to begin, but an application of theology to that will also be necessary. And so we open our Bibles on page one and we learn straight away that God (Elohim) is the Creator. The Almighty all-powerful One has brought all things to be through His word (“*God said*”).⁸⁰¹ From later Scriptures we can supplement this knowledge with the understanding that the word of God is none other than the second person of the holy trinity, Jesus Christ, hence our theology supplements our approach to the Biblical passage under consideration.⁸⁰² God is the Author of creation which is spoken of by Him as a finished event and one brought about in concert with the Holy Spirit and with the Son of God who is the agent.⁸⁰³

For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him.⁸⁰⁴

The holy trinity, Father, Son and Holy Spirit brought all things (visible and invisible) into existence by an act of will, miraculously, in the beginning. Although creation was spread out over six literal days, the acts within those days were instantaneous as Psalm 33:6,9 informs us. Creation then is God's handiwork and is thus owned by Him.

The next thing we observe as we look at what God has said about creation is that all He has done is “*good*.”⁸⁰⁵ This is as a consequence of His character which is good.

Nevertheless He did not leave Himself without witness, in that He did good, gave us rain from heaven and fruitful seasons, filling our hearts with food and gladness.⁸⁰⁶

801 This phrase comes ten times in Genesis 1: Genesis 1:3,6,9,11,14,20,24,26,28,29.

802 John 1:1f,14,18.

803 The Spirit hovered over the waters in Genesis 1:2, and God breathed life into Adam in Genesis 2:7 – see also Psalm 51:10; 104:30; Isaiah 42:5.

804 Colossians 1:16.

805 Genesis 1:4,10,12,18,21,25,31.

806 Acts 14:17.

In fact we can go further, God is good and does good, and there is no evil or error in Him or what He does at all.⁸⁰⁷ Creation therefore displays some aspects of God's very character. As further proof that this statement applies to other attributes of God consider the following two Scriptures:

The heavens declare the glory of God; and the firmament shows His handiwork.⁸⁰⁸

For since the creation of the world His invisible *attributes* are clearly seen, being understood by the things that are made, *even* His eternal power and Godhead.⁸⁰⁹

Thus creation is imbued with the very character of God. It shows forth the fact that God created and formed it as an infinitely powerful craftsman, and it shows forth His glory too. It displays His eternal power, that is, His infinite and everlasting never fading power, and it even displays His deity (Godhead). Given these statements we must not think, therefore, as modern science has a tendency to do, that the whole of the universe is simply a mechanical or physical object that exists autonomously and independently. The Divine Nature which created all things (which therefore partake in some reflective way of that nature) must never be likened to physical or material objects. Whilst we can say that “*we live and move and have our being*” in God, we cannot thence say that the things we see around us (like “*gold or silver or stone*”) or even those things “*shaped by art and man's devising*” are divine or to be worshipped.⁸¹⁰ In other words, creation is divine only in the sense that God created it and it displays aspects of His nature, for creation is a separate thing from God, and yet under His direct control and involvement.

Thus whilst creation is separate from God, it is never beyond God. He is transcendent but He is equally immanent. Nothing escapes His notice, and nothing takes Him by surprise. Two statements concerning Christ as the agent of creation point to this immediate control of God in Christ:

And He is before all things, and in Him all things consist.⁸¹¹

... upholding all things by the word of His power ...⁸¹²

The very fabric of creation is held and upheld by Christ through His word. However the immanence of God is a thought pervasive throughout Scripture. David in Psalm 139 spoke of this intimacy of

807 Psalm 5:4; 119:68; 136:1; 143:10.

808 Psalm 19:1.

809 Romans 1:20.

810 Acts 17:24-29.

811 Colossians 1:17.

812 Hebrews 1:3.

God in creation with regard to the Holy Spirit:

7 Where can I go from Your Spirit? Or where can I flee from Your presence? 8 If I ascend into heaven, You *are* there; if I make my bed in hell, behold, You *are there*. 9 If I take the wings of the morning, *and* dwell in the uttermost parts of the sea, 10 even there Your hand shall lead me, and Your right hand shall hold me.⁸¹³

There is no escaping the presence of God because He is everywhere present all at once. And so we see that God not only created all things, but that He has not left it alone to run its course as a wound-up clock as Deism suggested. He is intimately involved with every detail and aspect of the entirety of His work.⁸¹⁴

Much more could be said about God and His creation but there are other things we need to establish as we read through His word. Whilst God is good, and we know that He will always be good because He is God, His creation is not good now. It was created good as we observed by reading Genesis 1. It is now under a curse. We read of this in Genesis 3. The apostle Paul recognised this truth in his letter to the Romans. He wrote:

For the creation was subjected to futility, not willingly, but because of Him who subjected *it* in hope.⁸¹⁵

This fact is so important we need to stop and pause to take it in. The Lord placed a curse on creation because of Adam's disobedience in the garden. We learn that it was Woman's fall which Adam did nothing to prevent (he should have taken a lead) and the consequences have been devastating to the world within which we live. The ground was cursed so that the very fabric of all things is distorted and crooked. The Lord still upholds all things and keeps creation together but not in the good way it was when originally created. What is the relationship between this cursed world we inhabit and the one created by God in the beginning? No one can fully answer that question. We have the data of Genesis 1 and 2 alone that speak of that pristine creation and so whatever we might say about it, it must be in conformity with what God has revealed there. In our current world, we have to take into account this fact of a cursed and fallen creation.

Why did God subject creation to the curse, or to "*futility*" as Paul puts it? Well the answer is clear. God did it in hope. To leave man in a good creation in his rebellious state would have been terrible. The fall of creation forces man to cry out: help Lord! If creation was still good then there would be no reconciliation with God. Now God is not harmed or influenced or altered in any way

813 Psalm 139:7-10.

814 Psalm 104:27; 145:15.

815 Romans 8:20.

by our sin and rebellion. However if we were rebellious in a good world, our arrogance and independence would lead us further and further from the goodness of God. This fact of the fall is the one aspect you see that is missing in the story of modern science. Creation was held to in the earliest days of the scientific revolution, but no account was taken that what they were studying was not the original good creation but a fallen one subjected to futility. I wonder if this fact would have made a difference to Darwin? He could not accept that a good God would create a world in which there was parasitism and so on, and so he formulated a new way of thinking (evolution) and left off his trust and belief in God.

One final aspect of this concept of starting with God needs to be mentioned and that is the need for redemption. Creation has been subjected to futility but that is not the end of the story. It has been subjected in hope. We quoted Romans 8:20 but we need now to continue and look at the verses that follow:

20 For the creation was subjected to futility, not willingly, but because of Him who subjected *it* in hope; **21** because the creation itself also will be delivered from the bondage of corruption into the glorious liberty of the children of God. **22** For we know that the whole creation groans and labours with birth pangs together until now. **23** Not only *that*, but we also who have the first fruits of the Spirit, even we ourselves groan within ourselves, eagerly waiting for the adoption, the redemption of our body. **24** For we were saved in this hope, but hope that is seen is not hope; for why does one still hope for what he sees? **25** But if we hope for what we do not see, we eagerly wait for *it* with perseverance.⁸¹⁶

Thus when Christ died and rose again, He did not do it merely to save some people from sin.⁸¹⁷ He did it with a view to redeeming all of creation. This creation has once already been washed by the waters of the flood.⁸¹⁸ It awaits its final purification by fire in the coming again of Christ.⁸¹⁹ When Christ returns there will be a new heavens and a new earth in which there will be no taint of sin, error, evil, decay, disaster, disease or death.⁸²⁰

In this brief foray into what God has said we have only considered things from the perspective of God's action viewed in one way, thus: (good) **creation** – **curse** (because of sin) – **redemption** (in Christ alone). There are many other ways in which the action of God may be viewed and each of these will have insights and helps to our understanding. Answers in Genesis suggest seven historical themes as follows: Creation, Corruption, Catastrophe, Confusion, Christ, Cross,

816 Romans 8:20-25.

817 This aspect of Christ's work is very important of course!

818 Genesis 6-9.

819 2Peter 3:10f.

820 Revelation 21:1-5.

Consummation.⁸²¹ The thing to bear in mind is to keep looking in Scripture, and keep asking God to speak to you so that you will have an increasingly clear and better view of how to view all things, including creation.

Purpose.

In considering a Biblical perspective to replace modern science we come now to a theme derived from what we have looked at thus far. Modern science is blind and purposeless. Modern scientists have aims and goals but these stem from personal independent wishes (“I want to understand all things from my point of view”). The direction that modern science takes has no aim in itself. This can be seen in any reading of the history of science. It oscillates and varies from age to age. But for the Christian, purpose and meaning take a more prominent part. Creation was not simply made as an object with no purpose. When God made mankind He placed within us the ability to relate to Him. We were made in the very image of God.⁸²² Mankind (male and female) was made with a purpose and a mission. They were to have rule or dominion over all the earth, they were to be fruitful, and they were to multiply filling the whole earth.⁸²³

But above and beyond the particular purpose given to mankind, the very form of Genesis 1 leads us to the idea that God had a purpose in creation. Genesis 1 is undoubtedly an historical record of how God created all things. We know this both from the way it was written, and from the whole tenor of Scripture regarding creation. However when we ask the question: why did God take six days to create? we are left with a slight puzzle. I say “slight” puzzle because God's statement in Exodus 20:8-11 informs us that our work pattern of six days followed by a day of rest is to reflect His work in creation. However I contend that still leaves some further puzzle. Why did God create in the way He did? Why create light first (after initial creation)? Why then did He separate the waters into two parts calling the one “*heaven*.”? Why did He next gather waters below and make dry land appear which He named “*earth*”? Well I could pursue this set of questions to cover all God's creative acts in Genesis 1, but the real question we really need to ask is this: since God is perfect in every way, what was His purpose in creating all things in the precise way that He did? If you look carefully at the major themes of God's actions I believe that you can see His work of redemption reflected in His work of creation. He created light so that we can see. This is the first step in salvation – the opening of the eyes. He separates heavenly things from earthly, thus making a distinction between things above and things below. Then He makes a firm place on which His

821 <https://answersingenesis.org/bible-history/so-what-are-the-7-cs-anyway/>

822 Genesis 1:26-28.

823 Genesis 1:28.

people can stand, speaking of the Rock – a firm foundation. Then He provides for all making an abundance of fruit, and then we see the air and the seas teeming with an abundance of life. This very brief analysis shows that God is not arbitrary in the way He creates. He created things with a purpose. The same is also true when we see how God actually created mankind male and female as recorded in Genesis 2. There is a definite aim and purpose in showing us how God created Adam from the dust and then breathing life into him, and then in the details of how He created woman. God is not arbitrary and His creative acts demonstrate things. (We shall reconsider this spiritual aspect of the Genesis creation accounts in chapter 8.) We could, of course, extend this line of reasoning to thinking about the minutiae such as the creation of flowers in conjunction with their insect pollinators. What was His reason for doing this? Is it not (superficially speaking) to declare the inter-relatedness and inter-dependence of things? There may well be other reasons and purposes which the reader may care to explore! My point simply is that creation is not meandering and meaningless as Solomon suggested if we view all things “*under the sun*” alone. God does not do anything without meaning. God does not waste time on incidental or irrelevant things. All is needful and necessary (for creation). This means that when we look at the world (at creation) we ought to have in mind its purpose, its goal. For what reason did God create this? Why did He create it in this way? Modern science rejects the concept of teleology or purpose but the Christian not only affirms such but actively seeks it out! After all do you not look for the reason and purpose an artist has for doing some artwork or work of craftsmanship? Why paint in that way? Why sculpt that subject? What motivated you and what did you intend to achieve? If the artist and craftsman displays their work to make some statement at least, then why are we loathe to consider creation as displaying some purpose or meaning?

Order.

Since God is a God of order and not of confusion, it follows that what He does is ordered.⁸²⁴ This feature of creation is readily evident. We rely on it daily. The fact that objects fall to the ground every time they are released from our grasp is something we learn to live with from an early age. The rising of the sun, the refreshing nature of water, the taste of salt, the course of the stars and the moon in the sky, the pattern of the seasons, the life-cycles of creatures, the sharpness of a knife and its effects, the benefits of good food and many more things besides are things we take for granted. All of these are constant because God has created them so. If the action of gravity (however we may define it) suddenly changed or operated differently at different times how would that make us feel?

824 Exodus 25:9,30; 26:30; Numbers 8:4; 2Samuel 23:5; 1Chronicles 15:13; Psalm 37:23; 1Corinthians 14:33,40.

If a sharpened knife failed to slice the onions I am preparing what would I do? This regular and patterned order to creation is derived from God whose very nature is ordered and constant. God is not someone who lies and whose character changes day by day. With Him there is “*no variation or shadow of turning*,” so that in a similar way creation is not arbitrary nor is it capricious varying with the seasons.⁸²⁵

This patterned, ordered, and regular nature displayed by creation means that we can study it because we know that what we observe today will be observable tomorrow. The fact that creation may be analysed is shown by Psalm 19:

1 The heavens declare the glory of God; and the firmament shows His handiwork. 2 Day unto day utters speech, and night unto night reveals knowledge. 3 *There is no speech nor language where* their voice is not heard. 4 Their line has gone out through all the earth, and their words to the end of the world.⁸²⁶

The very “*line*” of God's “*handiwork*” is displayed everywhere. In other words, God's creation is measurable (to a degree). The Lord remonstrated with Job:

4 “Where were you when I laid the foundations of the earth? Tell *Me*, if you have understanding. 5 Who determined its measurements? Surely you know! Or who stretched the line upon it? 6 To what were its foundations fastened? Or who laid its cornerstone?”⁸²⁷

These statements, at the very least, show us that an ordered universe exists, and that it is capable of being measured. There are limits to this, of course, as the above also indicates. God is using the language of the craftsman and builder here to teach us (and Job) important lessons. We do not know the initial conditions of creation, and these are not discoverable. And yet the Lord also speaks of using a measuring line when He comes to judgement.⁸²⁸

The modern scientist knows that the universe (creation) is measurable but he has no justification for it, it is simply an assumption he makes. But for the Christian the regular ordered nature of creation is consequential upon their knowledge of God. However, as we have already suggested, there are limits to this regularity. First, we observe that humans are limited and so plumbing the depths with our measuring tools will reach a limit dependent upon our finite minds and our finite reach. Such a limit is no barrier to us because the essential nature of creation is God-

825 James 1:17.

826 Psalm 19:1-4.

827 Job 38:4-6.

828 2Kings 21:13; Isaiah 28:17; 34:17; Jeremiah 52:21; Ezekiel 40:3; Zechariah 2:1.

given and we have no need to seek reasons beyond those the Lord has given and displayed. God Himself has satisfied our curious nature. The eternity that was set in our hearts by God has been pacified and made peaceful by the very presence of God Himself.⁸²⁹ We are no longer those who seek to fill our souls with the entire world in desperation and end up losing them because we have forsaken this world and its ways and opted to be in Christ instead.⁸³⁰ Now how far we may be able to go in making measurements is an open question. All we can be certain of is that we will never be able to say that we have the measure of God's creation (as modern science seeks in its aim).

A second limit to the regularity of creation comes from a consideration of miracle. God created by miracle because there was no regular ordered creation in place “*in the beginning.*” Christ's use of miracle to display His deity points us back to Genesis 1 so that we can identify Him as the Creator. Just as God instantaneously created light, so Christ Jesus created wine, raised the dead, stopped the waves and so on. Now this discussion of miracle is important because we must never consider that the regularity of creation is something that God is fixed by. The so-called “laws of nature” are not laws by which God is bound. He is the Law-giver and being so He can repeal His law at will.⁸³¹

A third limit to the regularity of creation is that since it has been subjected to futility and is thence decaying, it will reach a point where the Lord will call time out. This is when Christ will return. On that day the regularity of creation will be altered. All things will be burned to the point of discovering the very foundations, and then God will bring in the new heavens and earth.⁸³² Bertrand Russell's inductivist turkey that we referred to earlier is a picture of us all! The Lord will return as a thief in the night and then comes the end.⁸³³

Now the ordered nature of creation is one upon which modern science has established itself in the last four hundred years. This means that there have been countless observations and experiments done which both demonstrate this regularity and seek to explain it in some way. Since this is the case, it means that a Christian can consider the fruits of modern science, but must do so with a ***great deal of caution***. For example, an acid will react with an alkali to form a salt and water and will do so in precise and measurable ways. One mole of hydrochloric acid will react with one mole of sodium hydroxide to form one mole of sodium chloride and one mole of water.⁸³⁴ However

829 Ecclesiastes 3:14; Ephesians 2:14.

830 Matthew 16:26; Galatians 6:14.

831 Isaiah 33:22; James 4:12.

832 2Peter 3:10f; Revelation 21:1f.

833 1Thessalonians 5:2.

834 The term “mole” is not an animal but a precise number of molecules or atoms of a particular substance. It may also be defined in relation to the mass of substance but the reader should just understand for now that it means a precise number.

one mole of sulphuric acid will react with two moles of sodium hydroxide to make one mole of sodium sulphate and two moles of water. These statements are derived from countless experiments and a theory concerning the nature of matter (acids, alkalis and so on). The facts can be reproduced ad nauseam, although you do not have to call the substances acids and alkalis and so on. A precisely measured quantity of a substance that is corrosive and has certain other properties when added to another corrosive substance with different properties will yield a harmless (beneficial) substance of a certain amount. The theory encompassing this particular reaction is certainly very useful, because you can use it to get the salt you want in a definite quantity, by reacting the correct acid with the correct alkali in definite proportions. The theory may well reflect reality in an empirical sense because the data are reproducible even in areas yet untried. But does the theory *depict* reality? Are there actually atoms and molecules reacting in a real way? That may or may not be perfectly true but how do we decide?⁸³⁵ We cannot resolve this issue perfectly and this is another limitation we are under. Thus whenever we look at the fruits of modern scientific research we must try to separate out the reproducible (that which regularly occurs because it is part of the created order) from ways in which the observed facts are understood. Sometimes the way the facts are understood is very useful and helpful, but in other cases they may not be. These are always open to question.

Christ central.

This next theme might have been placed earlier because Christ undoubtedly features as the central feature not just of redemption but of creation too. However I have left it here because it is the central theme.

We have already observed the fact that Genesis 1 teaches that God created through means of the agency of His spoken word, which we discover in the New Testament is none other than the second person of the trinity, Jesus Christ. For now I would like to begin here by looking at one text in the book of Colossians:

15 He is the image of the invisible God, the firstborn over all creation. **16** For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him. **17** And He is before all things, and in Him all things consist. **18** And He is the head of the body, the church, who is the beginning, the firstborn from the dead, that in all things He may have the pre-eminence. **19** For it pleased *the Father* that in Him all the fullness should dwell, **20** and by Him to

⁸³⁵ The theory of atoms and molecules itself is incredibly useful and I am inclined to think it may well reflect reality. However I can never reach the conclusion that it is reflecting reality because to do so I would have to be able to directly observe these entities. The fact that we can only observe them indirectly gives me reason to be cautious.

reconcile all things to Himself, by Him, whether things on earth or things in heaven, having made peace through the blood of His cross.

In other places we learn that Christ is the “*alpha*” and the “*omega*,” the “*beginning*” and the “*end*.”⁸³⁶ By these designations we observe that Christ is both before all things and will remain the same when all things have their end. In other words Christ is eternal. He is God. Now Paul informs us in Colossians 1 that Christ is the very agent of creation. Things were made “*through*” Him. In fact the apostle John emphasises this at the start of his gospel account by stating: “*all things were made through Him, and without Him nothing was made that was made. ... the world was made through Him.*”⁸³⁷ Imagine that you had a manufacturing business. You own it and run it as a family affair. Your son, your only son, is the chief designer and manager of the factory. He designs and organises the building of the things the company sells. The father initiates, and the son carries out the fathers desire by getting things made and ready for sale. This is a very weak and poor analogy but it serves to show something of what we mean by saying that the Lord Jesus is the agent of creation. Everything that was made by the factory has the Son's stamp of approval. He designed it and saw it into production. Now this is an important point for those who aspire to be true scientists⁸³⁸ Christ manufactured us and our environment. Therefore none is a mistake, and none are set within God's order by mistake. We are not here by chance and we are not here by accident. Furthermore, since all things were made through Christ, we are linked to our Creator. To run from Him, or to act as though He were not there, goes against our very constitution. Some manufacturers are very proud of their products and do not like them failing for fear of losing reputation. Some even issue long guarantees or warranties. When Christ created all things, do you think He did so disinterestedly, or without thought to what He was making? I think to ask such a question is to answer it! Because we are created through Christ we are inseparably connected to Him in some way.

But then further we read in Colossians 1 that all things were created “*for Him*.” We are back to the concept of purpose we discussed earlier. But here we see that the purpose of all things, from goats to galaxies, and from the sand on the seashore to supernovas, are for Him. In what way, “*for Him*”? Since He is God there can be no sense of Him being bettered or entertained or fulfilled by creation. That cannot be. He is fully fulfilled by being God. God is perfect, and therefore, perfectly fulfilled. So how is all creation made “*for Him*?” Well I can supply no other answer than to direct

836 Revelation 1:8,11; 21:6; 22:13. Note modern translations are at fault in some of these references.

837 John 1:3,10.

838 I repeat that I am not calling for a separate body of people we may call “scientists” but am using the term simply to speak of investigating creation with the God-given faculties we all possess.

your attention to the Lord's High priestly prayer the night before He died, as found in John 17. We learn there that Christ desired to be brought back to the glory of the Father, and that those who believed in Him would share in this amazing glory too.⁸³⁹ Before ever there was a creation, there was God in glory. Father, Son and Holy Spirit shared perfect harmony and Being. And now the Lord has created all things through Christ and for Christ so that He may share this glory with those who are redeemed.

Creation, therefore, is by and through Christ, and it is for Him in an ultimate sense. But then what should we say when we come to investigate the world around us? How shall we endeavour to keep Christ central? The Lord Jesus taught the disciples after He rose from the dead that the Old Testament Scriptures spoke of Him and His work. But these words of Paul intimate that creation too speaks of Christ. Creation is through Him as agent and for Him in ultimate purpose. How then can we see Christ in creation? I think the answer to this question is to consider afresh the incarnation of Christ. God, the second person of the holy trinity, took on human flesh. The incarnation teaches us that creation was something within which God could be manifested in a perfect way. Christ is fully God and fully sinless man. He has two natures (divine and human) but is but a single person. His assumption of human form tells us that when He created all things in the beginning, it was in such a way as to prepare for this signal event. It was not that Christ suddenly had to come into the world to effect salvation and redemption. No! Christ created all things with a clear view that He would one day assume human flesh to be the Saviour of the world. He is the *"Lamb slain from the foundation of the world."*⁸⁴⁰ His creative work, therefore, follows His decision to be the Saviour of the world. That is one reason I suggest that the way in which God created as revealed in Genesis 1 shows forth God's salvific work in pictorial form.

Now given that Christ is beginning and end, alpha and omega and that He assumed human form for the purpose of redeeming His creation, can we ever look into His creation without recognising Him? Clearly all that I have written thus far stems from a consideration of God's word. Modern scientists do not take an iota of thought about what God has spoken but then hear what the Lord has to say concerning those who reject or ignore His word:

The wise men are ashamed, They are dismayed and taken. Behold, they have rejected the word of the Lord; So what wisdom do they have? ⁸⁴¹

It simply will not do to leave Christ out of creation. I confess that I struggle a great deal with

839 John 17:1,21-25.

840 Revelation 13:8.

841 Jeremiah 8:9.

thinking positively how when I look at creation in a detailed way I ought to see Him. This I believe is because I have been steeped in the ways of modern science. I cry out to the Lord: “cleanse me from the folly of man and let me see You Lord Jesus as I study your world.”

Perhaps one way to begin is to look at Psalm 111. The Psalm is a praise hymn to God especially concerning “*the works of the Lord.*” Verse 2, which has been inscribed over the doors of the Cavendish Laboratory in Cambridge on several occasions, as there have been scientists working there who were Christians, tells us that God's works are immense and ought to be “*studied by all who have pleasure in them.*”⁸⁴² There is no limit placed on the type of works implied here. The word used for works in verses 2, 6 and 7 is the word we also find in Genesis 1 (*‘asah*), which has a wide range of meanings centred on the idea of doing or making. In verse 3 we learn that God's work (taking into account whatever He does) is “*honourable and glorious.*” As we view Christ in His earthly ministry what do we observe? He went about teaching truth, healing the sick and providing means for the needy. The Lord Jesus was not just an ordinary man, He was a very good man. Few men could aspire to the lengths and breadths of His love as demonstrated consistently by His deeds and actions whilst on earth. But He is also Creator and He showed this truth in all that He did. This world was not alien to Him. He commands demons and He cursed the fig tree.⁸⁴³ He commanded the waves and spoke to people with authority.⁸⁴⁴ In all of these ways we can see Christ in His creation as Lord and sovereign king. He demonstrates His love to us in these multifarious ways although supremely He did so by dying on the cross in our place.⁸⁴⁵ Then further in verse 3 we find that the Lord's work is also one of a righteousness which will last. This indicates not just the righteousness required for those who believe (it is that) but also the fact that what God does is (always) right. Next in verse 4 we discover that these works are works which are wonders or miracles and they have been done so as to be remembered. It may be taken (by some) that only miracles are meant here, as the word is meant to suggest distinct works. However when we consider that creation was all miraculous (nothing went before), when we examine a portion of that creation we are meant to exclaim in wonder: how marvellous!

Psalm 111 deserves more attention than can be given here but I would end by making one further point. The works of God span the immense distance that reaches from creation itself in all its detailed glory, through the provision of food to all in need, right up to the amazing work of salvation that includes the covenant, salvation and redemption. All of these works are powerful, and

842 <https://scienceandbelief.org/2010/12/17/172/>

843 Matthew 8:26,27; Mark 1:27; 4:39-41; 11:12-14,21; Luke 4:36.

844 Matthew 7:29; Mark 1:22,27; Luke 4:32,36.

845 Romans 5:8.

are said to be done in truth (“*verity and justice*”).⁸⁴⁶ Given that God is One and unchanging, we cannot make division between works of creation and salvation. When Christ died on the cross for sin, He was also doing a work that affected creation. We see this particularly in Matthew's account where we discover that the earth quaked, rocks were split, graves were opened, and many appeared visibly in the city after His resurrection.⁸⁴⁷

Renewed in His image.

To effect a Biblical approach to science, (or, to be more precise, to the use of our God-given faculties), we need to be new creatures. We need to be new creatures because the *old natural man* does not understand the things of God.⁸⁴⁸ Fallen and sinful man cannot receive the word of God, and therefore is unable to see the truth in creation, and the fact that all has been subjected to the curse. The fact that man ought to be able to see creation and give God glory is offset by his inclination to suppress truth and prefer the lie.⁸⁴⁹

The new birth signals the beginning of the new creation, the fullness of which we read in Revelation 21:1f, where we are informed that it will partake of no sin, sorrow nor death. Each newly born saint has the first fruits of this new creation. With Christ our pioneer things are different.⁸⁵⁰ When Christ raised from the dead He was not merely resuscitated (like Lazarus had been) but was raised a new creature. Christ died for sin but His was no natural death. Death could not hold Him like it does us.⁸⁵¹ Instead He gave up His spirit into the hands of the Father.⁸⁵² None other could do this. Thus when the disciples saw the risen Christ in one sense He was like no other human being, for He had a new resurrection body. In another sense He was of course the same man as evidenced by the scars on His hands, feet and in His side. Believers are new creatures with one difference. Whereas Christ already has His new heavenly body, we await the redemption of our bodies which will come when Christ returns.⁸⁵³ We are saved in Christ but await the fullness when Christ returns. In such a state we are ambassadors for Christ. Having been born again of the Spirit of God we are new creatures, but we appear to all around us as normal dying men and women. (It would have been very strange for people around us if we had inherited our resurrection bodies when we were born again!). Now we are able to see things from God's perspective. We have been turned

846 Psalm 111:5-7.

847 Matthew 27:51-53.

848 1Corinthians 2:14.

849 Romans 1:18f.

850 Hebrews 6:20.

851 Acts 2:24.

852 John 19:30.

853 Romans 8:23; 1Corinthians 15:42-49.

around. Our salvation is described in various ways apart from the new birth, and one of these has to do with new allegiance. Paul described it thus:

12 giving thanks to the Father who has qualified us to be partakers of the inheritance of the saints in the light. **13** He has delivered us from the power of darkness and conveyed *us* into the kingdom of the Son of His love, **14** in whom we have redemption through His blood, the forgiveness of sins.⁸⁵⁴

We are “*qualified*” by the Father to share in all that the saints will inherit, and we have been taken out of the realm designated as “*the power of darkness*” and have been transported (“*conveyed*”) into a new realm described as “*the kingdom of the Son of His love.*” Now this new status yields new qualities, to which we shall now turn.

Renewed senses.

New birth does not change the physical apparatus we were created with. We still have the same eyes, ears, nose etc. that we were born with. What does change, however, is our spiritual status. Where once we could be described as being dead, or cut off and separated from God, before new birth, now after this amazing (miraculous) event we have been made alive in Christ. This new position has the effect of re-directing our sense apparatus.

Our eyes can now see spiritually. Where once all we could see was the light from the objects in front of us, which objects were defined by our prevailing culture with its secular and materialistic world view, now our eyes see the beauty of God's creation. God made those flowers, that bee, this sunset and my family. Such sight is sudden, I was once blind but now I see. Where once all I could taste was the food on my lips, now my tastes and appetites are new, fuelled by new desires. Where once I only heard accusation and condemnation because of my wicked heart, now I hear the love of God in Christ. New birth enriches our normal senses. It heightens them. But it does more.

Renewed minds.

The new birth repairs the separation between God and an individual. The spirit, that part of mankind which defies definition in any modern scientific sense, is brought to life by being united with God. The Lord has reconciled Himself to us and in so doing has brought our spirits to life once again. They were once dead, separated from God, inactive, dormant. But now in the new birth we are alive to God. This means that our inner being (again something which defies exact definition in

854 Colossians 1:12-14.

a modern science sense) is renewed. Our minds, our intellects, our wills and our emotions are given a new king and lord. No longer do we serve self or this world or the devil, but now we are joined and in union with Christ. Christ is within. The trinity dwells with us. All is as it should be.

However this new state is not one which is final. It is not yet complete. It is permanent, for it is not possible for a person born again to be unborn, but there is still work to be done. That is why we read on two separate occasions that we need to be renewed.

1 I beseech you therefore, brethren, by the mercies of God, that you present your bodies a living sacrifice, holy, acceptable to God, *which is* your reasonable service. **2** And do not be conformed to this world, but be transformed by the renewing of your mind, that you may prove what *is* that good and acceptable and perfect will of God.⁸⁵⁵

20 But you have not so learned Christ, **21** if indeed you have heard Him and have been taught by Him, as the truth is in Jesus: **22** that you put off, concerning your former conduct, the old man which grows corrupt according to the deceitful lusts, **23** and be renewed in the spirit of your mind, **24** and that you put on the new man which was created according to God, in true righteousness and holiness.⁸⁵⁶

There is need to resist this world's ways and its conduct, to put off the former ways of thinking, and instead to be renewed in mind. In other words, we may be born again of the Spirit, and we may have had our lives washed by the blood of Christ, but there is need to be made new in mind in an on-going daily basis. The pillars of trust built up over years in the world before conversion have been removed in conversion. However the patterns of thinking these had established need to be replaced. Whereas we once thought in a certain way governed by the world, or governed by custom or tradition, now we are to have new thinking sourced and fuelled by God through His word. We can express this idea using some words James wrote in his epistle:

Therefore lay aside all filthiness and overflow of wickedness, and receive with meekness the implanted word, which is able to save your souls.⁸⁵⁷

We are to accept in all humility the "*implanted word*." That is, the word of God which is within us as a deposit.⁸⁵⁸ In other words, as we pray in the Spirit whilst we study God's word, it is as though the word we already have within us through new birth as a deposit of faith (a complete package – the very Word of God), is to be unpacked so that we can follow it.

855 Romans 12:1,2.

856 Ephesians 4:20-24.

857 James 1:21.

858 1Timothy 6:20; 2Timothy 1:13,14.

The new believer has this new ability. They can direct their minds into the ways and will of God (with the Spirit's aid). Now because a newborn believer does not have ready made a complete mind that understands all things at once, it is necessary to continually seek Him for new treasure. This leads to a number of corollary points. First, we are all at different stages of growth in our Christian walk. This needs to be taken into account and grace, mercy and patience exercised where there are differences of opinion. Second, we can never say we have reached the full orb'd mind of Christ because we are still subject to this world and to sin. This means we always need to be reforming, or being renewed. The world is a wicked place and we can often get soiled by the garbage it strews hither and thither.

Two Biblical examples of considering creation correctly.

In the book of Job the Lord addresses the suffering man to teach him important lessons about God, and about how he should be. Job is one who offered counsel and explanation, “*without knowledge.*”⁸⁵⁹ Now in the course of God's remonstrance with Job the Lord offers two illustrations taken from the animal kingdom.⁸⁶⁰ We need to remember that we are in a time where the world is fallen and in sin. However we discover from these descriptions a number of important points. First, consider how detailed the descriptions are both of structure and behaviour. Here is an endorsement to us for making careful and precise observations. Just as the Lord describes each creature in terms of their proportions and what they actually do, so also we can describe aspects of creation in a similar way. Second, note how the Lord uses analogy, for example, Behemoth's tail is “*like a cedar.*”⁸⁶¹ Third, note how the Lord speaks in terms of His intentions. For example, Behemoth is described as “*the first of the ways of God,*” whilst Leviathan is depicted as being “*king over all the children of pride.*”⁸⁶² We learn more about Leviathan elsewhere in Scripture and these ought to be consulted as well, to gain insight into how understand God's creation from God's perspective.⁸⁶³

There are numerous other examples of God using aspects of His own creation to illustrate truths. These are not just theological truths *superimposed* upon some aspect of creation which seems to fit the case. No! They are those things concerning creation which God designed to be there. Leviathan was an immense beast of the sea, and as such was a fitting representative of the dragon and serpent Satan. I write in opposition to all those who suggest that the Biblical use of this figure (Leviathan) was borrowed from the ANE. In speaking to Job the Lord sets the precedent. If

859 Job 38:2.

860 These can be found in Appendix 3.

861 Job 40:17.

862 Job 40: 19; 41:34.

863 See Psalm 74:14; 104:26; Isaiah 27:1f.

ANE cultures utilise the Biblical creation account and melds into it mythical monsters, that has no bearing on the true word of God.

There are many other creation-based illustrations which seem to derive from the very structure or organisation of the particular species or part under view. We could mention the lilies of the field, the ant that needs no commander and works in unison with others, the various types of tree which yield fruit in season having drawn deeply from the depths, the type of soil with which to plant seed successfully, the dove which signifies the inner life, the ostrich and her folly, the ox and their service, the donkey and many others besides.⁸⁶⁴ It is true that many of these examples have more than one thing to teach us. However what seems clear to me is that God so designed these creatures to show forth something of His nature either by image or reflection, or by way of contrast. Thus as we study creation, (God's wondrous truthful works), we ought to consider what aspect of the truth of Christ it presents to us. Now a clear danger of adopting this approach is a worked-up and forced connection which would bring dishonour to God. We must be diligent in our study and careful to discern only that which is true and clear. This requires a very close walk with the Lord and a very good understanding of His word.

Summary for a Biblical approach to “science.”

Because this is such an important subject to grasp I would like to summarise what I have outlined so far. I do not claim that this is the final word on how we should engage in the study of God's world from a godly perspective. However these are features which ought to form at least part of the toolkit for such a study. These are shown in table 10 below.

None of what we have discussed thus far helps in forming a programme of study. I am not suggesting at this point that we can structure and organise to emulate the world in its search for truth in investigating the world. My (brief) experience in Christian education has taught me that it is very difficult to shrug off the world's way of doing things. At the school I was employed at for eight years I was privileged to devise a science programme that could be called, “Christian.” However what I discovered along the way was that there were a lot of other things we did (assessment, lesson plans, reporting to parents, timetables etc.), which we just took on-board wholesale from the secular system. Now of course a day's activities must be organised somehow and the way the secular institutions do this may have a lot of merit. But what I noted (in my time as a teacher) was that these were simply not questioned. That, in my view, is a dangerous position to get into. When I challenged my colleagues one of the responses which came back was “we do not need to reinvent

⁸⁶⁴ Deuteronomy 25:4; 1Kings 7:19f; Job 39:13,14; Psalm 1; 68:13; Proverbs 6:6f; Song of Songs 1:15; 2:14,16; 4:1,5; 5:2,12,13; 6:3,9; 7:2; Isaiah 1:3; 41:19; 60:13; Matthew 3:16; 6:28; 10:16; 13:1f; 21:2f; Luke 12:27; John 12:15.

the wheel!” I responded by saying that I thought that that was precisely what we were doing. Again it may be that the operation of some things follows a natural course. However we need to be certain that what we do, whatever we do is, in point of fact, done to the glory of God.⁸⁶⁵

Table 10: Principles for a Biblical “science.”

Principle to hold to:	Features of this principle:
God comes first	We need to begin with what God says on all things. Thus we begin with Scripture as foundation. We need to be theological and Biblical in our approach.
Purpose	Our task in looking at creation inquisitively is purposeful. It forms a part of the Great Commission which builds on the creation mandate of Genesis 1:26f.
Order	Derived directly from our knowledge of God and His Being (theology), we now have the basis for investigation. We look for order and pattern but do not assume this is universal at all times. God has operated through miracle I bringing creation to be, and our faith is based on the truth of the miracles concerning Christ's coming, death, resurrection and ascension.
Christ central	Since Christ is both alpha and omega, beginning and end, and since His appearing is the focus of history, Christ as the agent of creation and for whom creation exists must be evident within our enquiry.
Renewed in His image	The natural man cannot receive the things of God. Scripture teaches that man seeks out strange schemes even though God had made man upright in the beginning (Ecclesiastes 7:29). The mind and heart of mankind is dark and he refuses to listen to God and look at things from His perspective. Therefore we need to have our lives renewed. We are dead in trespasses and sins and need to be born again.
Renewed senses	The new birth brings about a dramatic change in the way in which we look at things and the focus of our hearing. Tastes also differ. We now have heavenly senses. Our hearts are renewed and we have communion with God.
Renewed minds.	The mind, the heart, the spirit, the inner being is made wholly new. But it is not yet perfected and is subject to temptation and needs to grow. There is repeated need to have our minds renewed and washed.

In order to end this section I have tried to sum up the difference between modern science and Biblical science in an illustration shown in figure 30. The diagram needs some comment. At the top we have a simple box which declares that “*God has spoken.*” I have used this phrase deliberately because of Genesis 1 and John 1:1 from where we get the notion that God created by means of the “*Word,*” (Jesus Christ). The two distinct aspects of God's communication are the Bible (Scripture)

⁸⁶⁵ 1Corinthians 10:31; Colossians 3:17,23.

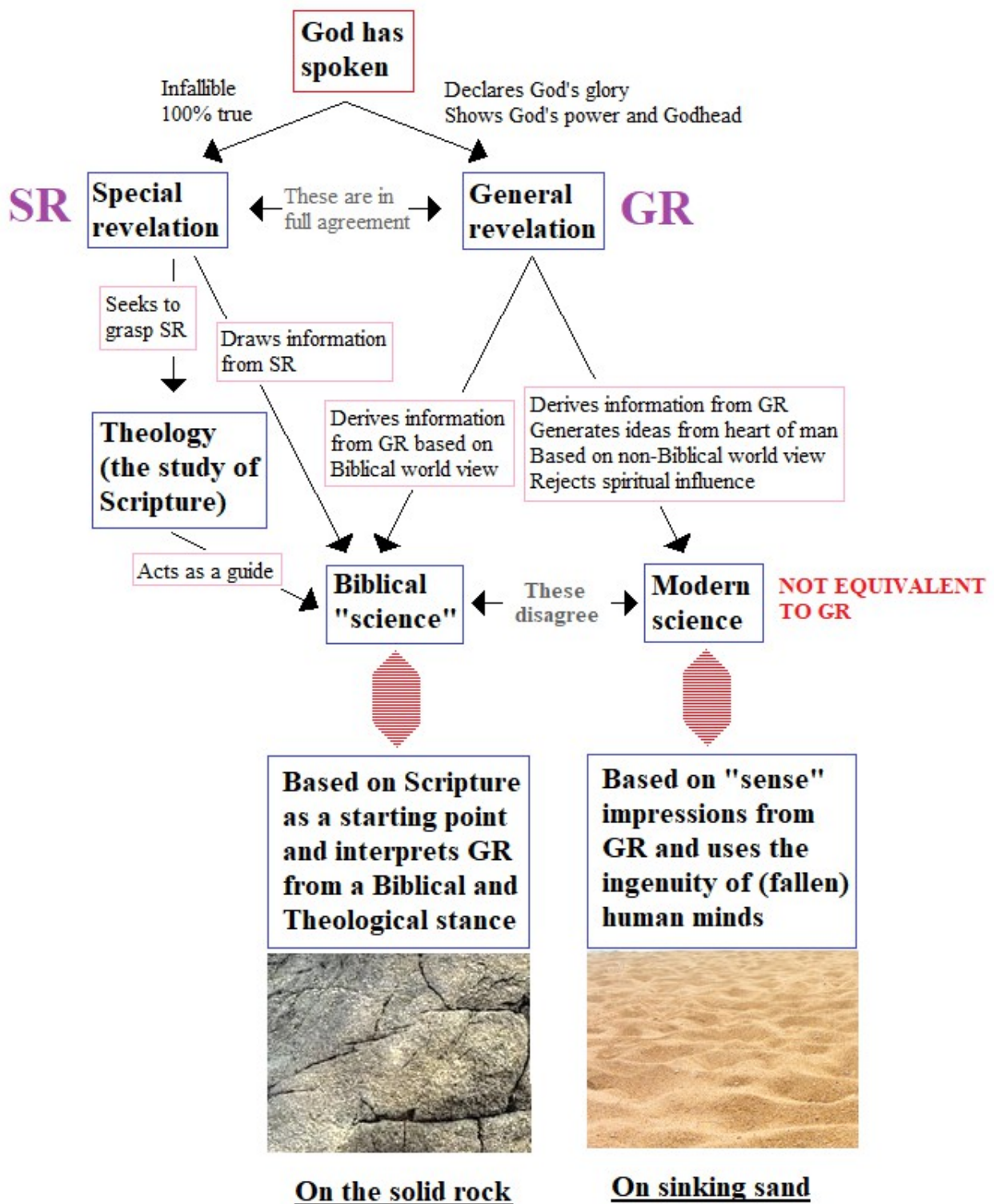


Figure 30.

and creation. These have sometimes been described by the idea of “Two Books,” the *book of Scripture*, and the *book of nature*. This representation has a long history and has (by and large) not been helpful. In the development of modern science this figure has been used to transfer allegiance from the Scriptures, which were being accused of obscurity and the basis for foment and dissension, onto a study of creation itself which was (at the time) considered simple to read and grasp. To some extent this was understandable. Some amongst the intellectuals of these times (seventeenth century onward) were holding to a Greek view of the Scriptures and proffered Aristotelian views of the universe. This meant that an attack on Aristotle was being confused with an attack on Scripture. Another feature of this “two book” illustration was that it naively connected general revelation with modern science.

Now in figure 30 I have shown that special revelation (Scripture SR) and creation (General revelation GR) are in full agreement. This is because God has spoken both into being and He cannot contradict Himself. The problems arise, however, when we take these foundations and attempt to make sense of the world around us. For the Christian the Bible is the starting point as we have elaborated on at length. This is because it is the clear word of God to human beings. Creation speaks truth too but this must be interpreted with Biblical principles. The Bible does not speak about chemical reactions, how a missile flies through the air, or the life cycle of a butterfly. That is a truism. But the Bible is ***The Foundation*** for all things. Remember that only in Christ exclusively “*are hidden all the treasures of wisdom and knowledge.*”⁸⁶⁶ Where do we find out about Christ? Only through Scripture! Thus creation and Scripture must be interpreted using the rules of hermeneutics as found within Scripture. Modern science, however, simply looks at general revelation (creation) but examines it from the basis of mankind and secular thought. It rejects God, spirit and creation as Biblically defined, and makes its own view of how all things are to be viewed.

Now we need to add here that our interpretation of Scripture and our theology derived from that source may well be at fault, and it most certainly will not be full nor complete. However, the man who is truly God's and has been truly born again, will start from a correct foundation (God is The Rock), and will be ever walking towards the truth.⁸⁶⁷ What they may think as true concerning Scripture and its implications for studying the world at one time, will change and develop more towards the truth because God is true and wills to lead us into all truth.⁸⁶⁸ Thus instead of modern science ever advancing towards the truth (which from the history of science has been shown to be false), it is the true believer who advances ever closer to an appreciation of all that

866 Colossians 2:2,3.

867 Philippians 3:12-14.

868 John 8:32; 14:6,17; 15:26; 16:7,13; 17:17,19.

is true. Since this is the case, a body of believers will all be at different points, but will all be on ***The Rock*** looking forward to glory and (hopefully) advancing to the eternal city. They are walking the road in direct opposition to the way the world walks.

Chapter 8: Evolution and Genesis.

(Literal or what?)

At some point in our discussion about evolution we need to give an appraisal of the opening chapters of the book of Genesis. Theistic evolutionists have shredded the text in an effort to shoehorn the modern science view into its pages. We shall respond to individuals who have done this in part 2. But how should we look at Genesis 1 to 3? Now I have written extensively on this subject elsewhere, but I feel it important to outline the basics here because we want to offer more than simply an assessment of various writers on the book of Genesis in part 2.

Genesis is history.

To begin with we need to consider the type of literature that Genesis is. This is not a hard thing to discover even from the translations. A look at the AKJV rendering will show that Genesis is written in an historical narrative form. It should be understood that the opening verse (Genesis 1:1) describes God's initial creation *ex nihilo* act, and then in the next verse we have a three-fold description of the earth as it had been created in an instant "*in the beginning.*" There then follows a series of statements all of which begin with the conjunction "*and.*"⁸⁶⁹ All of these are translations of the Hebrew particle which is added to the front of words (*waw*). It is this Hebrew form which indicates the narrative historical style.⁸⁷⁰

- 2 **And** the earth was ...
- 3 **And** God said ...
- 4 **And** God saw ...
- 4 ... **and** God divided ...
- 5 **And** God called ...
- 5 ... **And** the evening and the morning were the first day.
- 6 **And** God said ...
- 7 **And** God made ...
- 8 **And** God called ...
- 8 ... **And** the evening and the morning were the second day.
- 9 **And** God said ...

869 In one instance the word "*so*" is given in the AKJV (1:27), and in another the word "*thus*" is supplied in the AKJV (2:1). Other translations use different conjunctions throughout to make it read easier in English.

870 The Hebrew construction is a little more involved but the main point is that we have a list of events written one after the other.

10 **And** God called ...
 10 ... **and** God saw ...
 11 **And** God said ...
 12 **And** the earth brought forth ...
 12 ... **and** God saw ...
 13 **And** the evening and the morning were the third day.
 14 **And** God said ...
 16 **And** God made ...
 17 **And** God set ...
 18 ... **and** God saw ...
 19 **And** the evening and the morning were the fourth day.
 20 **And** God said ...
 21 **And** God created ...
 21 ... **and** God saw ...
 22 **And** God blessed them ...
 23 **And** the evening and the morning were the fifth day.
 24 **And** God said ...
 25 **And** God made ...
 25 ... **and** God saw ...
 26 **And** God said ...
 27 **So** God created man ...
 28 **And** God blessed them ...
 28 ... **and** God said ...
 29 **And** God said ...
 31 **And** God saw ...
 31 ... **And** the evening and the morning were the sixth day.
 #2 1 **Thus** the heavens and the earth were finished ...
 2 **And** on the seventh day God ended his work ...
 3 **And** God blessed ...

The way in which the writer has constructed this text is as a series of statements linked together by the conjunction “*and*.” This is, perhaps, not the best way to write in English! However it does get across the idea that what is being spoken of is a series of connected events. God did such and such, and then He did something else, and then He did ... and so on. The reader will notice in the above, that I have also included the first few sentences of chapter 2. There is a very good reason for doing this, for whilst Genesis 1 finishes with the completion of the sixth day, the next few verses in chapter two inform us of the seventh day of rest. The style is still historical narrative, and then we find at the beginning of verse 4 we have a statement which concludes the record of creation week, namely:

These *are* the generations of the heavens and of the earth when they were created.⁸⁷¹

871 Genesis 2:4a, AKJV.

Table 11: The “generations” (*tôl’dôt*) of Genesis..

<i>Text where the English word “generations” (<i>tôl’dôt</i>) is found in the AKJV.⁸⁷²</i>		<i>Details preceding and following the word “generations.”</i>
2:4	These are the generations of the heavens and of the earth when they were created, in the day that the LORD God made the earth and the heavens.	The seven days of creation week precede this, and the details of creation of man on day 6 follow.
5:1	This <i>is</i> the book of the generations of Adam. In the day that God created man, in the likeness of God made he him.	The line of Cain through to Lamech's sons and daughter, (4:16-24) followed by a statement about Seth (4:25,26) precede this, and then a restatement of Adam's creation (5:1b,2) and the line of Adam from Seth to Noah (5:3-32) follow.
6:9 (x2)	These <i>are</i> the generations of Noah: Noah was a just man <i>and</i> perfect in his generations , and Noah walked with God.	Details of the wickedness of the earth and the Lord's warnings to mankind (6:1-8) precede this, and further details of the corruption on earth together with detailed instructions to Noah (6:9b-22) follow.
10:1	Now these <i>are</i> the generations of the sons of Noah, Shem, Ham, and Japheth: and unto them were sons born after the flood.	The details of life after the flood with the promise and covenant, the curse on Canaan and the end of Noah's life (9:1-28) precede this, and the genealogy of Noah's sons in three parts known as the <i>Table of Nations</i> (10:1b-32) follow.
10:32	These are the families of the sons of Noah, after their generations , in their nations: and by these were the nations divided in the earth after the flood.	
11:10	These <i>are</i> the generations of Shem: Shem was an hundred years old, and begat Arphaxad two years after the flood.	The events of the <i>Tower of Babel</i> (1:1-9) precede this, and the genealogy of Shem (11:10b-27a) follows.
11:27	Now these <i>are</i> the generations of Terah: Terah begat Abram, Nahor, and Haran; and Haran begat Lot.	The genealogy of Shem (11:10-27a) precedes this, and details of Terah's descendants (11:27b-32) follow.
25:12	Now these <i>are</i> the generations of Ishmael, Abraham's son, whom Hagar the Egyptian, Sarah's handmaid, bare unto Abraham.	The details of Abraham's second wife and the end of his life (25:1-12a) precede this, and details of Ishmael's family line (25:12b-18) follow.
25:13	And these <i>are</i> the names of the sons of Ishmael, by their names, according to their generations : the firstborn of Ishmael, Nebajoth; and Kedar, and Adbeel, and Mibsam,	
25:19	And these <i>are</i> the generations of Isaac, Abraham's son: Abraham begat Isaac.	The details of Ishmael's family line (25:12b-18) precede this, and the story of Isaac gaining a wife and twin sons (25:19bf) follow.
36:1	Now these <i>are</i> the generations of Esau, who is Edom.	The twelve sons of Jacob listed and the end of Isaac's life (35:22b-29) precede this, and details of Esau's wives (36:1b-5) follow.
36:9	And these <i>are</i> the generations of Esau the father of the Edomites in mount Seir.	Details of Esau moving to Seir (36:5-9a) precedes this, and details of Esau's descendants (36:9b-43) follow.
37:2	These <i>are</i> the generations of Jacob. Joseph, being seventeen years old, was feeding the flock with his brethren; and the lad was with the sons of Bilhah, and with the sons of Zilpah, his father's wives: and Joseph brought unto his father their evil report.	A brief review of of Jacob (37:1) precedes this, and the life of Joseph from age 17 (37:2bf) follows.

⁸⁷² **Generations** = *tôl’dôt*. **Generation(s)** translation of *dôr*, which signifies a generation in terms of a “revolution in time,” (i.e. from father through to son and then grandson) found at: 6:9; 7:1; 9:12; 15:16; 17:7,9,12

The NKJV version renders this opening sentence in a slightly different way:

This *is* the history of the heavens and the earth when they were created.⁸⁷³

Now the word put as “*generations*” in the AKJV and given as “*history*” in the NKJV, are translations of the Hebrew word, תולדות, or *tôl’dôt*, in transliterated form. This Hebrew word is found throughout the book of Genesis in a similar form of expression as found in Genesis 2:4a. I have shown the NKJV translation because this word points us to the type of writing and the main purpose of the book of Genesis. It is a book of history. This statement is very important but it does not exhaust the beauty nor richness of Genesis, for it is also a spiritual book which we will have cause to discuss later on. The other places where *tôl’dôt* is found are shown above in table 11 with some additional information about how they are connected within the text. Another word rendered as “generation(s)” in the AKJV is a translation of the Hebrew word, דֹר, *dôr*. This word indicates the cyclic nature of time from father to son, to grandson. Both of these words, (*tôl’dôt* and *dôr*), together with the various genealogical lines or lists of family descendants (highlighted in yellow in table 11), serve to indicate the essentially historical nature of the book of Genesis. Although there has been debate over the word *tôl’dôt*, it is best to take it as a summary statement of what precedes its occurrence. I suggest this because we do not come across the word until the fourth verse of chapter 2. If it were to be taken as a heading (as some presuppose) why is it not found at the start of the book of Genesis? Some suggest that the word *tôl’dôt* acts as a heading because of its connection with genealogical lists of names. A glance at table 11 will show that the word sometimes occurs with no immediate connection to genealogies, so this assumption is unfounded. Using this word as the divider of the book, we arrive at an analysis or outline which is given in table 12.

In table 12 I have taken the liberty of making the word *tôl’dôt* imply the idea of “history.” As we have not spent time showing why we have come to this outline, several points need to be added to make things clear.⁸⁷⁴ First there is the assumption that each section was written (in a human sense) by the named person. We take this view because of the words we find in Genesis 5:1 which mentions Adam and the first book ever written. The assumption, then, is that each named person in table 12, was responsible for gathering the data and information we have in our Bibles. These texts were handed down from Adam to Noah, to his sons, to Shem, to Terah, and so on all the way down to Jacob's sons (and particularly to Levi). They were then passed on to Moses (descended from

873 Genesis 2:4a, NKJV.

874 See my work: *Usshering in an Old Age* (written 1993 and updated). I am currently working on a devotional commentary on Genesis which will show the reasons.

Levi) so that he could organise them under inspiration from the Lord.

Table 12: A structural outline of Genesis.

Text.	Book and person attributed to:
1:1 – 2:4a	The history of the heavens and the earth (by the Lord). ⁸⁷⁵
2:4b – 5:1a.	The history according to Adam.
5:1b – 6:9a.	The history according to Noah.
6:9b – 10:1a.	The history according to the sons of Noah.
10:1b – 11:10a.	The history according to Shem.
11:10b – 11:27a.	The history according to Terah.
11:27b – 25:19a.	The history according to Isaac. ⁸⁷⁶
25:19b – 37:2a.	The history according to Jacob. ⁸⁷⁷
37:2b – 46:8. ⁸⁷⁸	The history according to Jacob's sons. ⁸⁷⁹
46:8 – Exodus 2:10.	The history according to Levi's sons.

Second, it will be noted that the word *tôl'dôt* does not end the book. The last time we come across the word in Genesis is in chapter 37 and verse 2. However the next time we come across the word again, is in Exodus chapter 6 where we have a detailed genealogy of Moses.⁸⁸⁰ This genealogy is very important because it highlights the fulfilling of prophecy given to Abraham in Genesis 15. From Jacob through to Moses is four generations, and this was the length of time that the Lord spoke of in Genesis 15:16. Thus Moses was keenly aware at some point that the Lord had chosen him to lead the Exodus precisely because of this prophecy. Moses collated all the documents that the Lord (Genesis 1:1 – 2:4a), Adam (Genesis 5:1a – 6:9a), Noah (Genesis 6:9a – 10:1a), and so on had written and handed down formulating the book as we have it now. The end part of Genesis shows evidence of this compilation as Genesis 46:8 is virtually identical to Exodus 1:1. Thus Genesis, and in particular the early chapters of Genesis, are historical in nature.

875 This assumption is based on the words in Genesis 2:4b which speaks of the Lord God being responsible for creation.

876 Includes the history according to Ishmael (25:12).

877 Includes the history according to Esau (36:1,9)

878 Compare Exodus 1:1 with 6:19.

879 Although the word "generations" is not used a similar formula of words is used.

880 See Exodus 6:16,19. See also Numbers 26:58,59 for corroborating evidence where we discover the following:

[1] Levi had three sons, one of which was Kohath. Exodus 6:16.

[2] Kohath had four sons, one of which was Amram. Exodus 6:17.

[3] Amram married Jochebed who is described as "*his father's sister*" (i.e. his aunt). This would mean that Jochebed is sister to Kohath. Exodus 6:20.

[4] Amram's wife (Jochebed) was a daughter of Levi born to Levi in Egypt. Numbers 26:59.

[5] Amram and Jochebed had three children, Aaron, Moses and Miriam. Numbers 26:60.

Jacob – Levi – Kohath – Amram – Moses = hence four generations as prophesied (Genesis 15:16).

Given the fact that Genesis is historical we are thus justified in using the data we find within it to construct a timeline. We do not have the space nor time to demonstrate this, but it must be noted that the genealogies of Genesis 5, 11 and Exodus 6:16f are all 'intact,' by which I mean they do not admit of gaps. The genealogy of Moses from Levi in Exodus 6:16f is particularly interesting because, as mentioned earlier, it is a fulfilment of the prophecy the Lord gave to Abraham in Genesis 15 where we are told of the return from Egypt “*in the fourth generation.*”⁸⁸¹

Genesis 5 tells us that there were 1,656 years of history before the flood of Noah's day. From the flood up to Abraham leaving Ur and entering Canaan occupied 427 years according to the genealogy in Genesis 11. From Abraham's 75th year until the time Jacob finally enters Egypt another 215 years pass by.⁸⁸² The Israelites were in Egypt for another 215 years.⁸⁸³ Another 480 years elapse until the time when Solomon completed the temple in the fourth year of his reign.⁸⁸⁴ According to John Whitcomb, (professor of Theology and Old Testament studies), this was in the year 966 BC.⁸⁸⁵ Putting all of these times together we arrive at the following dates for various events before Christ.

Table 13: Fixed dates since creation.

Date	Creation	Flood	Abraham is 75	Jacob goes to Egypt	Exodus	Temple finished	Jerusalem falls
AC ⁸⁸⁶	0	1656	2083	2298	2513	2993	3373
BC ⁸⁸⁷	3959	2303	1876	1661	1446	966	586

According to these calculations, in the year 2020 AD creation is 5,979 years old.⁸⁸⁸

881 Genesis 15:16. See also Exodus 6:16f and Numbers 26:58,59. Moses was son of Amram, who was son of Kohath, who was son of Levi who came down to Egypt with his father Jacob. The texts in Numbers 26 and Exodus 6 show that Amram married his aunt, Kohath's sister thus confirming the intact nature of this genealogy. Genesis 5 and 11 cannot admit of gaps because of the way they are written. Other important Scriptures for establishing a time line include: Galatians 3:16,17; Exodus 12:40; 1Kings 6:1 and Genesis 12:1f. Throughout Genesis there are ages of patriarchs at birth of sons which also helps in formulating the time frame.

882 Isaac was born when Abraham was 100. Jacob was born when Isaac was 60. Jacob went to Egypt when he was 130. See: Genesis 21:5; 25:26; 47:9. So 25 + 60 + 130 = 215 years.

883 Exodus 12:40,41 tells us that the sojourning of Israel was 430 years – this refers to the time when Israel were wandering as nomads and strangers amongst the Canaanites as well as their time in Egypt. Galatians 3:16,17 reckon the 430 year period as starting from the promise of a “seed” to Abraham which was given in Genesis 12:1f. Genesis 15:13 tells us of a four hundred year oppression on the people of God and Galatians 4:28f informs us that such persecution began at Isaac's weaning party as Hagar's son began mocking (see Genesis 21:9). This was when Isaac was 5 years old.

884 1Kings 6:1.

885 **John C. Whitcomb.** Chart of Old Testament Kings and Prophets. 1968. Published by BMN Books. Winnona Lake, IN, USA.

886 AC = After Creation.

887 BC = Before Christ.

888 I am aware that many disagree with my dates concerning the sojourn in Egypt and perhaps have a quibble concerning the exact dates for Solomon's temple. However even if we accept these alternative dates (adding another 215 years for the stay in Egypt and another 50 years for Solomon) the result would be 6,244 years for the age of creation. This is still of the order of 6,000 years, so a statement which concludes that creation is about 6,000 years old at this time

ANE and God spoke first.

It is fashionable today to make a different assumption about the way Genesis has come to its present condition. This is, undoubtedly, due to an acceptance of the secular view of world history, which takes its lead from assuming evolution to be true. As a reminder to the reader, the acronym “ANE,” is used to represent the *ancient Near East* cultures, (Babylon, Egypt, Canaan, the Hittites etc.). In 1872 George Smith was the first to read a clay tablet recovered from the library at Nineveh which told the story of a great flood very similar to the Biblical account.⁸⁸⁹ The tablet was part of what is now known as the *Gilgamesh Epic*. Ever since that time, it has been the norm to assume that this ancient account (and others discovered since) pre-dated the Bible. Some assume that the Biblical accounts are derivative from this and other ancient records. Taking their cue from the fact that Judah were taken captive into Babylon in 586 BC, it is assumed that the captives had access to the Gilgamesh Epic and other creation/flood accounts, and set about writing something in opposition to these, as a polemic. Others do not go so far, but suggest that the Biblical account was written in the culture of the time and so could not avoid using similar themes and categories. These folk suggest, for example, that Genesis 1:2 speaks of a “chaos” and is similar to the chaos-monster elements of the ANE texts.

Now such deference to the prevailing culture flies in the face both of the way in which Genesis appears, and, more importantly, from what we read of God elsewhere in Scripture. In the first place Genesis records creation in terms of God speaking. From all that we read both in Genesis 1 and elsewhere, it appears clear that God takes the initiative, and so we have no hesitation in assigning the authorship of the opening section to the Lord Himself. Second we have the words of the Lord Himself informing us that He has been revealing Himself since the beginning. The following Scriptures ought to be held in the mind:

Have you not known? Have you not heard? Has it not been told you from the beginning? Have you not understood from the foundations of the earth?⁸⁹⁰

Who has performed and done *it*, calling the generations from the beginning? ‘I, the Lord, am the first; and with the last I *am* He.’⁸⁹¹

18 For thus says the Lord, who created the heavens, who is God, who formed the earth and made it, who has established it, who did not create it in vain, who formed it to be inhabited: “I *am* the Lord, and *there is* no other. **19** I have not spoken in secret,

is not far off the mark.

889 <https://www.nationalgeographic.com/history/magazine/2018/01-02/history-gilgamesh-epic-discovery/>

890 Isaiah 40:21.

891 Isaiah 41:4.

in a dark place of the earth; I did not say to the seed of Jacob, ‘seek Me in vain’; I, the Lord, speak righteousness, I declare things that are right.⁸⁹²

I have declared the former things from the beginning; they went forth from My mouth, and I caused them to hear it. Suddenly I did *them*, and they came to pass.⁸⁹³

Come near to Me, hear this: I have not spoken in secret from the beginning; from the time that it was, I *was* there. And now the Lord God and His Spirit have sent Me.⁸⁹⁴

Such statements are difficult to ignore. Some attempt to limit these statements to the history associated with Israel and Judah, but connection with the “*foundations of the earth*,” and other phrases which speak of creation, make such impossible. The last statement above is one spoken by the Messiah (the Servant). How can this be taken in any other sense than that the pre-incarnate Christ has, in fact, spoken “*from the beginning*”? It makes eminent sense, of course, to assume that the God who created all things, and who came into this world to die for sin being raised three days later, would speak from day one. We have such an assurance from the Lord Jesus Himself who, in rebuking the lawyers of His day, declared that His prophets had spoken since the “*foundation of the world*.” This is how He put it:

50 that the blood of all the prophets which was shed from the foundation of the world may be required of this generation, **51** from the blood of Abel to the blood of Zechariah who perished between the altar and the temple. Yes, I say to you, it shall be required of this generation.

The first ever prophet was Abel, the son of Adam. If we follow the lead of the modern writers and commentators on Genesis and assume that Genesis is late (anywhere from 14th to 4th Century BC), then what, we may ask, was God doing prior to this date? According to Scripture there was 1656 years from creation to the flood, then 427 years from the flood to Abraham leaving for Canaan at age 75 years, and then 430 years from this point to the Exodus.⁸⁹⁵ The Exodus occurred in 1446 BC. So, according to Scripture (at least), there were 2,513 years in which we have no word at all from God! This is wholly unbelievable! Could it be that the God whom we know through Christ, who is full of compassion and eager to do the Father's will, would leave the world all alone to its own devices for such a long period of time? Of course not! The Genesis account informs us that God created (by speaking) and, as a part of creation, actually involved man in the formation of woman.

892 Isaiah 45:18,19.

893 Isaiah 48:3.

894 Isaiah 48:16.

895 See Genesis 5 & 11, Genesis 15; Exodus 6 & 12, and Galatians 3:16,17.

Such revelation to Adam is what we may expect from the God who loves so much, and who is eager and willing to make Himself known.

Are there two different Genesis accounts?

One of the issues often raised by those who struggle with Scripture and its relation to modern science is why we have such different accounts of creation in Genesis 1 and 2. Genesis 1 tells of six days of creation with a broad sweep covering all of the universe, ending with the day of rest at the beginning of Genesis chapter 2. Then from Genesis 2:4b onwards we have a story which tells us how the Lord made man and woman and how they occupied a garden. To many these two very different accounts pose a problem. Which is the right one? Which is the real account of creation?

I am afraid that I am at a loss as to why anyone would see a problem here. When we consider how the text of Genesis is constructed, the questions dissolve completely. The first account is one which (I believe) was God's re-telling of events and covers the entire sweep of creation from beginning to end (over the six days of creation). The second account is the opening story that Adam has recorded. It forms the first part of his "*book*" which starts in Genesis 2:4b and ends at Genesis 5:1a. Adam's book can be divided into three sections as follows:

- [1] Creation of Adam and Woman and the garden of Eden. Genesis 2:4b – 25.
 - [a] Introduction to creation of mankind. Genesis 2:4b – 6.
 - [b] Creation of Adam and an introduction to Eden. Genesis 2:7 – 9.
 - [c] Interlude: The geography of Eden. Genesis 2:10 – 14.
 - [d] Creation of Woman – an experience for Adam. Genesis 2:15 – 25.
- [2] The fall of mankind. Genesis 3:1 – 24.
 - [a] Eve is tempted and mankind falls. Genesis 3:1 – 8.
 - [b] The Lord God's question, and a curse with a promise! Genesis 3:9 – 19.
 - [c] Consequences of the fall and Adam and Eve's redemption. Genesis 3:20 – 24.
- [3] Life in a fallen world begins. Genesis 4:1 – 5:1a.
 - [a] The promised hope is not yet, and the two ways. Genesis 4:1 – 15.
 - [b] The way of sin – the line of Cain. Genesis 4:16 – 24.
 - [c] The substitute, calling on the Lord God – the way of faith. Genesis 4:25 – 5:1a.

One of the interesting features of this section of Scripture is the title used for God. Whereas in Genesis 1:1 – 2:4a the title used exclusively is **Elohim**, (אֱלֹהִים), in Genesis 2:4b – 5:1a the title used is **Yahweh Elohim** (יְהוָה אֱלֹהִים). In our English translations this is often written as "Lord God." The title is indicative of relationship. God is not just the Almighty who created all things, but Lord who

governs and rules. Thus one of the main reasons we have these two accounts is to show the difference between God as the Almighty and powerful God, and the Lord who creates in a personal and intimate way. The second creation account does not contradict or oppose the first, but shows us the detail of the creation of mankind from the perspective of relationship. In Genesis 1:26-28 where we are given a mere introduction to the creation of mankind, we are simply told that God created man in His own image. But in Genesis 2:4b – 25 the creation of mankind is shown in detail and in such a way as to emphasise relationship. The notion of relationship is not absent in Genesis 1:26-28, but seems to be a main feature in Genesis 2:4b – 25. On top of this we can also see that the Lord God actually *involves* Adam in the very act of creating Woman. We shall elaborate on the details in a later section, but for now we simply need to highlight the fact that the Lord God was under no compulsion to create in any particular way. What He does do, however, is to create Woman so as to include Adam in the process.

Genesis 1:1-2:4a has structure.

We have discussed the essentially historical nature of Genesis because of the form of Hebrew used which comes through in the English (AKJV) as a series of connected statements joined by the conjunction “*and*.” We have also noted that Genesis as a whole must be characterised as history because of the frequently occurring word *tôl’dôt* which is used to mark out the various sections of the book as detailed in table 12. However we must also report that Genesis 1:1-2:4a is a highly structured account. You can observe this by means of the many repeated phrases, words and ideas. The most obvious is the repeated phrase: “*So the evening and the morning were the ... day*,” which occurs six times in the opening chapter of Genesis, but there are others which are all detailed in table 14. Now in connection with this important phrase concerning time which divides the text into six separate parts we need to be very clear. A lot of nonsense has been written concerning the length of days over the years, and I do not wish to go into all of this at this juncture.⁸⁹⁶ Here I just want to affirm that the Holy Spirit has gone to some lengths to define what is meant by “*day*” in each of these six cases. Each time it is “*evening and morning*” which can only indicate a normal (24 hour) day. Couple this with the fact that whenever the Hebrew word *yom* (“*day*”) is connected with a number (ordinal or cardinal) the meaning is always indicative of a normal (24 hour) day. The same type of construction is used throughout the Old Testament and in each case the meaning is a normal (24 hour) day.⁸⁹⁷ It is true that sometimes the word “*day*” on its own can mean a period of

⁸⁹⁶ I have written at length on this elsewhere. Current work in progress: Right from the Start. (A devotional commentary on Genesis).

⁸⁹⁷ See, for example: Exodus 12:16 which mentions the “*first day*,” Exodus 2:13 which mentions the “*second*

time, but whenever it is found with an ordinal or cardinal number it is always a normal (24 hour) day.⁸⁹⁸

Table 14: Repeated phrases in Genesis 1:1-2:4a.

Repeated word or phrase.	Reference.	Frequency.
created	1:1,21,27(x3); 2:3,4.	7
God said	1:3,6,9,11,14,20,24,26,28,29.	10
Let	1:3,6(x2),9(x2),11,14(x2),15,20(x2),24,26(x2).	14
And God saw that <i>it was good</i>	1:4,10,12,18,21,25,31. ⁸⁹⁹	7
called	1:5(x2),8,10(x2).	5
So the evening and the morning were the ... day.	1:5,8,13,19,23,31.	6
made	1:7,16, ⁹⁰⁰ 25,31; 2:3.	5
it was so	1:7,9,11,15,24,30.	6
blessed	1:22,28; 2:3.	3

Looking at the text a little more closely, it has been observed by commentators that the six days are organised into two sets of threes which reflect the detail found in Genesis 1:2. In this text we note that the raw material of initial creation stated in Genesis 1:1 is “*without form, and void.*” Thus the first three days address the condition of being “*without form*” and so can be titled “forming days,” in Genesis 1:3-13, whilst the second three days address the condition of being “*void*” (or empty) and so can be titled “filling days,” in Genesis 1:14-31. This division is not an exact one because the stars and the heavenly bodies were formed on day 4, and all those creatures that filled the sea, air and land were formed and created too. Further the land was filled with vegetation of types and kinds on day 3. Nevertheless the intention is clear. God made the raw materials in an instant as Genesis 1:1 tells us, and then set about using these to form and fill the world as He so willed. Creative acts continued throughout the week as well, so that a mixture of creation and manufacture took place through the week. We see the act of manufacture clearly in the creation of man as told in Genesis 2.

Now this structure has often been used to argue that the text is not historical but a type of exalted poetry. This line of reasoning owes more to the fear of man because it is often suggested in order to wriggle out of the implications of a six-day creation for modern science. But that a

day,” Genesis 22:4 which mentions the “*third day*” Numbers 7:30 which mentions the “*fourth day*,” and so on – these all signify a normal (24 hour) day.

898 See, for example: Genesis 2:4; 5:1 which speak of a length of time. Here no number is connected to the Hebrew word for day, *yom*.

899 The last occurrence is a superlative (“*very good*”).

900 There is a second occurrence of this word, but it appears in italics so is not actually in the Hebrew.

structured form of text does not rule out the clear historical nature of the Genesis text can be seen by looking at other historical texts (accepted as such) which also admit of significant structure too. Take, for example, the offerings made by the leaders of the tribes when the tabernacle was set up as recorded in Numbers 7. Each leader made exactly the same offering, and the detail and order of this is repeated for us 12 times. The repeated text reads as follows:

His offering *was* one silver platter, the weight of which *was* one hundred and thirty *shekels*, and one silver bowl of seventy shekels, according to the shekel of the sanctuary, both of them full of fine flour mixed with oil as a grain offering; one gold pan of ten *shekels*, full of incense; one young bull, one ram, and one male lamb in its first year, as a burnt offering; one kid of the goats as a sin offering; and for the sacrifice of peace offerings: two oxen, five rams, five male goats, and five male lambs in their first year.⁹⁰¹

There are many other examples of organised and structured texts in historical Biblical literature which serve to indicate that such structure does not rule out the text being taken in an historical way.⁹⁰² What we have before us in Genesis 1:1-2:4a is an historical account of God's creative activity which took place over a normal 7-day week. Creation from the beginning until its completion took six days and then God stopped from *this* work of creation to rest from it on the seventh day.

Genesis 2:4b-25. The creation of man.

We outlined the form of this section above when we discussed the structure of Adam's "book." There are four distinct parts to the creation of man as recorded in the first part of Adam's account, and these are as follows:

- [a] Introduction to creation of mankind. Genesis 2:4b – 6.
- [b] Creation of Adam and an introduction to Eden. Genesis 2:7 – 9.
- [c] Interlude: The geography of Eden. Genesis 2:10 – 14.
- [d] Creation of Woman – an experience for Adam. Genesis 2:15 – 25.

[a] Introduction to creation of mankind. Genesis 2:4b – 6.

The narrative begins with a general recap of what went before. The second part of Genesis 2:4 speaks of the time when God made "*the earth and the heavens.*" He then narrows this time down for us by stating that it was "*before any plant ... before any herb ... had grown*" in verse 5.

901 See Numbers 7:13-17; 7:19-23; 7:25-29; 7:31-35; 7:37-41; 7:43-47; 7:49-53; 7:55-59; 7:61-65; 7:67-71; 7:73-77; 7:79-83.

902 Examples include Numbers 2, Numbers 33 and Nehemiah 3.

Now plants, herbs and trees were created on day 3, so this time was before then. At this time, (during days 2 and 3 perhaps), we discover that there was no “rain” and no “man” to work the ground. Verse 6 informs us that the ground was watered by a “mist” which covered its entirety. Then we reach verse 7 which means we are in day 6. The writer has ignored reference to the creation of sun, moon, stars, fish, creatures of the air and land animals because the main focus is upon the creation of man. However man is not simply made, but made in a special way. We get a strong hint of this in Genesis 1:26f where the text there tells us that man was created in God's image and given a special role. The opening statements in this part of Adam's account set the scene, which is to be the place where created man was to be located and set. Thus we have the formation of man and the creation of a garden occurring simultaneously. God created man from the ground and planted a garden in Eden.

[b] Creation of Adam and an introduction to Eden. Genesis 2:7 – 9.

The details of God's creation of man (Adam) are given in the seventh verse of Genesis 2. they are succinct and yet comprehensive. The Lord God “formed” man. This word indicates moulding or crafting as a potter does the clay on his wheel. Immediately two thoughts surface. We have noted that in Adam's book God is referred to as “Lord God” emphasising the relational aspect of God. Here we see the Lord God doing the work of a craftsman, or a potter. This is the first ever occurrence we have of the pre-incarnate Christ. The first Christophany.⁹⁰³ The pre-incarnate Christ fashioned the dust and clay of the ground into a human body. The ground, of course, is made up of all sorts of constituent elements which are necessary for life. There is no direct relationship between the ground (whether we think of soil, clay, rocks, sand etc.) and the human body in terms of proportions. Just as the Lord Jesus created the constituents of wine in the six bodies of water contained in the water-jars, so the Lord God organised the elements from the ground in their right proportions and structures to form the body. Moving from the raw materials in the ground to a human body requires energy, direction, a plan and effort. God took carbon, hydrogen, oxygen, nitrogen, phosphorus, sulphur, iron, magnesium from the minerals and grains in the ground and re-organised these into living tissues, organs and systems integrated into a unit we know as the human body. This did not take long, and once done the Lord God then “breathed into his nostrils the breath of life” so that the “man became a living being.” The mention of “breath of life” points us to the action of the Holy Spirit. At one and the same time, the Spirit of God invaded and

⁹⁰³ Many prefer the term “theophany” signifying an appearance of God. However given that the Scriptures speak of Christ (see Luke 24 for example), I prefer to call these theophanies “Christophanies” or appearances of the pre-incarnate Christ.

animated the human body formed by the pre-incarnate Christ. Such miraculous creation given to us here in a narrative historical form is at one and the same time both heart-warming and instructive. It is heart-warming because the triune God is involved in our very formation, and, in particular, the pre-incarnate Christ. Thus Job and David could declare that God Himself had formed them:

8 Your hands have made me and fashioned me, an intricate unity; yet You would destroy me. **9** Remember, I pray, that You have made me like clay. And will You turn me into dust again? **10** Did You not pour me out like milk, and curdle me like cheese, **11** Clothe me with skin and flesh, and knit me together with bones and sinews? **12** You have granted me life and favour, and Your care has preserved my spirit. ⁹⁰⁴

13 For You formed my inward parts; You covered me in my mother's womb. **14** I will praise You, for I am fearfully *and* wonderfully made; marvellous are Your works, and *that* my soul knows very well. **15** My frame was not hidden from You, when I was made in secret, *and* skilfully wrought in the lowest parts of the earth. **16** Your eyes saw my substance, being yet unformed. And in Your book they all were written, the days fashioned for me, when *as yet there were* none of them. ⁹⁰⁵

It is significant that Job refers to being made "*like clay*" and speaks of being "*fashioned*" indicating the action of a potter. It is clear that both David and Job knew of Genesis 2:7 and accepted it as the very word of God, the truth. However the detail of Genesis 2:7 is also highly instructive. We are created from the earth, the raw material that God created "*in the beginning,*" and therefore we share a connectedness with all of creation. It is also very instructive for our current age. I say this because we have here the pre-incarnate Christ forming a human body and giving it life in a moment of time on day 6 of creation week. We need to pause and reflect here. The God of the universe, the very agent of creation, gets down in the dust of the ground and forms man. He does not use any intermediaries or processes to do this. The ground brought forth vegetation on day 3, but the Lord God "*formed*" man literally with His own hands. Here in these verses of Genesis 2 we can see a precursor of Christ in Canaan who was willing to reform fallen man by healing some, and by raising others from the dead. The connection between these early chapters of Genesis and Christ's ministry in Canaan is very clear. The same person who actually formed Adam, also raised Lazarus, healed lepers and created wine from water. Given these clear facts, any thought of evolution must be immediately and summarily dismissed.

Then next we discover that God placed the created man in a garden which He Himself had planted. The fact that the Lord God had done this work of planting a garden is also instructive.

904 Job 10:8-12.

905 Psalm 139:13-16.

Work is normal and natural. God worked in creation and works to this day.⁹⁰⁶ It is only after the fall that work becomes toilsome and difficult. Here in Genesis 2 work is a part of what it means to be human. The Lord as instructor not only plants, He places the “*formed*” man into the garden for the purpose of showing him what is to be done. He causes all manner of beautiful and fruitful trees to grow in this garden, amongst which are two special trees, “*the tree of life*” and “*the tree of the knowledge of good and evil*,” which are placed in the centre of the garden. The detail of the Lord God's instructions are then interrupted, at this point, by a series of statements about the nature of the land of Eden.

[c] Interlude: The geography of Eden. Genesis 2:10 – 14.

I have often wondered why the details of the geography of the region appear suddenly to interrupt the narrative. You can see the interrupting nature of Genesis 2:10-14 by comparing Genesis 2:8 with Genesis 2:15:

8 The Lord God planted a garden eastward in Eden, and there He put the man whom He had formed.

15 Then the Lord God took the man and put him in the garden of Eden to tend and keep it.

The two statements are not identical but the writer having begun to tell us of Adam being placed in the garden of Eden breaks off to inform us of the geography of the region. So what does this tell us?

Well in the first place it tells again that what we have before us in Genesis is history. These details give the whole account credibility. There is set before us a place with rivers, lands, and minerals, the stuff of ordinary existence. We hasten to add here that all at this time is still “*good*” and in a state before the curse and the fall. Second we note that there is a further emphasis on the lack of rain. The rivers were there in order to “*water the garden*.”⁹⁰⁷ This reinforces the idea that the pre-flood world was one which was not governed by the hydrology and water-cycles we observe to day.⁹⁰⁸ Beyond this we cannot (and dare not) add. The third thing we note is that we are given a series of names with details appended for some but not all. The fact that the names mentioned here also occur later in Biblical history needs to be addressed, but this, in truth, is a simple matter to deal with. We are guided by the fact that the world's surface was so devastated by the waters of the flood, reforming mountains and valleys, and destroying all flesh, that any pre-flood civilisations would

906 John 5:17; 9:4; 10:25 etc.

907 Genesis 2:10.

908 The first time it rained is when the flood waters came upon the earth. See Genesis 7:4f.

also have been removed.⁹⁰⁹ Consequently there is no continuation of Eden, Assyria, and so on. How come, then, do we read of such places later in the Bible? I think the answer comes from a consideration of the Americas and Australia. When people from Europe settled in these places the new cities and towns that they formed often bore the names of towns and cities from the home countries. Australia, for example, has an impressive record of places with English counterparts.⁹¹⁰

But why did the Holy Spirit guide Adam to include these details at this point in the story of the Lord God's creation of mankind? Was it just to indicate that what we are reading is real historical narrative? I think it certainly does reinforce the historical base but there is more to this than simply geographical details. A clue is garnered from considering the various names of the four rivers mentioned here shown in table 15.

Table 15: The four rivers in Genesis 2.

River	Text:	Name meaning & significance.
<i>Pishon</i>	11 The name of the first <i>is</i> Pishon; it <i>is</i> the one which skirts the whole land of Havilah, where <i>there is</i> gold. 12 And the gold of that land <i>is</i> good. Bdelium and the onyx stone <i>are</i> there.	Water poured forth, overflowing. From a root word meaning to spring about, jump or bounce. Indicates dispersal or spreading. Great diffusion of waters. From the details in the text the implication is of a spreading river that courses around (circles) a land of richness.
<i>Gihon</i>	13 The name of the second river <i>is</i> Gihon; it <i>is</i> the one which goes around the whole land of Cush.	Great breaking forth. Bursting forth, or gushing like a spring. This river springs and wells up and encircles the land whose name means “black.”
<i>Hiddekel</i>	14 The name of the third river <i>is</i> Hiddekel; it <i>is</i> the one which goes toward the east of Assyria.	The rapid swift. Assyria signifies a successful step forward.
<i>Euphrates</i>	The fourth river <i>is</i> the Euphrates.	From an unused root meaning to break forth or rushing. Indicates fruitfulness or sweet water.

909 That the flood was universal is attested to clearly in Genesis 6-9 and by the New Testament – see Christ's reference to Noah in relation to His return, and 2Peter 3 for example.

910 The following is not exhaustive: In **New South Wales**: Barnsley, Blackheath, Camberwell, Chipping Norton, Darlington, Epping, Euston, Exeter, Gloucester, Ilford, Kendall, Kensington, Liverpool, Morpeth, Newcastle, Penrose, Richmond, Stanmore, Stroud, Tottenham, and Windsor. In **Queensland**: Croydon, Ipswich, Kenilworth, Milton, Paddington, Richmond, Scarborough, Southport, and Warwick. In **South Australia**: Brighton, Darlington, Glossop, Harrogate, Hyde Park, Littlehampton. Malvern. Peterborough, Redhill, Salisbury, Spalding, Stockport, and Wellington. In **Tasmania**: Blackwall, Brighton, Devonport, Exeter, Falmouth, Kempton, melton Mowbray, Richmond, Sheffiled, and Somerset. In **Victoria**: Blackburn, Brighton, Burnley, Charlton, Chelsea, Cheltenham, Dartmoor, Dartmouth, Doncaster, Everton, Harrow, Hastings, Horsham, Macclesfield, Peterborough, Preston, Richmond, Rochester, Stratford, and Torquay. In **Western Australia**: Brighton, Carlisle, Darlington, Derby, Exmouth, High Wycombe, Northampton, Scarborough, Spalding and Warwick.

These rivers were distinct and different so that because of this they attracted distinct and peculiar names. We have a spreading overflowing river first which encircles a rich land, followed by a gushing spring that encompasses a land characterised as “black.” Then we have a rapid swift that pushes forward with success. Finally we have one that is sweet and fruitful. Now if we consider the significance of rivers from other Scriptures it will become clear that the Lord's intended use here is one of spiritual significance. There are many references to rivers in Scripture but to start with we shall look at the Psalms. In the first Psalm we read that rivers enabled trees to flourish and bring forth their fruit. This illustration is likened to the godly righteous who sit, walk and stand in the way of God meditating on the law.⁹¹¹ In Psalm 36 we read that the Lord has a river which contains His “pleasures,” and, further, that with the Lord “*is the fountain of life.*”⁹¹² Then in Psalm 46 we read these words, which seem to be reflecting the details in Genesis 2:10-14:

*There is a river whose streams shall make glad the city of God, the holy place of the tabernacle of the Most High.*⁹¹³

In Psalm 65 we are told that, “*the river of God is full of water.*”⁹¹⁴

Isaiah and other prophets also use this figure extensively. In Isaiah 33 we discover that the “*majestic Lord*” will be as “*A place of broad rivers and streams.*”⁹¹⁵ In the gospel age the Lord predicts through the prophet Isaiah that there will be “*rivers*” in desert places.⁹¹⁶ The one who obeyed the commands of the Lord would experience “*peace ... like a river.*”⁹¹⁷ And then at the end of the book of Isaiah we read of the Lord's intentions to “*extend peace ... like a river.*”⁹¹⁸ In Jeremiah there is express warning not to drink of the rivers of Egypt, but rather not to neglect the Lord who is the “*fountain of living waters.*”⁹¹⁹ In Ezekiel we read about the Lord's being against the rivers of Egypt.⁹²⁰ Then towards the end of Ezekiel in a picture of the gospel age, we are brought to consider the river of God which bursts forth from the temple and which gets deeper and deeper and causes trees to grow fruit in their season.⁹²¹

In the New Testament there are surprisingly few references to rivers, but there is one which is so important we quote it below:

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- 911 Psalm 1:1-3.
 - 912 Psalm 36:8,9.
 - 913 Psalm 46:4.
 - 914 Psalm 65:9.
 - 915 Isaiah 33:21.
 - 916 Isaiah 41:18; 43:19,20.
 - 917 Isaiah 48:18.
 - 918 Isaiah 66:12.
 - 919 Jeremiah 2:13,18.
 - 920 Ezekiel 29:10.
 - 921 Ezekiel 47.

37 On the last day, that great *day* of the feast, Jesus stood and cried out, saying, “if anyone thirsts, let him come to Me and drink. **38** He who believes in Me, as the Scripture has said, out of his heart will flow rivers of living water.” **39** But this He spoke concerning the Spirit, whom those believing in Him would receive; for the Holy Spirit was not yet *given*, because Jesus was not yet glorified.⁹²²

Thus we see the significance of rivers in Scripture. They signify the flow and work of the Holy Spirit within mankind.

So back in Genesis 2:10-14 we see that the Holy Spirit indicates the nature of His future ministry in an illustrative form. The Holy Spirit's work begins from God (who is in Eden) and spreads encompassing all that is considered rich in this world (the Pishon). There is not a single place where the work of the Holy Spirit is not to be found. That is why in Genesis 6 we find the Lord warning the people that there would come a stop to the Spirit's striving because of rampant and gross wickedness.⁹²³ And today the Spirit of God is still at work throughout the entire world. His presence and influence stretches all around the globe. Then the Holy Spirit's work is seen in new birth (Gihon). Bursting forth and encompassing the land of darkness, the Holy Spirit's work is seen when new babes are born again just as promised by the Lord Jesus in John 7. Next the work of the Holy Spirit is seen as a rapid and swift work that goes onward and forward throughout the world always fulfilling the Father's wish. The work of God by the Holy Spirit will never fail. Finally we note that the work of the Holy Spirit is fruitful and sweet. The apostle Paul reminds us that those born of the Spirit are those who bear fruit.⁹²⁴ And so we see that the interlude in Genesis chapter 2 is placed there to indicate the work of the Holy Spirit in pictorial form. The Spirit spreads far and wide bringing individuals to new life from the darkness of sin. The Holy Spirit will never fail but presses forth marching in step with the Father's wishes and will spread fruit and life wherever He goes. We can see from the above that God's creation indicates much more than the merely physical.

[d] Creation of Woman – an experience for Adam. Genesis 2:15 – 25.

The final part of the story of the creation of mankind concerns (in the main) the formation of woman. We are returned to the original ideas expressed before mention of the four rivers, and we now learn that the Lord God issued a single command to Adam. There was just one tree of which Adam was not to eat. Around this there were very many others of which he could partake with freedom. The prohibition introduces something of a note of concern. There is the real possibility of death for disobedience. Adam's place in the newly formed world is conditional. He must obey the

922 John 7:37-39.

923 Genesis 6:3.

924 Galatians 5:22. See also John 15.

Lord's word.⁹²⁵

But without doubt one of the most remarkable features of Genesis 2:15-25 is the way in which the Lord God involves Adam in the creation of Woman. There was no reason nor compulsion for the Lord God to include Adam, but He does. First the Lord shows clearly that all the animals He had made were not sufficient to be his helper or mate. They were not equivalent, they were not “*comparable to him*.”⁹²⁶ This demarcation between the animal kingdom and mankind is notable, and it indicates yet another reason why we cannot accept evolution. There is a marked step up to mankind, no gradual advance from lower forms to higher. In showing Adam that the animals were not comparable to him we are also shown his dominion over the created order, because he gives names to each animal shown to him.⁹²⁷ Naming is indicative of authority.

Once Adam has been taught both the distinction between himself and the animals, and how he was to have dominion, we next discover the details of how Woman was made. Note again the form of the text, which we reproduce below in the way we showed Genesis 1:⁹²⁸

21 **And** the Lord God caused a deep sleep ...
21 ... **and** He took ...
21 ... **and** closed up ...
22 **Then** the rib which ...
22 ... **and** He brought her to the man.
23 **And** Adam said:
25 **And** they were ...

Thus we have an historical account. Now I emphasise this because many seize on the poetic eulogy Adam makes in verse 23 to argue that the whole is just poetic. Some say that we are not to imagine a surgical procedure being done on Adam here, for the whole is simply illustrative and representative. But the clear indication of an historical account informs us that we must take the details here as having happened in time and space exactly as we read of them. The Lord God did not need to create Woman in this way but He does.

The Lord God caused Adam to go into a “*deep sleep*.” This state would obviously have enabled the pre-incarnate Christ to do the needed operation. The significance of this we discover later in Scripture with the close connection our Saviour makes between death and sleep. For example, the Lord Jesus refers to both the young girl who died as He was approaching her, and also

925 Genesis 2:16,17.

926 Genesis 2:18.

927 Genesis 2:19,20.

928 The text chosen is the NKJV but the AKJV is very much the same.

to Lazarus when he died, as being asleep.⁹²⁹ So just as Jonah who was swallowed by a giant fish and then later vomited out onto dry land acts as a figure for Christ's death and resurrection, so we have here in the sleep of Adam a prophetic view of Christ's death on the cross. I am not the first to make this connection. Matthew Henry in his commentary on Genesis is worth reading on the subject.⁹³⁰ Then we discover that the Lord God took one of Adam's (physical) ribs and fashioned this into Woman. This is what happened historically. The pre-incarnate Christ operated on Adam and fashioned the Woman from Adam's rib. Matthew Henry comments that just as Adam had a rib removed from his side, so the Lord Jesus was pierced in His side out of which flowed blood and water, which the apostle John indicates in his letter signify the birth of the church.⁹³¹ Once the operation was done the Lord God brought Woman to Adam. Adam's poetic eulogy shows the truth of what happened literally (poetry does convey truth despite those who use it to sidestep modern science).

Verse 24 describes the teaching concerning marriage. Woman was taken from Adam and now in marriage they are to be re-united as one flesh. This union is picked up by Paul to reinforce the importance of marriage, and, more importantly, to speak about Christ's relationship with the church. Thus we have a remarkable depiction of the literal history of the creation of both Adam and Woman displayed to us here in Genesis 2, which also speaks clearly of the gospel, our redemption in Christ! What an amazing God we have! The section ends on a note which sets the context for the next chapter. Both were naked but not ashamed.

Genesis 3. Not good.

And so we come to Genesis 3 and the fall of man. The first thing we need to establish is the plain fact that the text is still historical. Those who want to sidestep the collision with modern science argue that it is simply a form of myth, fable or poetic account. However what we have here is a retelling of events that *actually* happened in the garden of Eden at a *specific time* shortly after

929 Matthew 9:24; Mark 5:39; Luke 8:52; John 11:11-13.

930 **Matthew Henry** comments on Genesis 2:

"That the woman was made of a rib out of the side of Adam; not made out of his head to rule over him, nor out of his feet to be trampled upon by him, but out of his side to be equal with him, under his arm to be protected, and near his heart to be beloved. Adam lost a rib, and without any diminution to his strength or comeliness (for, doubtless, the flesh was closed without a scar); but in lieu thereof he had a help meet for him, which abundantly made up his loss: what God takes away from his people he will, one way or other, restore with advantage."

931 See 1John 5:6f. **Matthew Henry** comments on Genesis 2:

"In this (as in many other things) Adam was a figure of him that was to come; for out of the side of Christ, the second Adam, his spouse the church was formed, when he slept the sleep, the deep sleep, of death upon the cross, in order to which his side was opened, and there came out blood and water, blood to purchase his church and water to purify it to himself."

Adam and Woman were created. We establish this because of the nature of the text – it is the same in construction as Genesis 1 and 2 – and because we have various characters interacting with one another in, what appears to be, straightforward conversations and interactions. Now, of course, the literary minded utilise such devices when they write their fiction and novels, but we have the Lord speaking here and not some made-up characters. Where the Lord comes and asks questions and pronounces judgement are we not to take this seriously and as though it actually happened? Those who try and divorce what they perceive as the theology from the history are forcing people into a schizophrenic life. The theology here is embedded in the actual historical events. This is always the case. Take, for example, the Passover. The theology of this is wrapped up in the literal events of the rescue from Egypt. You cannot have one (the theology) without the other (the history). People may not want to accept a serpent speaking in Genesis 3 because such a thought is absurd, and so argue that it is not history but myth and fable. But why? If so, should we also reject the story of Balaam's donkey speaking to the prophet, or of Jonah's encounter with a large fish, or of the resurrection of our Lord and Saviour Jesus Christ because these too seem absurd?⁹³² The serpent speaking is a surprise. True. But it is presented to us as a matter of fact. In fact by recognising this fact of its oddity we are brought to a simple truth. How easy we can be deceived by failing to consider things in their right way. The Woman should have recoiled from the serpent's advances and run to the Lord God. Nowhere in the account thus far do we have talking beasts. The whole interaction of Adam and the animals in Genesis 2 prior to the creation of Woman showed the great gulf that exists between man and the animal world. We are not told how much time elapsed here, (although the interlude describing the region in Genesis 2:10f may suggest a considerable length of time for exploration), so we do not know all of what transpired between Adam and the Woman. Did Adam speak to her about the Lord God bringing the animals to him so he could name them? We do not know. However, what we do know is that Adam told Woman about the one command the Lord God gave to them, namely, not to eat of the tree of knowledge of good and evil.⁹³³ This is important. The Woman had the word of God, but as we shall see, she misuses it.

Here is not the time to work out all the detail of Genesis 3. Instead we shall content ourselves with an outline of the main points. To begin with, we notice that the chapter forms a unit in itself. Thus whilst Genesis 2 focused on the creation of man (male and female) which occurred on day 6, Genesis 4 begins with the first human couple starting a family and the consequences that brings. Genesis 3 can be divided into three separate parts as follows:

932 Numbers 22:28; Jonah 1:17.

933 Genesis 2:17.

- The serpent deceives Woman, and Adam falls into sin. (Genesis 3:1-8).
- The Lord God asks a question, pronounces curses, and issues a promise. (Genesis 3:9-19).
- In the meantime there is atonement, but humanity is cast from Eden. (Genesis 3:20-24).

The serpent deceives.

The story begins with reference to the “*serpent*,” and we are informed that this creature was made by the Lord God but was “*more cunning*” than any other land-dwelling creature. The very way the story begins is therefore meant to be an arrest to the the soul. A note of discordance is struck. The end of Genesis 2 warns us that something is amiss by pointing out a fact which is incidental. The couple were naked but unashamed. Such a state was hardly noteworthy in the “*good*” world that God created. But in the events of Genesis 3 it becomes a feature of importance. And so we have a creature (an animal) which speaks. We do not discover until later in Scripture that this creature is one used by none other than the devil (Satan). In one sense there is ambiguity here, for the serpent is presented as a unified being. He was made by God but was “*more cunning*” than all the other creatures. We are directed to Satan as a created angel who somehow became evil and rebellious. Using the serpent as a tool, the devil comes with his temptations.⁹³⁴

The pattern of the conversation between the serpent and the Woman is instructive and serves to show what the devil always does to deceive. First he deflects the Woman's attention away from the abundant provision of God who gave the first couple an abundance of fruit and trees from which to eat and enjoy. He does this by focusing on the prohibition and making no reference to how the prohibition was given. This is important. God told Adam that He had given them a plethora of fruit and trees, but there was just one he was not to eat of. Satan ignores the free gift (which is awesome) and takes issue with the command. Second the serpent then casts doubt on the word of God. The doubt is sown by asking “*has God indeed said ...*” We see this doubt-sowing in this opening question which we may paraphrase by saying, “are you sure that God meant what He said”? The Woman listened to the serpent's question, which was a mistake, and then goes on to make a second mistake. She distorts what God had in fact said. She adds to what the Lord told Adam by stating that they were not to “*touch it*,” and she takes from God's word by suggesting that the outcome of disobedience is not certain. The Lord God never forbade the couple to touch the tree, but He did make it clear that if they ate of it they would most certainly die, (literally: “*dying you shall die*”). The Woman says they were not to eat of it nor touch it “*lest you die*.” This statement leaves room

⁹³⁴ We do not know when Satan fell. He was created within the 6 days of Genesis 1:1-2:4a but when He rebelled is unclear.

for doubt concerning the consequence of disobedience.

When the serpent hears the Woman making these mistakes of adding to and subtracting from God's word, he moves in for the kill. His reply in verse 4 is emphatic. It is a flat contradiction of what the Lord God had told Adam. The serpent simply takes the phrase “dying you shall die” and puts a negative word in front of the phrase. He changes “you will most certainly die” into “you will most certainly not die,” as we might put it in English, although it is more emphatic because the negative is foremost. Perhaps better we might say he changes, “you will most certainly die” into “no, you will most certainly not die.” Once the serpent has made this statement the game has been lost and the serpent can add a complete fabrication to 'explain' away this disobedience. The serpent pretends that by disobeying the Lord God she will, in fact, be more like God.⁹³⁵ This is patent nonsense. Disobedience leads to estrangement and alienation and to a person becoming less human, and less like God. And so the Woman crowns her fall from a right understanding by taking the forbidden fruit.

One of the astonishing things about this account is the failure of Adam. He was there but silent, for we read that Adam was “*with her*” in verse 6. The Woman has the conversation and takes the path of disobedience, but Adam fails to stop or remonstrate with her, and simply accepts the fruit even though he knew that it was rebellion to do so. What appealed to the Woman came after her eyes had been deflected from the Lord God's goodness and she had distorted what the Lord God had said. Now she saw the tree in a new light. Her world view had shifted. Her ground had altered. She did not look at the garden as a place of abundance and plenty with a single prohibition, but she saw the one tree forbidden to her as the pinnacle and the one to be desired above all else. The tree was “*good for food,*” but then so were all the other trees. The tree was “*pleasant to the eyes,*” but then so were all the others too. The tree was one that could “*make one wise,*” but this last thing was not true.

Adam and Woman then attempt to correct their fall by self-made coverings, and it is at this point that “*they heard the sound of the Lord God walking in the garden in the cool of the day,*” and so, because of their fall, run for cover!⁹³⁶ The One who had been their close friend and delight was now to be fled from. Well such is the account of the fall of Adam and Woman and it is a tale which we do well to learn from, for Satan's strategy does not change. He deflects from truth, encourages tampering with truth, and gets people to deny what they once affirmed. Exactly the same strategy has been used by the serpent (Satan) to convince people that God's word does not recount creation!

935 Genesis 3:5.

936 Genesis 3:8.

The Lord God asks a question.

The second part of the chapter concentrates on the Lord God's response to the situation. It is vital that we assert here that what unfolded did not take the Lord God by surprise. We know this because of the nature of God, and because of what we learn about the Lord's mission to die for sin even before the very foundation of the world.⁹³⁷

The question the Lord God asked Adam was designed to get Adam to think about what had happened. We might enlarge upon this question by saying: what have you done Adam to make you flee from the Lord and seek out your own means of salvation? Now the Lord God walking in the cool of the garden is, of course, the pre-incarnate Christ. The Lord God will not let Adam go. Adam and the Woman are hidden in the trees but they cannot escape the searching penetration of God's word. Where are you? This is a good question to ask ourselves. Now Adam responds by stating the truth. He is afraid of God, but not in a good sense. To be fearful of God in a right sense is to respect greatly what He has to say and whom He is. This is the type of fear that Adam had before he fell into sin. Now he is cowering amongst the trees. He knows his nakedness, he hears the voice of God and it causes him to cower and cover his sin.

Then the Lord God presses Adam further. Adam has not really confessed his sin to the Lord God yet. He has merely told the situation that the Lord God can easily see. They are cowering and covered with fig leaves. And so the Lord God presses Adam to come to confession. What does Adam do? He passes the blame. In fact he does worse than blame the Woman, he actually blames the Lord God, since he speaks of "*the woman whom You gave to be with me, she gave me of the tree, and I ate.*" It was the Woman that the Lord God brought to Adam after the operation on his side. What a terrible thing we do. When we are brought to that point of realisation we are lost and hopeless we point the finger at God, who has done nothing but good, and try to lay the blame on Him. Pathetic. When the Woman is asked, she passes the blame too, this time to the serpent. In neither Adam's nor the Woman's case do we have an honest owning up to their sin. They admit that they ate of the tree they should not have, but they pass the blame and make excuses. If the Lord God had not given Adam the Woman, Adam contends, he would not have eaten. If the serpent had not deceived the Woman she would not have eaten. Of course we can easily suggest trains of events to deflect our responsibility, but the truth is the Woman let herself become beguiled and deceived, and Adam wilfully partook of the forbidden fruit when he should have protected his wife.

The Lord then pronounces judgement as a result of this episode of sin. All three creatures are to blame. The serpent is cursed first, and within the curse issued we see the great promise of the

⁹³⁷ Ephesians 1:4; 1Peter 1:20; Revelation 13:8; 17:8.

gospel!⁹³⁸ How marvellous is God! In wrath He exercises mercy. Not for the serpent but for mankind. From this point on there will be “*enmity*” (warfare) between the serpent and the Woman and between the serpent's progeny and all who are born of the Woman. Genesis 3:15 is the first open statement of the gospel. The “*Seed*” of the woman will “*bruise*” the serpent's “*head*,” and in the process, the serpent will “*bruise*” the Seed's “*heel*.” The Messiah here promised will deal a death blow to the serpent, but the serpent will seek in an underhand and sneaky way to trip the Seed up. Later we discover a character named “*Jacob*” who grabbed his brother's heel as he was being born. Jacob is thence known as the “supplanter” or the one who grabs the heel acting in deceit.

Next we discover that the Woman is to be judged. Many misunderstand the statement the Lord God issues here. To be crystal clear, from now on the Woman will give birth to children “*in pain*.” This would not have been the case if they had not sinned, but now the act of child-bearing will be painful. The statement at the beginning of verse 16 informs us that the Lord God will “*greatly multiply*” the woman's “*sorrow*” and her “*conception*.” Not only will she become more fertile and have greater conceptions and pregnancies, but also she will suffer more in bringing forth children. It is impossible for us to know what life was like before the fall. Clearly Adam and the Woman had senses that could detect stimuli. However the point at which a sensation turns from mild to painful is something we cannot be sure of. What we do know now is that where a person has lost sensation such as touch (so that they do not feel anything when they touch an object), the outcome can be very dangerous. When sensation becomes mild stimulation and then passes to pain is not an easy thing for us to discern. However given that in the new heavens and new earth there will be no more sorrow or pain, it is reasonable to assume that the same state prevailed in the original “*good*” creation.⁹³⁹ Now Woman will feel pain (great pain) when giving birth. This is not all that the Lord God speaks to Woman for we note that clearly the relationship between Adam and her was one ruined.

Then the Lord God speaks to Adam. Because he did not remonstrate with the Woman but simply acquiesced in what she was doing, the Lord God now curses the ground. There are three consequences to this curse. First, it will now become very difficult to work. Before this, work was a pleasure and something which was within Adam's grasp. Now to grow anything, for example, would be wearisome and require toil and effort with great “*sweat*.” Second, we note that the ground will grow things it did not grow before. Whether these “*thorns and thistles*” are distortions of the structures of already growing plants, or new plants and weeds is something we cannot know. What we do know is that before this there were no thorns and thistles, but from this point on there will be

938 Genesis 3:14,15.

939 Revelation 21:4.

many. Third, the truth that the Lord stated concerning disobedience will come true. They will (in time) “*return to the ground*” from whence Adam was created. Before this point there was no death. Now death has made its entrance. When Adam and Woman ate of the forbidden fruit they died immediately in a spiritual sense. They lost their connection and close relationship with the Lord God. Instead of a filial fear and respect as they walked with the Lord God in the cool of the garden, the first couple hide in craven fear because they are cut off from the Lord God. As a result of this sinful and rebellious act they will eventually succumb to physical death and “*return to the ground.*” As we have already noted elsewhere, the phrase we read in the prohibition of Genesis 2:17 is, literally, “dying you shall die.” And this is what has, and will (eventually) happen. Adam and the Woman died spiritually the moment they ate, and they will die physically after some time has passed as a consequence as set by the Lord God.⁹⁴⁰ All notion of physical death being a part of God's “*good*” creation is ruled out by these words that the Lord God speaks to Adam. Now we need to consider these statements of the curse because of sin a little deeper. We have the following:

- The serpent is cursed above all other land creatures. He is now confined to eat dust.⁹⁴¹
- There is now warfare between humanity and the serpent's possessor.⁹⁴²
- Women will have more conceptions (pregnancies) and will suffer great pain in the process.⁹⁴³
- The ground is cursed so that it will be hard to work.⁹⁴⁴
- The ground will produce unwanted thorns and thistles which will inflict pain.⁹⁴⁵

In later texts (such as Isaiah 24 and Romans 8) we learn that the whole of creation is affected by the curse because of Adam's sin. But even from what we have here in Genesis 3 it is clear that the very fabric of the entirety of creation has been altered. I mentioned earlier that we cannot know for certain what the original “*good*” creation was really like. Later we see the Lord God inflicting judgement upon the world by a flood because of rising wickedness, and then causes confusion at the Tower of Babel after the flood amongst men to prevent even further departure into deepest sin. The

940 Hebrews 9:27.

941 Genesis 3:14. Now as a beast that hugs the ground we see in this a representation of the fall of satan, cast out of heaven down to earth.

942 Genesis 3:15.

943 Genesis 3:16.

944 Genesis 3:17,19.

945 Genesis 3:18.

curse on creation is comprehensive and universal. The three culprits are held to account, but the effect of their wickedness has a greater reach than can be imagined. In that the “*ground*” is cursed, we are lead to believe that this is a fundamental or elemental reach. Adam was made from the “*dust of the ground*,” and this signifies the powder or smallest parts of it. The word “*ground*” is similar to Adam's name, so he (along with the animal world and all vegetation) are built up of the smallest parts of the ground which is now cursed. The changes wrought in the Woman's body may have been a consequence of this, or they may be in addition to it. But what is clear from the above, is that the fundamental underlying constituents of the creation are now out of kilter and distorted in some way. When modern science delves into creation, the modern scientist is not examining a “*good*” creation as originally formed. All their speculation about what happened over time is therefore pointless. Not only does their attempt at “reading” creation to tell its story fail (because they must impose their understanding on what they observe) but even if they were enabled to look back in time and tell creation's story they could not because of this sudden disjunction, the fall of all creation (see figure 31 on the next page). This is a fundamental teaching of Scripture, (i.e. of God's word and thoughts towards us), and it has a direct bearing upon modern science. All scientific endeavour (seeking to explore within creation) must recognise this disjunction. What God originally created for us is now inaccessible to us. What we see instead is a broken and fallen world.

Hope in despair.

The curse on creation has come. But this is not the end of the story. We have been given a glimpse into the future as we overhear the Lord God's judgement upon the serpent. We discover that there will come one (the “*Seed*”) who will destroy the work of the serpent. But in these final verses of Genesis 3 we discover the outworking of the promised hope.

First we discover a name change. Adam's help-meet was originally called “*Woman*,” because of the way in which she was created. The name for “*man*” at the end of Genesis 2 is closely related to the name for Woman. But now Adam calls Woman “*Eve*,” giving as reason the fact that “*she was the mother of all living*.” Now it is tempting simply to assume that this statement indicates nothing more than the fact that Eve will be mother of all human beings that will ever live. But is that all that is meant? It would seem a little bit of a let-down if this is all that is meant. Naming signifies authority. Adam and Eve now have a more firm and godly relationship. Adam names his wife to show that he is responsible for his wife. In the same way we find the risen Christ issuing new names to those who overcome, to those who will be His bride.⁹⁴⁶ But I wonder also if

946 Revelation 2:17; 3:12.

there is not an element of faith in the promise here? Later in Genesis 4 we find that Eve (wrongly) thinks that her new son would be the promised one.⁹⁴⁷

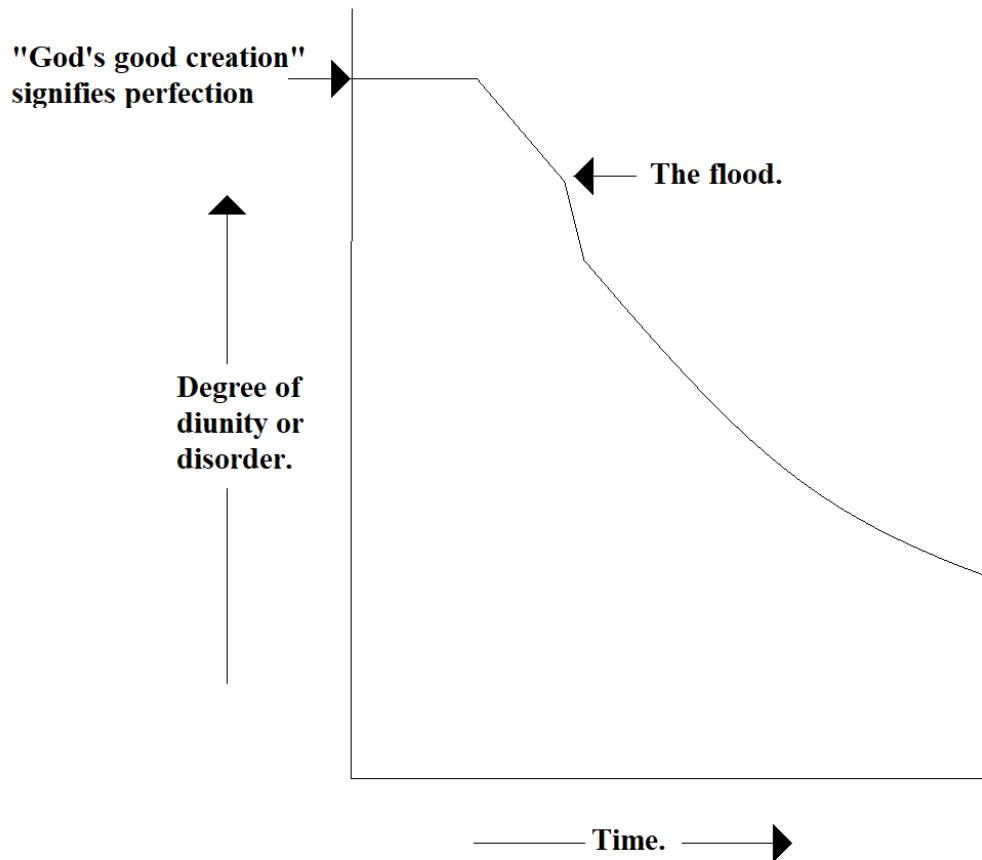


Figure 31.

Then in verse 21 we have a statement which seems similarly low-key. We are informed that the Lord God “*made tunics of skin*” for Adam and Eve to clothe them. This seemingly off-hand remark hides a deep truth. Later in Genesis 4 we read about the first boys born in the world and their offerings brought to the Lord in worship. The question we need to ask is: why did these boys bring these offerings? More to the point: why was Cain's offering rejected but Abel's accepted? For answer to these questions we need to consider the New Testament comments on Genesis 4, but for now we simply derive the fact that the two boys must have heard their parents (and even the Lord God Himself perhaps) speak of the need for an atoning sacrifice.⁹⁴⁸ We know from Hebrews 9:22 that, “*without shedding of blood*” there can be no forgiveness. And here in Genesis 3:21 we

947 Genesis 4:1 where the statement Eve makes can be rendered: “I have gotten a man – the Lord.” In other words she may have thought that this son was the promised Messiah.

948 See Hebrews 11:4; 12:24; 1John 3:12; Jude 1:11.

discover that the Lord God has made clothes for Adam and Eve from animal skins. The only conclusion to be made is that two animals were sacrificed and their blood spilt in order to provide covering for their nakedness. In this brief account we have the gospel declared, and it seems to me that in re-naming woman as “*Eve*” Adam was proclaiming their new faith in the Lord God through sacrifice.

There is therefore, great hope. The promise of Genesis 3:15 is shown in typological form for Adam and Eve's benefit in Genesis 3:21. They are now back in fellowship with the Lord God on the basis of faith through sacrifice, and they have temporary coverings which will suffice until the fulfilment in Christ is realised when He is incarnated to provide His life as a substitute. This hope, however, does not stop the train of events that sin and disobedience brought in. There would be no going back to Eden. Paradise was truly lost. The new condition of Adam and Eve was not one to be allowed to persist. There must be a change which only the death and resurrection of the promised One could effect. Adam and Eve had to place their faith in that future hope, but for now they had to be cast out of Eden.

The second half of verse 22 is shuddering. The prospect of sinful fallen man being able to “*live forever,*” in that fallen state was a thought far too horrible to bear. The text does not complete the thought, for the consequence of being confirmed in a sinful state for eternity just doesn't bear thought. Thus the Lord God sends them out for the purpose of working “*the ground from which he was taken.*”⁹⁴⁹ To protect Eden, (and also Adam and Eve), from the awful prospect of sin in God's good place, the Lord placed “*cherubim*” and “*a flaming sword*” as guard over “*the tree of life.*”⁹⁵⁰ It is important to see how the Lord expresses mankind's removal from Eden. We read first that he is “*sent,*” but then second we read that the Lord God “*drove out the man.*”⁹⁵¹ It was utterly imperative that they were removed and driven out of Eden lest they continue in a sinful and unredeemed state. However it was also necessary for them to know that the Lord God had not simply abandoned them and cast them aside forever. The provision of clothes and the promise of Genesis 3:15 give reason to suggest that the first human couple are still commissioned. Their calling has changed, because sin has disrupted the whole of the created order. But the Lord God sends them out for the purpose of enacting His plan of redemption. Although the first Adam has failed and can no longer represent mankind, yet within this couple, the future promised One would come. Specifically it would be the “*Seed*” of the Woman who would bring the victory. Thus they are sent out in hope, despite the failure and loss that sin has wrought.

949 Genesis 3:23.

950 Genesis 3:24.

951 Genesis 3:23,24.

The New Testament comments on Genesis 1 to 3.

The first thing to be said here is that the New Testament makes reference to all of the main characters we find in Genesis. Thus, Adam, Eve, Cain, Abel, Enoch and Seth all feature as true and real historical people that the New Testament writers appeal to for teaching and doctrine.⁹⁵² New Testament writers also appeal to various Genesis texts in support of their teaching. For example, the fact that creation is a past and completed or finished event, is a feature of at least four New Testament writers, (Mark, Paul, Peter and John).

... since the beginning of the creation which God created ...⁹⁵³

For by Him all things were created that are in heaven and that are on earth, visible and invisible, whether thrones or dominions or principalities or powers. All things were created through Him and for Him.⁹⁵⁴

... all things continue as *they were* from the beginning of creation ...⁹⁵⁵

... For You created all things, and by Your will they exist and were created.⁹⁵⁶

Then further, when teaching about divorce the Lord Jesus makes a point by combining two texts from Genesis, one from Genesis 1:27 (in **red**) and the second from Genesis 2:24 (in **blue**), thus endorsing their accuracy:

... Have you not read that He who made *them* at the beginning ‘**made them male and female,**’ 5 and said, ‘**for this reason a man shall leave his father and mother and be joined to his wife, and the two shall become one flesh**’? 6 So then, they are no longer two but one flesh. Therefore what God has joined together, let not man separate.⁹⁵⁷

According to Christ, then, mankind (both male and female) was “*made*” from the very “*beginning*,” and not created over eons of time.

The apostle Paul confirms the veracity of the early chapters of Genesis in a number of ways. First we must note his use of Adam in connection with Christ. Just as sin entered this world through Adam, so Christ came to deal with the problem of sin. We read of this direct connection in Romans

952 Matthew 23:25; Luke 3:37,38; 11:51; Romans 5:12-14; 1Corinthians 15:22,45; 2Corinthians 11:3; 1Timothy 2:13,14; Hebrews 11:4,5,7; 12:24; 1Peter 3:20; 2Peter 2:5; 1John 3:12; Jude 1:11,14.

953 Mark 13:19.

954 Colossians 1:16.

955 2Peter 3:4.

956 Revelation 4:11.

957 Matthew 19:4-6. See also Mark 10:6,7.

5 and 1Corinthians 15.⁹⁵⁸ If Adam was not historical or not a real living person, why did Paul make use of him in this way? Second we note that Paul agrees with the order in which mankind was made, (male first then female), and also the purpose in creating Woman. Paul writes:

8 For man is not from woman, but woman from man. **9** Nor was man created for the woman, but woman for the man.⁹⁵⁹

Third we note that Paul accepts as true the way in which sin entered the world through Eve:

13 For Adam was formed first, then Eve. **14** And Adam was not deceived, but the woman being deceived, fell into transgression.⁹⁶⁰

It is particularly interesting to note in this last quote that Paul reports the details accurately. He speaks of Adam and Eve to begin with in verse 13, but then goes on to speak of "the woman" being deceived in verse 14. This is accurate for the Woman did not receive her name by which she is most often referred (Eve) until the end of Genesis chapter 3. It is also noteworthy that Paul highlights the fact that the Woman was deceived but Adam was not. This reflects accurately the details of Genesis 3. It shows clearly that Adam was fully aware of what he was doing, and that is why Paul has no hesitation in Romans 5:12 to say that sin entered through Adam ("*one man*"), because he was responsible. To conclude this brief survey of the New Testament reference to the early chapters of Genesis we should mention Christ's reference to the sabbath being made for man, and the connection between the time of the flood in Noah's day with Christ's return.⁹⁶¹

Before we conclude this endorsement by the New Testament on the historical accuracy of the Genesis text, we must note in passing that the rest of the Old Testament also reckoned the creation accounts to be literally true as well. Take for example, references to the Lord being a potter forming man out of clay.⁹⁶² This theme is also found in the New Testament too. Paul speaks about our lives as being like a clay pot which hides a great treasure, ("*treasure in earthen vessels*").⁹⁶³ Then finally we note that Paul uses the figure of God as a potter to show that we cannot remonstrate with God on equal terms:

20 But indeed, O man, who are you to reply against God? Will the thing formed say

958 See Romans 5:12; 1Corinthians 15:22,45.

959 1Corinthians 11:8,9.

960 1Timothy 2:13,14.

961 Mark 2:27; Matthew 24:38,39; Luke 17:26,27; 2Peter 2:5f.

962 See: Job 10:8-12; Psalm 119:73; 139:13-16; Isaiah 29:16; 45:9; 64:8; Jeremiah 18:4,6.

963 2Corinthians 4:7.

to him who formed *it*, “why have you made me like this?” **21** Does not the potter have power over the clay, from the same lump to make one vessel for honour and another for dishonour?⁹⁶⁴

As we read our New Testament (and also our Old Testament) we are left in no doubt concerning the prevailing view of creation and of the early chapters of Genesis. These have always been taken as historically accurate everywhere in Scripture.

An historical but spiritual text.

Given this clear structure, and given the unmistakable historical force of the opening chapters of Genesis, we move to ask, why did God create in this precise way? He could have done all in an instant with no need for delay. Modern people ask why people such as I insist on 6 day creation some 6,000 years ago. They ask: what's the hurry? Why not accept modern science and its countless ages? Well I hope I have shown that Scripture at least is clear. God made all things in 6 days some 6,000 years ago, and since it is God who tells us this, then we would be foolish not to believe it. But in former times, before people accepted evolution, some asked why did God take so long? Why spread the work of creation over a week? Why not just have made all things instantaneously and have done with it? Well we have already demonstrated that the Lord God included Adam in the creation of Woman (Eve). There is, therefore, much more within the creation story than the truth of its history.

Before we embark on a consideration of the spiritual aspect of creation, it is necessary to add that the Lord Himself gives clear one reason why He created over a week. We have it from His words directly as recorded in the ten commandments. The fourth commandment reads as follows:

8 Remember the Sabbath day, to keep it holy. **9** Six days you shall labour and do all your work, **10** but the seventh day *is* the Sabbath of the Lord your God. *In it* you shall do no work: you, nor your son, nor your daughter, nor your male servant, nor your female servant, nor your cattle, nor your stranger who *is* within your gates. **11** For *in* six days the Lord made the heavens and the earth, the sea, and all that *is* in them, and rested the seventh day. Therefore the Lord blessed the Sabbath day and hallowed it.⁹⁶⁵

The pattern of our working week with six days to labour and one to rest is based firmly on God's principle of working in creation.⁹⁶⁶ This is wonderful! God asks us to do just as He had done. But there is more. We need to ask: why exactly did God create things in the way that He did? Why did

964 Romans 9:20,21.

965 Exodus 20:8-11.

966 The difference in Deuteronomy 5:12-15 does not negate what we read of in Exodus 20:8-11.

He create light first, and worked to separate the water into two bodies and then form land and so on? Why did He make man last of all? Was there a purpose in the order that God created things? To ask such a question is, surely, to answer it. God does not do things in an arbitrary way. We (as puny humans) may not comprehend why God does many things the way He does, just as an ant cannot fathom the comings and goings of human beings. However God has revealed what He did in the order that He did it for our blessing and benefit. So we ask: why did God create in the order and way that He did?

We pause to add a comment here concerning theistic evolution and its attempts at forcing the view modern science has invented into Scripture. By doing such a thing we denude the text of the meaning the Lord intended us to know. God created in 6 days for a pattern for our work and to teach us something, but if we insist on a modern scientific view of origins and creation, we will miss all that the Lord has for us through His revealed word.

We begin by reminding ourselves that the prime purpose of God's word is to speak to us of Christ and His work.⁹⁶⁷ We know from other Scriptures that Christ was prepared and “*foreordained before the foundation of the world*” to come into the world as the “*Lamb*” which was to be slain for sin.⁹⁶⁸ We know also that those who were to believe were chosen from before the beginning, and that the kingdom God had in view was prepared before time began.⁹⁶⁹ Salvation was no afterthought, but planned from eternity. Genesis 1 informs us that God created all things by means of His word, and we have noted that the New Testament affirms Christ (the “*Word of God*”) as the very agent of creation.⁹⁷⁰ Can we add any more to this?

We also need to add the fact that all of creation was “*good*” and this means there was no hint of sin, sickness, death or error at all. However, given that the Lord wants us to learn about Christ and His work, and given that the plan of salvation was decreed before ever there was any creation, we are justified in noting that God's very act of creation declares His way of salvation too. Thus the precise way in which God organised His creation of all things, displays elements of His salvific work.

We can do no more than briefly outline the kind of teaching I suggest is present in the first account in Genesis. To begin we discover that at the start God made an empty and unformed mass which we might call the “raw material” of creation. This watery mass was shrouded in darkness and the Spirit of God was hovering above. Such a state is perfect and good in terms of the history of

967 Luke 24:27,44-47; John 5:39.

968 1Peter 1:20; John 1:29; Revelation 13:8.

969 Matthew 25:34; Ephesians 1:4; Revelation 17:8.

970 John 1:1f; Colossians 1:15-17.

creation, but it is put like this to represent our lost condition. We are an unformed and empty mass shrouded in darkness in our lost state, but then along comes the Holy Spirit who brings life! Next we discover that the first thing God does through His word is to bring light. The first thing a newly born Christian often says is: once I was blind but now I can see! All of a sudden, light comes and awakens us to see both our lost condition and the Lord's beauty and glory. The apostle Paul recognised this truth when he stated:

For it is the God who commanded light to shine out of darkness, who has shone in our hearts to *give* the light of the knowledge of the glory of God in the face of Jesus Christ.⁹⁷¹

Just as God commanded light on day 1 to shine in the darkness, so the Lord has commanded light for us to see! The Lord brings truth to bear through His word and by the Holy Spirit.⁹⁷²

Following this we discover the next action of God in creation was to separate things. There is first the separation of light from darkness and the naming of each, and then there is the separation of the waters below from waters above, which are also named.⁹⁷³ In this we can see the need to make a distinction between things. Although we affirm that there is no sin nor error etc. in this creation week, nevertheless the Scriptures teach us that the righteous are of the day, and the wicked are of the night.⁹⁷⁴ Further we need to recognise and distinguish the things of heaven from the things of earth.⁹⁷⁵ And so the new believer with eyes open to God once again, learns to make distinctions. The new believer is given discernment.

Then moving further in this opening Genesis account we discover that the Lord makes a firm place to stand.⁹⁷⁶ The new believer has a place of rest in this world. They have firm foundations, the “*Rock*” which is Christ.⁹⁷⁷ They are to be rooted and grounded in Christ who is true love.⁹⁷⁸ Immediately following the creation of dry land we see that the Lord next commands that all types of fruitful vegetation are to be formed. Such mention of vegetation and seed-bearing leads us

971 2Corinthians 4:6.

972 Other Scriptures worth consulting are: Psalm 119:105; Matthew 9:27-31; Mark 8:22f; 10:49f; Luke 4:17-19; 18:35f; John 1:4,5,9,18; 8:12; 9:1f,5; Acts 26:17,18.

973 Genesis 1:4-7.

974 1Thessalonians 5:5.

975 John 3:31; 8:23.

976 Genesis 1:9,10.

977 Matthew 7:24-27; 1Corinthians 3:11. The Lord our Rock can be seen at: Exodus 17:6; Numbers 20:8; Deuteronomy 32:4,18,30,31; Psalm 18:2,31,46; 28:1; 31:3; 42:9; 62:7; 78:35; 89:26; 92:15; 94:22; 95:1; 144:1; 1Corinthians 10:4.

978 Ephesians 3:17. Paul mixes his metaphors here using the idea of a ground or foundation which points towards a building, and then also of being “rooted” signifying the idea of a plant which grows in good soil, watered and bathed in sunlight. See also Ephesians 2:20; Colossians 1:23; Hebrews 6:1.

to the notion of growth and fruitfulness. The new Christian born again needs to bear fruit as the Lord taught in John 15.⁹⁷⁹

Next we are introduced to the two great light bearers. The names “sun,” and “moon” are not given here, but simply “*the greater light*” and “*the lesser light*.”⁹⁸⁰ The sun, of course, is a light source, but the moon only gives light by way of reflection. Now we are not to consider either the sun or the moon as deity. However there is precedent in Scripture for the sun being representative of Christ.⁹⁸¹ He is, after all, the light of the world. The moon reflects the light of the sun and shines in the darkness. This is illustrative of the church. We are not the light as Christ is, but we are to shine brightly as reflectors.⁹⁸²

On the fifth and sixth days of creation the Lord makes an abundance of living creatures. There is a multiplication of terms to indicate the richness and great extension in variety of created living things. Verse 20 can be rendered “*let the waters swarm with swarms of living creatures.*” The phrases we find in the account remind us of the fact that Christ came in order that we might “*have life*” and that we will have such “*abundantly*.”⁹⁸³ God is the very source of life, so we need to come to Him supremely for life and reviving.⁹⁸⁴ Another thing to mention in connection with the great variety of life is that each has its place. Fish for the sea, birds for the air, and cattle for the land. In the same way the believer has his (or her) place in the body of Christ.⁹⁸⁵ There is as much variety in the body of Christ as there is in the created animal world. God has fashioned the hearts of each person individually, and the Spirit of God dispenses His gifts as He sees fit.⁹⁸⁶ Each Christian also has talents given of God by which he or she must do business.⁹⁸⁷ Thus the entire church is like the entire animal creation, with each doing what it was designed for and each reflecting the glory and goodness of God.

Then we come to man, made in the image of God, made male and female. Man is placed last as the pinnacle of creation and for a particularly good reason. Perhaps we have wondered why Christ came when He did. Why did He not come sooner or later? Of course the Father's plan is perfect and His timing is without fault. In the making of man we see prefigured the coming of Christ. Now He is not made in the image of God, but He “*is the image of God*.”⁹⁸⁸ Furthermore, we

979 See also Galatians 5:22,23; 2Peter 1:2-11.

980 Genesis 1:14-18.

981 Psalm 19:5; 80:17; Malachi 4:2; Matthew 12:29f; Mark 3:27f; Luke 11:21; Matthew 9:15; Mark 2:19,20; John 3:29; Hebrews 1:3; Revelation 1:16; 18:8;

982 Matthew 5:14,16.

983 John 10:10.

984 John 1:4; 3:15,16,36; 4:14,36; 5:21,26 etc.

985 1Corinthians 12:12f.

986 Psalm 33:15; 1Corinthians 12:7.

987 Matthew 24:14-30.

988 2Corinthians 4:4; Colossians 1:15; Hebrews 1:3.

note that Adam and Woman were to have dominion over the earth, but Christ is King of kings and Lord of lords, as prophesied by Daniel and reinforced in the New Testament.⁹⁸⁹ The rule of Christ is with grace and mercy, and that which Adam lost through sin, the second Adam has not just regained but has added to in abundance.

Then we come to the end of the creation story. Have you noted how the account seems to emphasise the fact that God had stopped His work? Of course God does not need to rest, He has simply stopped from the work of creation.⁹⁹⁰ However we discover that God “*finished*” all creation, and He “*ended*” His work because His work had been “*done*.” Then also we read that He “*rested*” from this work of creation because He had “*created*” it and He had “*made*” it.⁹⁹¹ We are thus brought to consider the final rest, heaven's wonders. There are many Scriptures that speak of rest, but perhaps for now let us consider the following two Scriptures. First one from the book of Hebrews:

9 There remains therefore a rest for the people of God. **10** For he who has entered His rest has himself also ceased from his works as God *did* from His.⁹⁹²

We are exhorted by the writer of the letter to the Hebrews to make sure to enter this rest of God by leaving our works, and by making sure we have true faith.⁹⁹³ Our second Scripture comes from the apostle Peter. We exhorted to ensure that we are geared up and sober fixing our eyes on the soon coming revelation of Jesus Christ:

Therefore gird up the loins of your mind, be sober, and rest *your* hope fully upon the grace that is to be brought to you at the revelation of Jesus Christ.⁹⁹⁴

989 Daniel 7:13,14; Ephesians 1:22; Revelation 1:5; 17:14; 19:16.

990 Here is another reason why we cannot countenance evolution. God does not need to rest but He has rested from this work of creation, so creation is finished and done with (in a creative sense). See also: John 5:17; Psalm 121:4.

991 Genesis 2:1-3.

992 Hebrews 4:9,10.

993 Hebrews 3:18,19; 4:11.

994 1Peter 1:13.

Chapter 9: Pause for thought.

(A brief review and a chance to reflect.)

And so we have nearly come to the conclusion of part 1 of this work. But before we move to part 2 it would be helpful to stop a while and reconsider what we have sought to show. In this chapter we will briefly review the conclusions from the previous eight chapters, and then take a look at the issue from a completely different perspective altogether through the means of poetry.

A brief review.

We began by looking at the nature of modern science in chapter 1 concluding that it is limited, flawed, and a thoroughly human affair partaking of all the problems associated with our fallen nature. Modern science effectively amounts to the use of our God-given human faculties in order to comprehend meaning in this world, but without God's direction. We discovered that modern science comes to the universe with many presuppositions. One of these is a firm belief in “nature” as a physical-only reality. We all come to things with some presuppositions so ours ought to be godly, God-given and true. Where better to look for such than in Scripture?

In chapter 2 we discussed the nature of evolution both in terms of natural selection and mutations. In chapter 3 we found that there were a number of insuperable problems for evolution both as an idea in thought and logic, (it defies common sense) and in connection with what we can readily observe all around us, (organisms are designed). One of the most difficult problems it encounters is the problem of requiring increasing amounts of material, energy and information as you ascend the tree of life. We concluded that evolution has no real basis as an idea and must be abandoned wholesale.

In chapter 4 we tackled the difficulties encountered by those who profess to believe in evolution and who also make the claim to a Christian faith. We outlined a number of reasons why evolution and following Christ are at war with one another. Evolution detracts from God's glory, places death in creation rather than as a result of sin, and removes Christ from centre stage.

Chapter 5 dealt with the question of hermeneutics, or how we should read and study Scripture. Since the Scriptures are our sole source of objective truth, which come from the very mouth of God, it is vital that we treat them appropriately and with respect. Studying Scripture

requires humility and an obedient heart. These things are only possible with the Holy Spirit's aid and can really only be done by one who has been born again of the Spirit.

In chapter 6 we tackled the issue of general revelation. We found that there is no one-to-one correspondence between general revelation (God's 'word' through creation) and the details found within modern science. We also discovered that God's creation declares truths about God, and yet modern science denies all of these so what wisdom do they possess?

Chapter 7 attempted to fill the vacuum created by showing the failure of modern science and evolution. The Scriptures are supreme because they reveal truth from the very mouth of God. But how should a Christian consider modern science and what 'science' should they pursue instead? This work is simply a starting point. Much more needs to be done.

In chapter 8 we made some comments on Genesis 1 to 3. We established that the text is historical and that we are justified in accepting a recent creation (6 days some 6,000 years ago). We also discussed the reasons for God creating in the way that He did, concluding that He wants to teach us spiritual truths concerning Christ and His work of redemption. We also considered the fall of the first human pair and the implications that has both for us and the pursuit of science.

A time to pause and reflect.

It is not always necessary to come at the problem that evolution brings with the full force of argument and examination. Sometimes reflection through the media of poetry helps! In my short and unimportant life there are occasions where I have been moved to write my own reflections in poetic form. The selection below shows my thinking on the nature of knowledge and the problem posed by evolution. I offer these for the reader to consider, and make of them what you will.⁹⁹⁵

In the first offering I tried very hard to make the point that the only sure knowledge stems from knowing God in Christ, for in Him and in Him alone are hid “*all the treasures of wisdom and knowledge.*”⁹⁹⁶ There are many references to various Scriptures but the essence of the poem is the nature of epistemology. Alone and with no God in view, we struggle for certainty. How do we know anything for certain? Can I trust my own eyes, or my own mind? What factors have influenced me? Even if we pool resources to seek knowledge together we can never be certain that collectively we have arrived at true truth. The history of science would seem to indicate this idea for the paradigms used to ground research are always changing. For that matter can we ever be sure that what we personally experience is the same as that which others do too? Such thoughts are for another book,

995 Both poems are the work of: Mike Viccary. Copyright. All errors and faults contained herein are the sole property of the author! All truth found lurking around is the property of the Lord God Almighty.

996 Colossians 2:2,3.

but in this poem I come to conclude that all that God has done and revealed to us in His word (the Holy Bible) is not only all that we really need, but also that it outstrips and outshines anything mere man in his supposed wisdom could produce.

Knowledge

*How can we know what is sure and true?
Science! The world declaims where else?
But such ken is strange, changeable and ever 'new'!*

*Since when, I ask, does truth change with season?
Surely what was, must be, and what will be, always was?
Rock knowledge is needed for the engine of reason.*

*Thus science gives no certain story fixed through ages,
History booms that what was 'true' is no more!
But how then can we speak to ancient sages?*

*OK so here's the thing – I know what is right, I know,
That Christ is God and died for me!
But how have I come to this? By what shall I show?*

*Ah! From the beginning He who made all has told,
The story of truth and saving grace,
And He does not speak in secret but declares so bold!*

*And then, wondrous grace not matched by any,
The Saviour steps into our poor domain,
And declares His Father's whole truth to one and many!*

*Creation declares His eternal infinite power and His praise,
Why do men mistake and suppress what is clear?
And strain to distort what God has provided in such perverse ways?*

*The gross and devilish doctrine of evolution is held 'true',
By saint and sage, sinner and sobriquet.
Why so? Evidence? No! Such doctrine we will one day rue!*

*Untold millions have been duped by this dope and dung,
And when they are shown true grace's gold,
Run foul and fly to fetid waters stink, the truth they've flung!*

*'Till time's end come death or His return in glory!
They will cry "rocks fall upon us" and hide,
From the conquering Son – end of story!*

My second offering was written during my post-doctoral studies in Holland in 1986. It was during this time that I wanted to express as succinctly as I possibly could, the vital and essential difference between modern science's view of origins and the Bible's view. It is rather simple and perhaps a little awkward but I think it gets the point across!

In the beginning.

*In the beginning God created
Or, in the beginning: Bang!
These two 'geneses' as just stated,
Are on what all futures hang.*

*In the first God injects –
His love and master plan.
Man disobeys and his sin infects,
But Jesus, God's word, saved man.*

*Alternative verse: In the first God reveals –
His love and master plan.
Man rebels, sins and steals
But Jesus, God's word, saved man.*

*In the second matter is created,
Out of nothing by nothing at all.
Its future is chaotic and fated,
Being predicted by evolution's call,*

*The hope of each genesis story,
Must be examined with careful thought.
That of the first is glory,
Whilst that of the second is nought.*

May the Lord bless you and keep you as you ponder His work of creation afresh!

Part 2: Alternative views of Genesis considered and refuted.

Chapter 10: Alternative views introduced.

(A brief analysis of different views of Genesis.)

Over the last forty years I have been able to collect and read more than 30 books which have as their focus the first few chapters of Genesis. Some of these have been excellent and have blessed me in my walk with the Lord. Sadly, though, the larger majority of these have caused me great concern. All of the books I have, claim to come from an “evangelical” stand-point in which the Bible is considered to be God's word. And yet within these works we find a subtle denial of this very truth.

In pursuit of the truth.

In the chapters that follow we shall examine the details of various authors' views on the Genesis text. In the course of these reviews I want to analyse the essence of what is taught and the implications that may follow. I am not making any assertion about the character, nor the standing (in a salvation sense) for each writer. It seems to me that part of the essence of the life of a Christian is a wholeheartedness for God. Speaking in sanctification terms, our life should be one of growth and one in which we eliminate everything which stands opposed to God. This includes holding every thought captive to Christ, whether it be a matter of a personal sinful habit, or a matter of deep universal truth.⁹⁹⁷ Our goal is the pursuit of God – knowing Him – and anything which detracts from this and leads us down some by-path is to be avoided at all costs. We must endeavour to keep ourselves in the love of God.⁹⁹⁸

Part of our quest in knowing God must be connected to the way things are. In other words we ought to be concerned with the truth. Now quite clearly the concept of evolution (as we have described it in this work) cannot be compatible with God, or knowing God. The Lord Jesus Himself declared the following:

I am the way, the truth, and the life. No one comes to the Father except through Me.⁹⁹⁹

997 2Corinthians 10:5.

998 Jude 1:21.

999 John 14:6.

Christ Himself is the means, the road, or the process by which we may come to the Father and have fellowship with Him. If we are not lead by Him and if we do not approach through Him and all He has done, we have no access to the Father. Christ is also the essence of what is right and true. As we have stated many times, only in Christ are “*all the treasures of wisdom and knowledge*” to be found.¹⁰⁰⁰ If what we are about is seeking to know truth, then if it counters Christ, or if it detracts from His work and being in any way, then we are on the wrong path. Finally, we discover here in John 14:6 that Christ is the essence of life. If we do not have Christ we are dead in our sins.

Now the important aspect of the trilogy of statements found in John 14:6 for our purposes is the fact that Christ is “*the truth.*” Our Saviour taught the disciples the night before He died that the Holy Spirit is also characterised by this concept of truth. Three times the Lord refers to Him as “*the Spirit of truth.*”¹⁰⁰¹ God (the Father) is described in three verses (four times) in the Old Testament as the “*God of truth.*”¹⁰⁰² The truth is described three times in the New Testament as being possessed by God, (“*truth of God*”).¹⁰⁰³ In John's gospel on three occasions we discover in different ways that truth is from God. We learn that the one “*who does the truth*” will be manifest so that what they have been doing was “*done in God.*”¹⁰⁰⁴ Then also we find that true worshippers must worship both in “*spirit*” and in “*truth.*”¹⁰⁰⁵ Finally we learn from the Saviour that the truth that He heard came “*from God.*”¹⁰⁰⁶ Clearly there is no disharmony or disjointedness in the trinity. If Christ is the truth, then the Father and the Spirit must be so too.

The Greek word for truth is “*ἀλήθεια*” (*alētheia*), and it has the following meaning in an objective sense: “that which is true in any matter under consideration.”¹⁰⁰⁷ Consequently we understand that God, the holy trinity, is the very embodiment and expression of what is true and therefore we know that God cannot lie.¹⁰⁰⁸ But there is a problem. God may well be “the truth,” and, since “*no lie is of the truth,*” God will only speak and act in truth, but we do not see God, so how do we know what is true?¹⁰⁰⁹ The answer, of course, comes from what He says. There are two ways in which God has spoken. First in creation, and second through the written word. Both forms of revelation require interpreting. However the Scriptures (that which is written) are the very word from God. The night before He died the Saviour prayed in earnest to the Father for Himself, for His

1000 Colossians 2:2,3.

1001 John 14:17; 15:26; 16:13.

1002 Deuteronomy 32:4; Psalm 31:5; Isaiah 65:16(x2).

1003 Romans 1:25; 3:7; 15:8.

1004 John 3:21.

1005 John 4:24.

1006 John 8:40.

1007 See: Strong's Greek Lexicon: <http://www.blbclassic.org/lang/lexicon/lexicon.cfm?Strong's=G225&t=KJV> .

1008 Titus 1:2; Hebrews 6:18.

1009 1John 2:21.

disciples, and for those who would believe through them (i.e. us). In this prayer we learn that Christ, had “*finished the work*” given Him of the Father, had “*manifested*” the Father's name to His disciples, had given to the disciples “*the words*” the Father had given Him, and had “*kept them in*” the Father's name.¹⁰¹⁰ Our Saviour then comes to a point in His high priestly prayer whereby He makes a sharp distinction between the Father, and the world in which the evil one held sway. The two realms are not just miles apart but diametrically opposed. You are either “*of*” one, or “*of*” the other – you cannot be a signatory to both. The disciples were to be left *in the* world but they were not “*of*” it.¹⁰¹¹ So what would the Lord's on-going provision appear like following His immanent departure?

All the while He was with them He kept them and gave them the words of God, but what of the future when He would be gone and raised back to heaven? Well there was provision for this too. The Saviour prays to the Father that His disciples would continue to be sanctified, set apart and kept in God's word. He prays:

Sanctify them by Your truth. Your word is truth.¹⁰¹²

The truth will set the Lord's disciples apart and make them holy. The truth is that which God speaks. His word is truth. The question then becomes, what exactly do we mean by “God's word”? Well, it is everything that God has spoken. We have already noted that God has spoken both in creation and through His written word. Both need interpreting. That which God has spoken in creation cannot contradict that which He has spoken in His word and provided in written form. Whilst creation declares the glory of God and acts as a witness to the Almighty God and His invisible attributes, it cannot show us wisdom, the way of life.¹⁰¹³ But the Scriptures – God's (written) word – can. Consider the following statements.

The secret *things belong* to the Lord our God, but those *things which are* revealed *belong* to us and to our children forever, that *we* may do all the words of this law.¹⁰¹⁴

7 The law of the Lord *is* perfect, converting the soul; the testimony of the Lord *is* sure, making wise the simple; 8 the statutes of the Lord *are* right, rejoicing the heart; the commandment of the Lord *is* pure, enlightening the eyes; 9 The fear of the Lord *is* clean, enduring forever; the judgments of the Lord *are* true *and* righteous altogether. 10 More to be desired *are they* than gold, yea, than much fine gold;

1010 John 17:4,6,8,12,14

1011 John 17:14-16.

1012 John 17:17.

1013 Psalm 19; Acts 14:17; Romans 1:18.

1014 Deuteronomy 29:29.

sweeter also than honey and the honeycomb. **11** Moreover by them Your servant is warned, *and* in keeping them *there is* great reward.¹⁰¹⁵

16 All Scripture *is* given by inspiration of God, and *is* profitable for doctrine, for reproof, for correction, for instruction in righteousness, **17** that the man of God may be complete, thoroughly equipped for every good work.¹⁰¹⁶

These Scriptures (that which God wants us to know and understand) teach clearly that they (the written word) are efficacious and effective for life. God has “*magnified*” His word above His “*name*.”¹⁰¹⁷ In 2Peter 1 we read that the Lord has given us “*all things that pertain to life and godliness*,” (i.e. everything we need to live a godly life), and that the means by which we can acquire these things is through the “*knowledge of Him*,” which is by means of the “*precious promises*” (i.e. Scripture).¹⁰¹⁸ It is the word of God **written** which gives us all truth. This is what the Lord promised the disciples the night before He died. He stated unequivocally that the Holy Spirit would lead them into “*all truth*.”¹⁰¹⁹ The truth, of course, is the Person of God's Son, and it is Him that God has spoken.¹⁰²⁰ Thus the Scriptures speak supremely of Christ.¹⁰²¹

However, as we have already noted and discussed in chapter 5, the Scriptures require interpreting. This need for hermeneutical tools is varied, for sometimes the meaning in Scripture is very plain, whilst at other times help is most definitely required.¹⁰²² Nevertheless the Lord has given all the tools we need **in Scripture**. The first tool for understanding God's word written is that we are spiritually alive, that we have been born again, as we have noted elsewhere.¹⁰²³ Without this none can hope to come to any understanding at all.¹⁰²⁴ Now the word of God written is thus the truth as Christ is the truth. Clearly the Lord Jesus Christ is much more than the written word of God, but that is not to demean and diminish the Scriptures. What this amounts to, however, is that in Scripture we have the very truth which comes from God. Since no lie is of the truth, the Scriptures cannot lie, nor err. Further, since the Scriptures most certainly do not reveal any concept of evolution, then such a notion is clearly ruled out as being true. When God speaks, He cannot but speak truth. When God reveals to us His written word (Scripture) and these contain nothing which accords with evolution (but rather speak against this notion), our only course of action regarding

1015 Psalm 19:7-11.

1016 2Timothy 3:16,17.

1017 Psalm 138:2.

1018 2Peter 1:3,

1019 John 16:13.

1020 Hebrews 1:1-3.

1021 Luke 24:25-27,46,47.

1022 Compare Matthew 22:31 with 2Peter 3:16.

1023 See chapter 5.

1024 2Corinthians 2:6-16.

evolution is to reject and oppose it. When it comes to interpreting creation, the first hermeneutical tool is an understanding of God and His work. Without this understanding we will approach creation with our own understanding born from our upbringing, education and other influences and we will miss important truths only revealed in Scripture.

There are many who still want to uphold evolution alongside their Christian faith. Some may do so misguidedly, others through ignorance, still others because they have not the time to think things through. These may be the Lord's people even though they deny Him by holding to a doctrine which denies His Creator-ship and rule. But those who stubbornly refuse to reject the doctrine of evolution despite the patient teaching of God must be sailing very close to God's displeasure. I dare not make any judgements on anyone's soul. My task is simple: to glorify God and declare His great grace goodness and glory. A rejection of evolution and all it teaches is part of this task, for evolution is a doctrine of demons.

Is there any pattern to the alternative views of Genesis?

In the following chapters I will consider 17 academics, both scientists and theologians, who have written on Genesis and have upheld either the idea of evolution or have accepted the necessary condition for evolution, namely, the millions (or billions) of years that it needs. In the main I have considered just one of each writer's major works which touches on Genesis. Since each writer approaches the topic from a different perspective and deals with Genesis in different ways, my treatment of their work will be singular and unique to that author. I shall respond to the positions outlined by each author as we go along. However there will arise certain repeated themes which will be common to all, and these will be the subject of a separate treatment at the end of this work in chapter 28.

Most alternatives to a literal view of Genesis come under three different headings as shown in table 16 below. First, there are those who argue for no absolute beginning. This view takes the first verse either as a title or summary statement, or subordinates it to later verses. The second type of view offered is that which introduces a gap (or gaps) into the text. Proponents of this view often accept that the days are indeed literal days, but because of some commitment to modern geology and long ages, they add gaps to make Scripture fit in. The third type of alternative scheme come from those who do not accept that the Genesis text is historical in any way. Now there is considerable cross-over between views so that some may hold to combinations of these different ideas. However seeing the variety and grouping them together at the start will help when it comes to making some summary conclusions at the end of our investigations.

Table 16: Alternative views of Genesis.

Alternative view.	Details.	Examples
No absolute creation.	By removing the opening verse, or by limiting its force, the creation story is thereby limited to what God did with pre-existing material within time.	Genesis 1:1 is a dependent clause, not an independent one signalling absolute creation.
		Genesis 1:1 acts merely as a title summarising what occurred in Genesis 1:2f.
Gap theory.	By introducing a time gap somewhere in the text, the supposed long ages suggested by modern science may be accommodated.	The word “beginning” of Genesis 1:1 indicates an unspecified but long period of time.
		A time gap exists between Genesis 1:1 and Genesis 1:2. (Thomas Chalmers view).
		Genesis 1:2 itself covers a vast and unspecified period of time.
		A time gap exists between Genesis 1:2 and Genesis 1:3.
Non-historical genre.	By suggesting that the Genesis stories are not historical accounts but were written in another form, the implications of an apparent literal nature of the text may be avoided.	Each day is to be taken as an “age” not as a 24 hour period. (Day-Age view).
		The creation stories were written in the cultural setting of the ANE and so were not literal but polemic. (Polemic view).
		The creation stories are poetic or figurative not literal history. (Poetic view).
		The creation stories are written in a literary manner following a framework so are not chronological (Framework hypothesis).
		The creation week is analogical and the days must be taken as “days of God.” (Analogical view).

In the next three chapters (11, 12 and 13) we will consider the three main alternatives to the literal 6-day creation some 6,000 years ago, which fall under the second and third type of alternative (Gap theory and non-historical genre). In the first we shall look at Thomas Chalmers who invented the gap theory in the early nineteenth century. In the second we shall consider the day-age theory as promoted by Hugh Ross, but which also emerged in the nineteenth century. In the third we shall look at the framework hypothesis as described by Henri Blocher which arose as an idea in the twentieth century. Whilst Chalmers started the idea of the gap theory, neither Ross nor Blocher were the inventors of their respective views, so a brief treatment of how these views came to be considered will be undertaken as well.

In chapters 14 and 15 we explore two modifications to the idea of a gap in the text. First we

consider the view offered by John Sailhammer who has been influential amongst many “New Calvinists,” and second we shall look at what the mathematician John Lennox has to offer. Then in chapter 16 will look at Bruce Waltke who offers a view which destroys the idea of an absolute beginning (the first category of table 16 – no absolute beginning). In chapter 17 we look at the work of another framework follower, the astronomer Howard Van Till, whose theistic evolutionary view lead him outside of a Christian position altogether.

Another important non-historical genre view is the analogical, which treats the days of Genesis as referring to God and not man. C. John Collins and Vern Poythress follow this viewpoint and they are treated in chapters 18 and 19 respectively. Following these come four theistic evolutionists and contributors to the website BioLogos.¹⁰²⁵ First in chapter 20 we shall consider Tremper Longman and his hermeneutical tools. Next in chapter 21 we look at the geneticist Francis Collins who founded the BioLogos website, whilst in chapter 22 we take a brief look at the “New Calvinist” Tim Keller. Chapter 23 focuses on our last BioLogos advocate focusing on the writing of the microbiologist Denis Alexander.

In chapter 24 we explore the ideas of Bernard Ramm from his main work *The Christian View of Science and Scripture*. Ramm advocated the progressive creationist view, which although he vigorously denies it, has much in common with theistic evolution. Ramm is also significant in that unintentionally he promoted a return to Biblical creation and a six day view.

Chapter 25 considers John Walton and his unique perspective of a no material creation, whilst chapter 26 discusses John Fesko and his temple perspective. The last chapter to deal with proponents of a non-historical view (chapter 27) focuses on Peter Enns who alone amongst modern theistic evolutionists works out the implications of holding to evolution. In the final chapter we attempt to derive common themes from all 17 writers.

Since these pieces were written as stand-alone items in analysis of each individual author's work, unfortunately there will be (inevitably) quite a bit of repetition. The modern academic world is bedevilled by a fawning acceptance of Scripture as a latecomer in the world of ancient literature and a deference to the wonders of modern science. There is an equal bootlicking mentality to the academic archaeological and anthropological world so that it is not surprising certain themes reappear. I ask the reader for patience in the face of repetition through the chapters that follow.

A brief biographical sketch for each author treated in this study can be viewed at Appendix 4 at the end of this work.

1025 This is a site dedicated to promoting theistic evolution. <https://biologos.org/>

Chapter 11: Thomas Chalmers.

The gap theory.

In the early nineteenth century, the Scottish minister and gentleman scientists Thomas Chalmers developed what has become known as the gap theory in order to accommodate the new science of geology.

For his MA thesis, John Webster examined the life and thought of Thomas Chalmers.¹⁰²⁶ Drawing from Chalmers' first biographer's assessment published in 1852, Webster reviews Chalmers' life in two parts, each of which was characterised by a singular focus and obsession.¹⁰²⁷ The first half of his life was centred on mathematics and natural philosophy and ran up to his conversion in 1809.¹⁰²⁸ Following his undergraduate studies in theology, Chalmers studied mathematics and natural philosophy at postgraduate level in Edinburgh under Professor John Playfair. Playfair was to be a very important influence on Chalmers at Edinburgh responsible not only for developing his mathematical studies, but for introducing him to the theories of James Hutton, who argued that geology pointed to a very old earth.¹⁰²⁹ Although he was ordained as a minister in the Church of Scotland in 1803, Chalmers was an “*absentee cleric*,” and spent considerable time at the university of St. Andrews lecturing in chemistry and mathematics.¹⁰³⁰ In the second part of his life running up until his death in 1847, the object of his devotion was theology. However the exact nature of his theology is open for debate. For example, Chalmers was “*a disciple of Malthus*,” whose ideas about population growth and food production were influential for Charles Darwin.¹⁰³¹ Because he adopted a Baconian philosophy, his approach to systematic theology “*was a major departure from accepted orthodoxy*,” so that he made theology a sub-discipline of science.¹⁰³²

1026 **John E. Webster.** Science and the Scottish Evangelical Movement in Early Nineteenth Century Scotland: a study in the interactions of science and theology in the work of the Rev. Dr. Thomas Chalmers D.D., LL.D., 1780-1847. M.A. Thesis. Department of Science and Technology Studies, University of Wollongong. 1989. <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=3229&context=theses>

Hereafter referenced as: Webster. “Science and the Scottish Evangelical Movement.”

1027 Thomas Chalmers first biographer was his son-in-law, **William Hanna**.

1028 **Webster.** Science and the Scottish Evangelical Movement. Abstract,P5.

1029 **Webster.** Science and the Scottish Evangelical Movement. P6,19.

1030 **Webster.** Science and the Scottish Evangelical Movement. P3.

1031 **Webster.** Science and the Scottish Evangelical Movement. P11.

1032 **Webster.** Science and the Scottish Evangelical Movement. P10,146.

Modern science used as an ally for the gospel.

Shortly after being called as minister of the Tron church in Glasgow, he delivered a series of lectures which were to catapult him to fame. The year was 1816, and the title of these lectures gives an indication of the inclination his theology was to take. The lectures were called: *Astronomical Discourses*, and had as a main aim, the purpose of calling modern science as an ally to the Christian faith.¹⁰³³ The *Astronomical Discourses* were published in 1817 and sold in great numbers.¹⁰³⁴ Webster observes that:

*“It was in this series of sermons that Chalmers used the conclusions of modern science, to proclaim the gospel.”*¹⁰³⁵

Webster has demonstrated clearly that Chalmers clung tenaciously to the scientific views of his day throughout his life both before and after his conversion.¹⁰³⁶ It appears that Chalmers favoured Baconian and Newtonian science over that of Voltaire, but his attempts to defend the Christian doctrine of Revelation made extensive use of the new sciences.¹⁰³⁷ Webster contended that Chalmers not only grasped the science of the day, but he was also keen “to use his scientific knowledge to advance the kingdom of God.” Furthermore, Chalmers held that “the truths of science” were not inconsistent with “God’s written revelation.”¹⁰³⁸

Chalmers favourable disposition to the advancing sciences of the early nineteenth century includes a prescient prophetic picture of the future, but without any apocalyptic overtones. In his *Astronomical Discourses* he declaims:

*“Who shall assign a limit to the discoveries of future ages? Who can prescribe to science her boundaries, or restrain the active and insatiable curiosity of man within the circle of his present acquirements? We may guess with plausibility what we cannot anticipate with confidence. The day may yet be coming, when our instruments of observation shall be inconceivably more powerful.”*¹⁰³⁹

Chalmers lived at a time when all of science was largely based on experiment or on observations,

1033 **Webster.** Science and the Scottish Evangelical Movement. P81.

1034 **Webster.** Science and the Scottish Evangelical Movement. P82.

1035 **Webster.** Science and the Scottish Evangelical Movement. P82.

1036 **Webster.** Science and the Scottish Evangelical Movement. Abstract.

1037 **Webster.** Science and the Scottish Evangelical Movement. P84.

1038 **Webster.** Science and the Scottish Evangelical Movement. P98.

1039 **Thomas Chalmers.** Astronomical Discourses. Discourses on the Christian Revelation viewed in connexion with the modern astronomy with others of a kindred character. Published for Thomas Constable by Sutherland and Knox, Edinburgh and by Hamilton, Adams and co., London. 1850. DISCOURSE I. A SKETCH OF THE MODERN ASTRONOMY. P24.

<https://ia600206.us.archive.org/10/items/discoursesonchri00chaluoft/discoursesonchri00chaluoft.pdf>

Hereafter referenced as: **Thomas Chalmers.** Astronomical Discourses.

yet his naïve acceptance of the conclusions made from observations is also clearly evident.¹⁰⁴⁰ For example, based on the developing ideas in astronomy, he argued extensively for the great likelihood of alien life on other worlds orbiting distant stars.¹⁰⁴¹

On Genesis and an ancient earth.

With respect to the first chapters of Genesis, Chalmers rejoiced in the idea that the world was millions of years old according to the geological findings of his day. At the outset of his major work, his acceptance of the great antiquity of the earth is posed as an unanswerable question:

*“Who can look across the millions of ages which have elapsed, and from an ulterior post of observation look again ... on an antiquity as remote and indefinite as ever?”*¹⁰⁴²

Although this work was published in 1841, Chalmers held to the great antiquity of the earth from as early as 1803 when he was lecturing on science.¹⁰⁴³ Despite the fact that he was not converted until 1809 aged nearly 30, he still held tenaciously to the long age of the earth as his publication of 1841 shows.¹⁰⁴⁴ Chalmers' work proceeds from a starting point of natural theology, for he sought to derive from the prevailing geology of his day truths and principles which would give proof of deity. For our purposes in this brief review, the most important part of his works is Chapter II of Book II in which Chalmers uses the evidence from the accepted geology of his time as a proof for the existence of God. Writing on this, Chalmers begins by noting that the number of geologists who favoured a great antiquity for the earth was on the increase. His argument proceeds on the basis that the age of the earth was in fact of no consequence and would do no “*violation even to the strict literalities of the book of Genesis.*”¹⁰⁴⁵

1040 **Thomas Chalmers.** *Astronomical Discourses.* P52,53,54.

1041 **Thomas Chalmers.** *Astronomical Discourses.* P21,25,26,31,32,40.

1042 **The Works of Thomas Chalmers,** D.D & LL.D. Professor of Theology in the University of Edinburgh. Third Uniform Edition. Volume First. New York: Robert Carter, 56 Canal Street. 1841. Book I. Preliminary Views. Chapter 1. On the Distinction between the Ethics of Theology and the Objects of Theology. P18.

[https://play.google.com/books/reader?](https://play.google.com/books/reader?id=WQY0AAAAYAAJ&printsec=frontcover&output=reader&hl=en_GB&pg=GBS.PP1)

[id=WQY0AAAAYAAJ&printsec=frontcover&output=reader&hl=en_GB&pg=GBS.PP1](https://play.google.com/books/reader?id=WQY0AAAAYAAJ&printsec=frontcover&output=reader&hl=en_GB&pg=GBS.PP1)

1043 “*In his lectures at St. Andrews in 1803 he had already said, “The writings of Moses do not fix the antiquity of the globe. If they fix anything at all, it is only the antiquity of the species.”*” From: Article on Chalmers in *The Popular Encyclopedia*, published by Blackie & Son, 1883. <http://www.newble.co.uk/chalmers/biography.html>

1044 **Webster.** “Science and the Scottish Evangelical Movement.” Abstract,P5. .Some suggest that Chalmers was converted at age 31 in 1811. See:<https://banneroftruth.org.uk/about/banner-authors/thomas-chalmers/>

1045 **The Works of Thomas Chalmers,** D.D & LL.D. Professor of Theology in the University of Edinburgh. Third Uniform Edition. Volume First. New York: Robert Carter, 56 Canal Street. 1841. Book II. Proofs for the Being of a God in the Dispositions of Matter. Chapter II. Natural and Geological Proofs for a Commencement of our present Terrestrial Economy. P229.

[https://play.google.com/books/reader?](https://play.google.com/books/reader?id=WQY0AAAAYAAJ&printsec=frontcover&output=reader&hl=en_GB&pg=GBS.PP1)

[id=WQY0AAAAYAAJ&printsec=frontcover&output=reader&hl=en_GB&pg=GBS.PP1](https://play.google.com/books/reader?id=WQY0AAAAYAAJ&printsec=frontcover&output=reader&hl=en_GB&pg=GBS.PP1)

Chalmers appeals to the doctrine of accommodation – the “*use of popular language*” – to modify the interpretation of the opening chapter of the Bible. All that can be safely held from the first chapter of Genesis “*is a great primary act of creation, at how remote a period is uncertain.*”¹⁰⁴⁶ The motivation for such an accommodation to the new philosophy is provided because “*our world may have been the theatre of many changes and successive economies, the traces or memorials of which might be observable at the present day.*”¹⁰⁴⁷ These words indicate clearly Chalmers' reliance on the doctrine of uniformity that observations in the present can be used as the key to ancient events. Given such a belief in the geology of his day, it:

“,, leaves ... abundant scope to those who are employed in the investigation of these memorials, if it be granted that the Mosaic narrative fixes, only the antiquity of our present races, and not the antiquity of the earth that is peopled by them.”¹⁰⁴⁸

Chalmers was unhappy about spiritualising the text and making the days of Genesis one span the ages to fit the geological periods, for he recognised that the six days described there was “*a week of miracles.*”¹⁰⁴⁹ However this week was simply a “*a great creative interposition,*” of God which was bounded by “*so many successive evolutions,*” from which “*the present economy was raised out of the wreck and materials of the one which had gone before it.*”¹⁰⁵⁰ Thus the great ages of the geologists are glossed over, and creation-week is an interjection of miracle by the Lord.

Chalmers declares that “*the sacred penman does not fix the antiquity of our globe but only of our species,*” so that the rest of the history of Scripture is left untouched and the new-found geology may be allowed its place. In doing this he has made the great mistake of separating what God does in creation from what He does with man. Chalmers' main intention was to show that geology displayed “*the marks and footsteps of a Divinity.*”¹⁰⁵¹ Chalmers is desperate to avoid any debate about the theories and ideas engaged in by the geologists, for his aim was merely to establish the truth of God's creative interposition, (i.e. creation week). However in accepting the vast ages (millions of years) he has already acquiesced to one theory promoted by the new geologists, namely, the idea of great antiquity. He accedes to this because geology has shown that there has been:

Hereafter referenced as: The Works of **Thomas Chalmers**. Book _ Chapter _ P _.

1046 The Works of **Thomas Chalmers**. Book II Chapter II P230.

1047 The Works of **Thomas Chalmers**. Book II Chapter II P230.

1048 The Works of **Thomas Chalmers**. Book II Chapter II P230.

1049 The Works of **Thomas Chalmers**. Book II Chapter II P230.

1050 The Works of **Thomas Chalmers**. Book II Chapter II P230.

1051 The Works of **Thomas Chalmers**. Book II Chapter II P230,231.

*“... the rise and disappearance of certain distinct and successive economies of nature on the face of our globe — the decay or destruction of each implying the extinction of at least so many of the animal and vegetable races proper to its era.”*¹⁰⁵²

Seeking to avoid controversy within his contemporary geological world, Chalmers has accepted the one common feature in all of the theories being expounded, whether they be of the catastrophist or the uniformitarian camp, namely, that there have been vast ages in our world as “evidenced” by the rocks. But it must also be pointed out that interwoven within these words, is the kernel of evolutionary dogma that each age had its own flora and fauna. Of course the vast ages proposed by the geologists of the time are simply ideas. They are not certain facts. An analysis of the assumptions embedded in the theory of the geologists would serve to show their uncertainty.

Having taken on board the vast ages provided by the geology of his day, he then describes the possible processes the earth may have been through during these vast ages, and what the consequences for man and life would be. Notice how his visual description of earth history seems to come very close to a form of evolution:

*“By an exercise of creative power the sea may be stocked with new generations, adapted to the last changes which its waters have undergone— and by another exercise of creative power, the new land which has been formed may also be peopled with living beings. If there be a rational being among the last like man, he might observe the traces of that process which took place in the last era of the history of the globe. He might learn from the vestiges of marine animals firmly imbedded in the stratified rock, that the ground he is now treading upon was at one time covered with the waters of the sea — and by comparing specimens extracted from the fossil productions around him with the fishes of the present ocean, he might come to the wonderful conclusion that the former species have been extinguished, and given place to a new and totally dissimilar generation.”*¹⁰⁵³

He continues in this descriptive way just as any old-Earth geologist would:

*“The successive retreats and irruptions of the Ocean may produce, not one, but a series of alternations. And the strata which are around us, each evincing its own relative antiquity by its position, and exhibiting the remains of its own peculiar animals, may serve the double purpose of recording the great revolutions which have taken place, both in the animal and vegetable kingdoms, and upon the surface of our Globe.”*¹⁰⁵⁴

Having stated that he was not wanting to entertain any of the various theories of geology, he seems

1052 The Works of **Thomas Chalmers**. Book II Chapter II P231,232.

1053 The Works of **Thomas Chalmers**. Book II Chapter II P234,235.

1054 The Works of **Thomas Chalmers**. Book II Chapter II P235.

to have favoured the catastrophist position. It is not generally realised by the public that those who favoured such a position only differed with the uniformitarians in details, not in the vast age of the Earth.¹⁰⁵⁵ The only group which opposed both the uniformitarians and the catastrophists were the Scriptural geologists who held tenaciously to Scripture – the Mosaic record – without denying any of the real geological evidence.¹⁰⁵⁶

*“... the most recent of these formations being that which preceded the very last catastrophe; and the intervals between the catastrophes marking the distinct eras of a globe, which, for aught we know, might have been the theatre of many revolutions.”*¹⁰⁵⁷

The danger of accommodation.

Reading Chalmers' views on the details of geology and on the development of scientific ideas at this period of history is highly illuminating for a number of reasons. Apart from the fact that he was the founder and instigator of the “gap” theory, we can also see in his work the process by which the new science developed, and we can observe how it was that a man of God fell into the trap of accommodating too much. In this next quote we observe both the process by which the new science of geology was developing, and Chalmers' shift into further accommodation:

*“Now to come nearer to our argument. Correspondent to the marks by which one set of professional men, even the geologists, have arranged these various formations in the order of their antiquity — there is another set of professional men, even the anatomists or comparative anatomists, who in the course of their independent researches have by the study of fossil remains ascertained, they think, many of the species and genera of living creatures by which the world has been peopled during the respective eras of its physical history.”*¹⁰⁵⁸

Notice first the reference to comparative anatomists who studied the fossils, as well as the geologists, both of whom are given the appellation “*professional*.” Although the date of publication for Chalmers work was some eighteen years prior to Darwin's publication of his seminal work, *On the Origin of Species*, theories of evolution were in circulation amongst the learned. However,

1055 Catastrophists accepted the great antiquity of the earth but suggested that its surface features were caused by great catastrophic disturbances. Uniformitarians believed that the earth's surface was caused by slow and gradual changes.

1056 See the work of **T. J. Mortensen**. British Scriptural Geologists in the first half of the nineteenth century. PhD Thesis. September 1996. Coventry University & Wycliffe Hall, Oxford. **T. J. Mortenson**. The Great Turning Point: The Church's Catastrophic Mistake on Geology—Before Darwin. 2004. Green Forest, AR: Master Books. The Church's Catastrophic Mistake on Geology—Before Darwin. Green Forest, AR: Master Books, 2004.

1057 The Works of **Thomas Chalmers**. Book II Chapter II P239.

1058 The Works of **Thomas Chalmers**. Book II Chapter II P238,239.

Chalmers does not seem to recognise this at this point. As a second observation we must note that Chalmers has acquiesced to an acceptance of the “*professionals*” of the day, when, in fact, many of the geologists and naturalists of this time were men of means who studied and explored out of their own motivation, and who ought to be referred to as *amateurs*. They were subject to no scrutiny or oversight, and they objected vehemently to those who preferred to start with Scripture. These men operated by the Enlightenment creed of reason first, rather than the godly one of revelation first. We have the advantage of hindsight. Consequently, it is essential that we look today at the science of our day (modern science) and consider whether we are taken in unawares but its seeming truthfulness. We are never to ignore true data and facts (the measurements faithfully made and the observations faithfully recorded – although these must be checked), but we have every right to be critical about the ideas and theories used to hold these facts together.

Chalmers references the work of Georges Cuvier (1769-1832), a catastrophist, and suggests that the work done by such professional geologists and comparative anatomists shows clearly that man is of recent origin, and that only in the very recent strata can be found animals akin to those we observe today:

*“But it would appear from the observations of Cuvier and others — that though in this way an occasional species may have survived one or two of these destructive revolutions; yet that each catastrophe annihilated the great majority of the existing genera, and that a very few more swept every trace of them away from the surface of the globe. In none of the old formations hath he ascertained the vestige of the human skeleton — marking the recent origin of our own species. It is only in the latest of these formations that he discovered traces indeed of any of our existing genera of animals.”*¹⁰⁵⁹

After establishing the fact that new animals can only come about by natural generation, and that whilst species may admit to variety they cannot change into new species, Chalmers asserts *as a matter of faith* that the arrival of man and of different animals is an indication of God's creative interposition.

*“At no juncture, we apprehend, in the history of the world — is the interposition of Deity more manifest than at this — nor can we better account for so goodly a creation emerging again into new forms of animation and beauty from the wreck of the old one, than that the spirit of God moved on the face of the chaos — and that nature, turned by the last catastrophe into a wilderness, was again re-peopled at the utterance of His word.”*¹⁰⁶⁰

1059 The Works of **Thomas Chalmers**. Book II Chapter II P240.

1060 The Works of **Thomas Chalmers**. Book II Chapter II P246.

Chalmers continues with a full statement of the way in which he views the geology in connection with Scripture in the following quote:

*“Those rocks which stand forth in the order of their formation, and are each imprinted with their own peculiar fossil remains, have been termed the archives of nature where she hath recorded the changes that have taken place in the history of the globe. They are made to serve the purpose of scrolls or inscriptions on which we might read of those great steps and successions by which the earth has been brought to its present state. And should these archives of nature be but truly deciphered, we are not afraid of their being openly confronted with the archives of revelation. It is unmanly to blink the approach of light from what ever quarter of observation it may fall upon us — and these are not the best friends of Christianity who feel either dislike or alarm, when the torch of science or the torch of history is held up to the Bible. For ourselves, we are not afraid, when the eye of an intrepid, if it be only of a sound philosophy, scrutinizes however jealously all its pages. We have no dread of any apprehended conflict between the doctrines of scripture and the discoveries of science — persuaded as we are, that whatever story the geologists of our day shall find to be engraven on the volume of nature, it will only the more accredit that story which is graven on the volume of revelation.”*¹⁰⁶¹

Notice first how he refers to creation as “*nature*,” and designates this as a personified female, (“*the archives of nature where she ...*”)! Second we observe that he has fallen into believing that this “*nature*” has recorded the changes that have taken place in the history of the world, rather like the records of history recorded in a book, (“*nature... hath recorded the changes ...*”). This amounts to an acceptance of the “Two Book” view of the world (although he does not seem to call it this) to which many have reverted.¹⁰⁶² His view is that “*light*” (understanding) may come from many sources, (“*the torch of science or the torch of history*”). Chalmers believes that the story the geologists read in the rocks will not in any way contradict the story of Scripture. However this assumes that the story of the rocks can be read without any bias of personal interpretation. It is also an admission that the old-Earth view is acceptable, and that any thought of a single inundation (Noah's flood) being the cause of the state of the present world is rejected. Chalmers is of the view that truth is truth wherever it may be found, whether in the rocks by geologist, or in Scripture by theologians. The problem with such an assertion is that we need an objective standard to verify what is truly true! We are not neutral and impartial judges receiving evidence from various sources. We are rather embedded within the creation of God, and to understand anything we need the eyes of the Lord. The naïve view that truth comes to us unvarnished from the record of the rocks or from

1061 The Works of **Thomas Chalmers**. Book II Chapter II P2407,248

1062 The “Two Book” idea has a long history but essentially it holds to the idea that Scripture and General Revelation are two books which any may read. The Book of Scripture is to be read as any other written book. The Book of Nature must be “read” using science.

Scripture is patent nonsense. The question of hermeneutics is the vital missing link here! With regard to Scripture the hermeneutical tools are provided within its pages for those who are truly born again and indwelt by the Holy Spirit. For the geologist what interpretive tools is he using? Now, in great naïvety, Chalmers believes that, “*instead of a conflict, there is a corroborative harmony between*” the truths from each department, so that the Mosaic account of history may be reconciled with the history discovered by geology.¹⁰⁶³

The gap theory.

The heart of Chalmers' discussion centres on the first two verses of Genesis chapter one. To enable the geologists their vast spans of time, Chalmers believed that he could separate Genesis 1:1,2a from the rest of the narrative, so that the first day begins with the Spirit of God hovering over the waters, and what went before this was God's initial creation which then fell into a chaos:

*“Now let it be supposed that the work of the first day in the Mosaic account of the creation, begins with the Spirit of God moving upon the face of the waters. The detailed history of creation in the first chapter of Genesis begins at the middle of the second verse; and what precedes might be understood as an introductory sentence, by which we are most appositely told both that God created all things at the first; and that afterwards, by what interval of time it is not specified, the earth lapsed into a chaos, from the darkness and disorder of which the present system or economy of things was made to arise. By this hypothesis neither the first verse, nor the first half of the second verse forms any part of the narrative of the first day's operations, — the whole forming a preparatory sentence disclosing to us the initial act of creation at some- remote and undefined period; and the chaotic state of the world, at the commencement of those successive acts of creative power, by which out of rude and undigested materials the present harmony of nature was ushered into being. Between the initial act and the details of Genesis, the world for aught we know might have been the theatre of many revolutions, the traces of which geology may still investigate, and to which she in fact has confidently appealed as the vestiges of so many successive continents that have now passed away. The whole speculation has ministered a vain triumph to infidelity — seeing first that the Historical Evidence of Scripture is quite untouched by those pretended discoveries of natural science; and that, even should they turn out to be substantial discoveries, they do not come into collision with the narrative of Moses. Should, in particular, the explanation that we now offer be sustained, this would permit an indefinite scope to the conjectures of geology — and without any undue liberty with the first chapter of Genesis. We may here state that there is no argument, saving that grounded on the usages of popular language, which would tempt us to meddle with the literalities of that ancient, and as appears to us authoritative record.”*¹⁰⁶⁴

1063 The Works of **Thomas Chalmers**. Book II Chapter II P250.

1064 The Works of **Thomas Chalmers**. Book II Chapter II P250,251.

There are several points worthy of dissection from Chalmers' words. First, it is clear that the motivation for the separation between an initial creation and a (supposed) subsequent one starting with the Spirit of God's action in verse 2, is arrived at not by exegesis, but in order to accommodate the science of geology. The theory that he is proposing “*would permit an indefinite scope to the conjectures of geology.*” These vast ages, which are required by the new *confident* geology, and which Chalmers has wedged into Genesis 1:2, are “*the traces of which geology may still investigate.*”¹⁰⁶⁵ Second, in devising a lengthy time gap within verse 2 there are now two creations, the second of which Chalmers refers to as “*the detailed history of creation,*” in the quote above and which he believes has come from a state of chaos, darkness and disorder. It is clear that Chalmers considers the chaotic and disorderly state of the world to have come about through the many geological revolutions and upheavals of this world, each of which has formed strata replete with fossils, and these throughout successive ages. This is in stark contrast to the “*good*” creation which is usually inferred from a reading of Genesis chapter one. A third stark conclusion from Chalmers' words is that he is confident that such an hypothesis that he proposes, does no harm to the veracity or literalness of the Mosaic record. He states that “*the Historical Evidence of Scripture is quite untouched by those pretended discoveries of natural science*” and whatever discoveries may be made these “*do not come into collision with the narrative of Moses.*”¹⁰⁶⁶

Quite how Chalmers comes to these conclusions is not clear. As we now know, modern science has reeked devastation with theology, and the withdrawal and retreat of the theologians has been rampant and wizenning for nigh on two centuries. Chalmers was confident that a gap introduced in verse two would do no harm to the Mosaic history. And yet the Lord states on numerous occasions that He has revealed to mankind *since* creation began, in other words, from the moment creation was finished. The splitting up of the second verse of Genesis chapter one does great damage to the unity of the whole chapter. We have clearly identified time-markers throughout the text, and the vast time gap Chalmers introduces simply renders these time-markers redundant!¹⁰⁶⁷ Finally, by suggesting that the main body of the text talks not of creation proper but of re-creation from a ruin, we are left wondering why the Lord would not reveal His initial creation, and further, why the text repeatedly tells us that creation was “*good*”? The exegesis of the terms in verse 2 which, according to Chalmers, demands a ruin or a devastation to have taken place is needless and quite false to the context. Rather we are being informed of an as yet to be formed earth. Although Chalmers does not appear to address any of the above problems he does consider the problem that

1065 The Works of **Thomas Chalmers**. Book II Chapter II P250.

1066 The Works of **Thomas Chalmers**. Book II Chapter II P250.

1067 Genesis 1:5,8,13,19,23,31.

would later lead others to suggest the framework hypothesis or opt for a poetic view of the text. How, he considers, can light be created without the sun? To answer this he appeals to the idea that the description given by Moses was not:

*“... in the order of creation actually, but in its order optically — or in other words, that the sun and moon were not first made, but first made visible on the fourth day.”*¹⁰⁶⁸

Against the Scriptural geologists.

Very sadly, although Chalmers honours the (mainly secular) geologists of his day, he has a deep distrust and dislike for what were known as the “Scriptural geologists.” These men were geologists who held tenaciously to a literal view of the Genesis account.

For example, whilst acknowledging Granville Penn's theology, he casts serious doubts as to his grasp of the science of that day. He refers to him as *“a violent and we think an unnecessary alarmist upon this question.”*¹⁰⁶⁹ He continues to state that Penn's disregard for the natural sciences will end up discrediting their best arguments for theism:

*“He does not respect enough the indications of nature and experience — and certain it is, that these might be so far disregarded as to invalidate some of our best arguments on the side of theism.”*¹⁰⁷⁰

A very similar slur is made in our day against those who uphold the Biblical account as being formative by those who, like Chalmers, take science as “truth” to be melded with theology. Chalmers' distrust for the Scriptural geologists centres on his view that they were untrained or unprepared in the science of the day:

*“We regret that Penn, or Gisborne, or any other of our Scriptural geologists, should have entered upon this controversy without a sufficient preparation of natural science.”*¹⁰⁷¹

Any reading of Joseph Townsend's work will quickly destroy this assertion. Townsend was a noted geologist of his day and aided in propelling William “strata” Smith to greater public awareness. Mortenson examined, for his PhD thesis, thirteen of the twenty-nine Scriptural geologists he was

1068 The Works of **Thomas Chalmers**. Book II Chapter II P251,252.

1069 The Works of **Thomas Chalmers**. Book II Chapter II P252.

1070 The Works of **Thomas Chalmers**. Book II Chapter II P252.

1071 The Works of **Thomas Chalmers**. Book II Chapter II P254.

aware of, and demonstrated clearly that many of them were expert geologists of their day. Townsend's work details geology and fossil evidence that covers much of the UK and particular areas of the continent. Chalmers felt that warfare between the Scriptural geologists and those geologists pressing for an ancient earth was effort and strength not only wasted but futile, for this idea of the antiquity of the earth may:

*“... safely be given up to naturalists, as an arena whether for their sportive fancies or their interminable gladiatorship.”*¹⁰⁷²

Even though Chalmers was influenced by the push for an ancient earth which lead him to drive a time gap into Genesis one, he was still to hold onto the historical veracity of the text. Consequently he understood that the *re-creation* of the world (as he terms it) did occur in six days some 6,000 years ago:

*“On this supposition the details of that operation narrated by Moses, which lasted for six days on the earth's surface, will be regarded as the steps, by which the present economy of terrestrial things was raised, about six thousand years ago, on the basis of an earth then without form and void. While, for aught of information we have in the Bible, the earth itself may, before this time, have been the theatre of many lengthened processes — the dwelling place of older economies that have now gone by; but whereof the vestiges subsist even to the present day.”*¹⁰⁷³

The Bible is limited.

Chalmers concludes his writing on the geological sciences and their promotion of the truth of deity, by suggesting what may be a considerable flaw in his whole scheme. It is a flaw which we see repeated time-and-again by those who struggle to understand modern science and its legitimate remit. Chalmers wants to uphold the notion that the Bible is an authentic record, but, he also suggests that Scripture too stands with a limited remit:

*“the Bible as the authentic record of an authentic communication from Heaven to Earth, as a Book indited by holy men of God, who stood charged, not with the matters of physical science, but with those transcendently higher matters which relate to the moral guidance and the moral destiny of our species.”*¹⁰⁷⁴

In limiting the Bible to dealing with “*transcendently higher matters*” and not with “*matters of*

1072 The Works of **Thomas Chalmers**. Book II Chapter II P256.

1073 The Works of **Thomas Chalmers**. Book II Chapter II P254.

1074 The Works of **Thomas Chalmers**. Book II Chapter II P257.

physical science,” Chalmers falls foul of separating theology from its basis in creation.¹⁰⁷⁵ Instead, Chalmers should have recognised that whilst the Bible does not contain science (either that which Chalmers witnessed or that which we witness today), for science is merely that which man makes up, the Bible is nevertheless the **basis** for all studies of whatever type they may be. This is because of the nature of revelation, which comes straight from God Himself.

We end this chapter by adding that the introduction of vast ages to accommodate geology throws up a major theological problem which Chalmers does not seem to have paid any attention to. I refer to the vexed issue of introducing death and destruction before God's “*good*” creation. Wedging in the millions of years of geology into verse 2 does serious damage to the account despite Chalmers' insistence that no harm is done, because it allows for death and destruction to pre-date Adam's sin. All accommodations of modern science into Scripture result in unintended consequences.

1075 The Works of **Thomas Chalmers**. Book II Chapter II P256.

Chapter 12: Hugh Ross.

The day-age theory (progressive creation).

Attempting to harmonise the developing science with Scripture, many key geologists of the nineteenth century advocated the day-age theory. Examples include: the Scottish geologist Hugh Miller (1802-1856),¹⁰⁷⁶ the Swiss-American geologist Arnold Henry Guyot (1807-1884),¹⁰⁷⁷ and the Canadian academic John William Dawson (1820-1899).¹⁰⁷⁸ Apart from these scientists, many theologians presented the idea in their treatment of systematic theology. Examples include: Charles Hodge (1797-1878), W. G. T. Shedd (1820-1894), and A. Strong (1836-1921).¹⁰⁷⁹ Although there have been several prominent fundamentalists of the early twentieth century who followed this view, there have been far fewer conservative Bible-believing advocates in the last fifty years.¹⁰⁸⁰

Dr. Hugh Ross, a physicist-astronomer and “evangelical” pastor, is one modern follower of the day-age idea.¹⁰⁸¹ Ross believes that “*the normal physical science definition for evolution is well established,*” and furthermore, he claims, unusually, that the Bible also confirms this view!¹⁰⁸² Ross believes that the content of Genesis 1-11 “*is largely natural history,*” for these chapters “*present a history of the universe, Earth, life, and early humanity,*”¹⁰⁸³ In chapter 8 Ross is bold in affirming this general idea, commenting:

*“Genesis 1 succinctly and eloquently tells the story of who we are and how we came to be – and it matches the scientific account of Earth's origin and development and of life's origin and development.”*¹⁰⁸⁴

Ross argues further that the early chapters of Genesis “*can be subjected point by point to rigorous*

1076 **Davis A. Young & Ralph F. Stearley.** The Bible, Rocks and Time. IVP. 2008. P128-131.

1077 **Peter Walker.** Genesis Revealed: A Scientific Examination of the Creation Story. Published by Wheatmark. 2014. P5-9.

1078 **Davis A. Young.** Westminster Theological Journal 49 (1987) 257-304. Copyright © 1987 by Westminster Theological Seminary, cited with permission. SCRIPTURE IN THE HANDS OF GEOLOGISTS (PART TWO)*. P271.

1079 **Davis A. Young & Ralph F. Stearley.** The Bible, Rocks and Time. P130.

1080 https://en.wikipedia.org/wiki/Day-age_creationism

1081 **Dr. Hugh Ross.** THE SHELL GAME OF EVOLUTION AND CREATION. 1/1/1987, revised 4/19/10 by Dr. Hugh Ross. <http://www.reasons.org/evolution/theistic-evolution/shell-game-evolution-and-creation>.

1082 **Dr. Hugh Ross.** THE SHELL GAME OF EVOLUTION AND CREATION. **Hugh Ross.** Navigating Genesis. A scientist's journey through Genesis 1-11. 2014. Reasons to Believe press. P9.

1083 **Hugh Ross.** Navigating Genesis. P9,10.

1084 **Hugh Ross.** Navigating Genesis. P81.

investigation,” and adds that they “*can be verified or refuted with greater precision and to a greater depth than previous generations might have imagined possible.*”¹⁰⁸⁵ He chides atheists because of their ignorance concerning the Bible and its “*scientific credibility.*”¹⁰⁸⁶ Thus, for Ross, the acid test for truth is science and its methods. He clearly favours the pre-eminence of science, saying, for example that there is “*compelling evidence for the antiquity of Earth and the cosmos,*” and that such evidence has come not from Scripture but from “*geologists, physicists, and astronomers.*”¹⁰⁸⁷ From chapter 4 onwards, Ross uses the Genesis account as a template upon which the supposed history of the universe according to science has happened. This idea that the Genesis account corroborates the *findings* of modern science (especially the big bang) has few followers.

Testimony.

It is very instructive to read Ross' testimony. He began early with an interest in science and soon came to a belief in the big bang.¹⁰⁸⁸ He writes that his “*singular passion was science, astronomy in particular,*” and that his “*life's purpose was to learn more and more about the universe.*”¹⁰⁸⁹ Before he reached sixteen, he “*had studied enough cosmology to become convinced that of all origins models ever proposed, the big bang model best fit the observational data.*”¹⁰⁹⁰ It was this realisation which later lead him to recognise that a big bang also required him to accept the idea of a “*Creator.*”¹⁰⁹¹ Thus a belief in the big bang implied, for Ross, that there was a “*Beginner,*” but at the first he “*imagined that the Beginner must be distant and non-communicative.*”¹⁰⁹² Following these discoveries, Ross continued by investigating all “*the world's sacred writings.*”¹⁰⁹³ He decided that whilst all the various holy books were beautiful in their own way, the “*scientific knowledge*” they contained was “*now known to be incorrect.*”¹⁰⁹⁴ Only the Bible presented the story of creation complete with “*scientific content,*” and, what-is-more, with “*the scientific method ... as clearly evident in Genesis 1 as in a modern research paper.*”¹⁰⁹⁵ Ross goes even further claiming astonishment at “*the Bible's consistent and frequent anticipation of future scientific discoveries.*”¹⁰⁹⁶

1085 **Hugh Ross.** Navigating Genesis. P10.

1086 **Hugh Ross.** Navigating Genesis. P16.

1087 **Hugh Ross.** Navigating Genesis. P89.

1088 **Hugh Ross.** HUGH ROSS' TESTIMONY. My Search for Truth. 1/1/1990 by Dr. Hugh Ross.

<http://www.reasons.org/theology/two-books/hugh-ross-testimony>.

1089 **Hugh Ross.** Navigating Genesis. P11.

1090 **Hugh Ross.** Navigating Genesis. P11.

1091 **Hugh Ross.** Navigating Genesis. P11.

1092 **Hugh Ross.** HUGH ROSS' TESTIMONY. My Search for Truth.

1093 **Hugh Ross.** Navigating Genesis. P11.

1094 **Hugh Ross.** Navigating Genesis. P11.

1095 **Hugh Ross.** Navigating Genesis. P12.

1096 **Hugh Ross.** Navigating Genesis. P12.

Whilst we can readily agree that what God reveals is always the truth, it is hardly sensible to say that the Bible agrees with modern science which has meandered and altered with time! Linking Scripture with any contemporary science generated by man and his wayward (fallen) mind is always a dangerous path to follow. What we need instead is to generate thought, as we view the created world, which will be derived from Scripture as the ground and foundation for all endeavours. Without a **godly** basis for exploration, the project will always fail and will ultimately end up denying God. This (effectively) is the story of modern science from the seventeenth century.

The “Two Books.”

Ross explains the congruence between modern science and the Bible by use of the “Two Book” analogy. He writes:

*“How could the two “books” of revelation from the same Source – that is, the book of nature and the Bible – tell everything other than the same message? They will always match up when we come to understand them more fully and interpret them responsibly. There is nothing to fear – for either believer or skeptic – in searching out truth.”*¹⁰⁹⁷

Although he acknowledges the need for responsible interpretation, Ross seems to be saying that modern science simply receives general revelation as unvarnished truth. Ross discusses models of science and Scripture and argues for an integrationist view in which there is a “*fully integrated understanding of God’s two “books,” Scripture and nature.*”¹⁰⁹⁸ Later in his work he concludes by noting that both forms of revelation come from God, and that “nature” itself keeps a record of what has transpired through time:

*“In this endeavour we need not and must not fear being forced to honour one revelation and reject the other. The God who inspired the Bible is the same God who made the universe, Earth, and all Earth’s life. This God is the very definition of truth; therefore nature’s record will never contradict Scripture and vice versa. When a seeming contradiction confronts us, we can know with certainty we have either misunderstood (one, the other, or both revelations) or perhaps we have yet to dig deeply enough. Whatever the case, we can embrace the opportunity to gain greater knowledge and appreciation for the Bible, for nature, and for the God who is responsible for both.”*¹⁰⁹⁹

But such assertions demonstrate a lack of clear understanding about the need for a Biblical basis for

1097 **Hugh Ross.** Navigating Genesis. P13.

1098 **Hugh Ross.** Navigating Genesis. P16-20,20.

1099 **Hugh Ross.** Navigating Genesis. P218.

all endeavour. Man left to his own devices will always drift from God. Unless the mind is renewed and unless the quest begins from the starting point of Scripture, the outcome is always uncertain.

In his quest for truth Ross used his *scientific knowledge* as the ground to test all things.¹¹⁰⁰ Ross came to accept the Bible on this basis. He did not yield to Scripture as true, and test all things from that perspective, but accepted the Bible because (according to him) it agreed with science. Strangely he came to the view that Genesis 1 was amazing because it agreed with how modern science saw the evolution of the universe! He writes:

*“The first page of the Bible caught my attention. Not only did its author correctly describe the major events in the creation of life on earth, but he placed those events in the scientifically correct order and properly identified the earth's initial conditions.”*¹¹⁰¹

How he comes to such a view is baffling! In the first place the Genesis account describes the sun, moon and stars being created on day four which radically contradicts the idea expressed by the big bang.¹¹⁰² Then also we have plant life created on day 3, but the insects were not created until day 6! If these days were unimaginably long ages how could the flowering plants have come about way before the insects by which many are pollinated? Ross begins with his understanding of the evolution of the universe and has discovered *some* correspondences with that scheme in the Genesis text. One wonders how he would feel where the big bang to be superseded by a new idea?

Understanding Genesis.

On the question of Biblical interpretation Ross takes a modern contemporary approach. He follows the old liberal idea that Genesis must have gone through an “*oral*” phase, because Hebrew did not become a written language until about 1500 BC. Furthermore, Genesis has its roots in the ANE cultures and languages and was not original.¹¹⁰³

He holds that the Bible is not sufficient and must be supplemented by external sources. Thus “*taking Scripture seriously*” means that we ought to welcome “*any evidence that exposes erroneous understandings of Scripture.*”¹¹⁰⁴ Such a view goes against what the Bible reveals both about itself and the nature of fallen sinful man. By what standard does Ross suggest we measure, “*erroneous understandings of Scripture*”?

1100 Ross elaborates on the scientific method. He suggests a classic stepwise iterative process. **Hugh Ross.** Navigating Genesis. P30.

1101 **Hugh Ross.** HUGH ROSS' TESTIMONY. My Search for Truth.

1102 Genesis 1:16f.

1103 **Hugh Ross.** Navigating Genesis. P81.

1104 **Hugh Ross.** Navigating Genesis. P23.

When it comes to looking at Genesis, Ross suggests that the two creation accounts are different and have different purposes. He argues that Genesis 1 is recounted from the perspective of an observer on (or just above) earth. He suggests that if it were from a higher perspective the result would mean that the record contradicts the scientific record. Here is how Ross puts it:

*“If the storyteller's viewpoint lies in the heavens above, the unfolding sequence of creative events contradicts the scientific record. It violates much of well-established Earth (and life) history. For example, it would place the production of plants before the formation of the Sun, Moon, and stars.”*¹¹⁰⁵

It is quite clear from this quote that modern science and its view point takes precedence over revelation. We are not allowed to consider the text of Genesis 1 as being divine in perspective because if we do, then what is unfolded counters what we (definitely) know from science.

Ross advocates that the two accounts of creation (Genesis 1:1-2:4a and Genesis 2:4b-25) must be taken as teaching very different things. The former *“presents the major physical creation events in a time-ordered sequence,”* whilst the latter *“elaborates on the why, or purpose, of creation.”*¹¹⁰⁶

*“The Genesis 1 storyteller describes the unfolding scene of the six creation days from a vantage point somewhere just above Earth's surface, but below the clouds, as God prepared a suitable habitat for humanity. Genesis 2 zooms in on a small portion of Earth's surface (Eden) and what occurred from the vantage point of one human being (the first human) in that locale, walking and awakening to the sights and sounds all around.”*¹¹⁰⁷

When it comes to the details of the text of Genesis 1, Ross advocates both a form of the gap theory so that Genesis 1:1,2 cover a vast unspecified length time, and the classic day-age notion which holds that the six days of Genesis 1 imply an extended length of time. Arguing from the perspective of linguistics, Ross suggests that the first two verses of Genesis refer to history that *“predate the events described in the six creation days by an unspecified but finite duration of time.”*¹¹⁰⁸ As a consequence of this gap notion, *“Genesis 1 allows for both the universe and Earth to be as old as astronomers' and physicists' measurements have determined.”*¹¹⁰⁹ Apart from advocating a long time period for Genesis 1:1-2, Ross is clear that the “days” of Genesis 1 must be taken as indicating

1105 **Hugh Ross.** Navigating Genesis. P31.

1106 **Hugh Ross.** Navigating Genesis. P95.

1107 **Hugh Ross.** Navigating Genesis. P95.

1108 **Hugh Ross.** Navigating Genesis. P32.

1109 **Hugh Ross.** Navigating Genesis. P32.

vastly long ages.¹¹¹⁰

“The inclusion of day seven in the creation story, with its clue to the meaning of “day” as an extended time period, has become a treasured gift from the One who inspired the Word – if we recognise and accept its implications. However, the pressure to resist what it tells us about long days springs from a powerful source, a highly emotional reaction to the idea that death of any kind must have been part of a “very good” creation prior to humanity’s act of rebellion against God.”¹¹¹¹

I find it remarkable that Ross can deduce the meaning of the word “day” from his interpretation of the significance of day seven, (*“an extended period of time”*), and yet ignore the clear interpretation of the word “day” found within Genesis 1 (*“evening and morning”*)! Given this piecemeal method of interpretation where modern science holds sway, it comes as no surprise to find that Ross believes that the genealogies of Genesis 5 and 11 have significant gaps and *“offer only a rough measure”* concerning the time frame for Biblical history.¹¹¹² Nor is it unsurprising to find Ross advocating the idea that Eden may one day be located and that the flood of Genesis 6-9 was only a local affair.¹¹¹³

Speculate don’t exegete!

In keeping with his integrationist view for Scripture and science, Ross applauds the *“brevity of Genesis 1”* because this allows human beings to enquire within creation to fill in *“the details,”* and *“to verify the story’s veracity.”*¹¹¹⁴

“The brevity of Genesis 1 expresses God’s wisdom in another way, too. God wants people far removed from the events in time and place to be able to verify the story’s veracity. He allows us the privilege – and the thrill – of filling in the details. Rather than bury us under a mountain of data that might distract us, He introduces His main themes and sets up the basic plot, the ultimate and irreversible triumph of good over evil so that human life can continue in unbroken fellowship with Him.”¹¹¹⁵

So convinced that the Genesis account corroborates the scientific view of origins, Ross indulges in some heavy speculation. In his view, the reference to the Holy Spirit hovering over the waters in Genesis 1:2 may actually refer *“to God bringing about life in Earth’s ocean – even before light*

1110 **Hugh Ross.** Navigating Genesis. P92.

1111 **Hugh Ross.** Navigating Genesis. P91.

1112 **Hugh Ross.** Navigating Genesis. P73.

1113 **Hugh Ross.** Navigating Genesis. P97,98,143,144.

1114 **Hugh Ross.** Navigating Genesis. P37,38.

1115 **Hugh Ross.** Navigating Genesis. P37,38.

shone through.”¹¹¹⁶ Such a suggestion is not just wide of the mark but wholly speculative.

Taking such lines for his method of interpretation, it is also unsurprising that Ross has to work hard to defend a limited view of the fall and for physical death being a normal part of God's creation. Curiously, he begins by outlining arguments that both creationists and militant atheists hold to!¹¹¹⁷ Both these groups hold that to believe that God had made a creation with death, decay, disease and destruction as normal is utterly unacceptable. The atheists argue that such a creator is despotic and cruel and so cannot truly exist, and the creationists argue that original creation has fallen from its “good” state because of the dramatic effects of the fall. Ross attempts to justify why pain and death are normal created things but his efforts are weak, to say the very least. On the issue of physical death before the fall Ross argues that it was, in fact, “beneficial.”¹¹¹⁸ He also brings the apostle Paul in as a witness to his view point. He writes:

“... Paul ... could see death as his release into a new and expanded realm of ongoing personal life in God's presence.

*Physical death is beneficial in another way, too. It limits the amount of harm those who reject God's offer can do to themselves and to others. Sin becomes a growing malignancy, if allowed to grow unchecked.”*¹¹¹⁹

How Ross can suggest such a view is astounding given the Bible's overall teaching on death.

Against creationism.

Given Ross' view on the Genesis creation accounts being largely in line with modern science, it is not surprising to find that he takes issue with creationists and creationism. He gives an interesting potted history of what fuelled the creationist cause starting with Bernard Ramm's influence.¹¹²⁰ In his work Ross suggests that belief in a literal 6-day creation some 6,000 years ago has been the cause of “much animosity” both “among Christians and between Christians and secularists.”¹¹²¹ He suggests that the creationist belief “dismisses ... all the sciences and infuriates science,” and more importantly it denies opportunity of salvation to those who “might be open to considering the good news” because “of its seeming nonsense about creation,” (as advocated by creationists).¹¹²² He continues by stating that creationist “attacks on science and scientists” will

1116 **Hugh Ross.** Navigating Genesis. P38.

1117 **Hugh Ross.** Navigating Genesis. P111.

1118 **Hugh Ross.** Navigating Genesis. P114.

1119 **Hugh Ross.** Navigating Genesis. P204,205.

1120 **Hugh Ross.** Navigating Genesis. P205.

1121 **Hugh Ross.** Navigating Genesis. P89,90.

1122 **Hugh Ross.** Navigating Genesis. P89,90.

force those hold both dear “to cling all the more tenaciously to naturalistic evolutionary theory,” because otherwise they might be “giving way ... to a demonstrably false notion.”¹¹²³ Finally Ross suggests that creationism is responsible for a great loss of faith!

*“Sadly, this denial of millions and billions of years and rigid adherence to a particular interpretation has resulted in a loss of faith among many people raised within or exposed to the Christian community. Having heard no other way to sustain belief in the literal truth of Genesis, some turn away from any trust in the Bible altogether, while others retain that trust by developing new interpretations of the Genesis story.”*¹¹²⁴

Such a statement deserves a little attention! What, we may ask, should we make of the apostle Paul's statements in 1 Corinthians where he speaks of the offence of the gospel?¹¹²⁵ People do not run towards Christ because it is intellectually satisfying.¹¹²⁶ They run to Christ because the Father draws them and they are being saved. They run to Christ because they see all that this world has to offer is vacuous and hopeless. But the natural man despises God and all He does. When a person becomes converted, the cross, and all of Scripture rings true, although sometimes it takes time to work through all the issues. The very fact that people reject creation and opt for evolution and billions of years as modern science dictates ought to be a signal that something is wrong. Belief in evolution renders belief in God redundant. What purpose did Christ die for, if not to conquer death?

1123 **Hugh Ross.** Navigating Genesis. P89,90.

1124 **Hugh Ross.** Navigating Genesis. P208.

1125 1Corinthians 1:18f.

1126 The gospel is, of course, truly intellectually satisfying, but only to the converted person.

Chapter 13: Henri Blocher.

The framework hypothesis.

Dr. Arie Noordzij from the University of Utrecht is credited with first proposing the framework hypothesis in 1924. The theologian N. Ridderbos popularised this view in the 1950s and it has gained acceptance through promotion by Meredith G. Kline, Henri Blocher, and Bernard Ramm (amongst others) in the twentieth century.

The idea defined.

The Frenchman Henri Blocher outlined the Framework Hypothesis in his book, *In the Beginning*. This theory considers the creation stories as literary constructs because of their structure and form. It has long been observed that the account in Genesis 1 seems to be arranged into two sections based on the statement found in Genesis 1:2 “*without form and void.*” Thus days 1 to 3 answer the situation that the earth was “*without form,*” whilst days 4 to 6 answer the condition that the earth was “*void.*” Here is how Blocher expresses this view:

“To put it bluntly, both the genre and the style of the Genesis 1 prologue, as our introductory chapter saw them, provide strong grounds for presuming in favour of the literary interpretation.”¹¹²⁷

“What are we to conclude? The theological treasures of the framework of the Genesis days come most clearly to light by means of the 'literary' interpretation. The writer has given us a masterly elaboration of a fitting, restrained anthropomorphic vision, in order to convey a whole complex of deeply meditated ideas. Of that we have no doubt; though whether it is the content or the form that calls forth the greater admiration, we cannot tell.”¹¹²⁸

The Genesis text is highly structured to provide theological information, according to Blocher. This, Blocher believes, indicates that it is a **literary** construct and therefore not an historical document. The knowledge that Genesis 1 is structured in form does not, however, detract from it being history, but Blocher, (and those who follow the framework hypothesis), seem to believe that the literary form necessitates a denial of the text being historical or literal.

1127 **Henri Blocher.** *In the Beginning*. 1984. IVP. P50.

1128 **Henri Blocher.** *In the Beginning*. P59.

Modern science and academia.

Blocher has a deep respect for scholars and experts, including modern scientists.¹¹²⁹ He is naïve in following the idea that science is equivalent to general revelation, and so comments that God has 'authored' "Two Books" not just one (the Bible). He refers to the "*common origin of the two Books of God,*"¹¹³⁰ and he speaks of that "*natural' light*" which also "*comes from God, the ultimate author of facts.*"¹¹³¹ In complete contrast, Blocher has no time nor respect for creationists. He argues that creationists:

*"... appear to give in to the easy answers of a blatant Manicheism and underestimate the value of the scientific consensus reached in the world. They forget that the mutual criticisms of the specialists who are often each other's rivals protect them partly from unwarranted extrapolations. The agreement of thousands of researchers is reached neither by chance nor by conspiracy!"*¹¹³²

In this last quote we see clearly that it is the consensus of science which prevails for Blocher. Apparently, scientists are not easily duped and those who cut across their views, such as creationists, are *Manicheists*, – a pejorative term implying a naïve simplicity or believing that everything is either black or white. Blocher continues by stating that the creationist's:

*"... rejection of all the theories accepted by the scientists requires considerable bravado. ... Nevertheless, current opinions, built on the studies of thousands of research scientists who keep a very close eye on one another, continue to look very probable. Anyone rejecting them is taking an immense step."*¹¹³³

Once again, we find a misrepresentation of both modern science and creationist beliefs. I am startled that Blocher does not recognise that the world and its ideas are generated from the depths of the human heart, which, according to Jeremiah 17:9 is "*deceitful above all things, and desperately wicked.*" We have already looked at the mind of man and its darkness in chapter 5 of this work, and we remind the reader here that Scripture speaks often with warnings against trusting mankind and his thoughts.¹¹³⁴ Creationists do not discount evidence, nor do they ignore general revelation. However they do understand two important things which theistic evolutionists ignore. First creationists recognise the fact that true science can only be pursued in the present, for so-called

1129 **Henri Blocher.** In the Beginning. P22.

1130 **Henri Blocher.** In the Beginning. P27.

1131 **Henri Blocher.** In the Beginning. P25.

1132 **Henri Blocher.** In the Beginning. P23.

1133 **Henri Blocher.** In the Beginning. P48.

1134 Psalm 60:11; 108:12; 118:8,9; 146:3; Isaiah 2:22; 30:2f; 31:1f; 1Corinthians 1:20.

“historical science” (the study of origins) steps outside of the domain of science and into the discipline of history.¹¹³⁵ Second, they also grasp the fact that general revelation must be interpreted. This later point is so frequently ignored or omitted by many who espouse alternative ideas on Genesis 1 and 2.

An ancient idea that resolves problems.

In attempt to give weight to the framework view, Blocher contends that there have always been those who have argued for a literary view of the text, even as far back as Augustine.¹¹³⁶ Blocher argues for the framework hypothesis because

“This hypothesis overcomes a number of problems that plagued the commentators. It recognises ordinary days but takes them in the context of one large figurative whole; the differences in order between the two 'tablets' no longer cause difficulties, neither does the delay in the creation of the stars, nor does the confrontation with the scientific vision of the most distant past.”¹¹³⁷

The problems that apparently *plagued* commentators are only problems if you take on board a worldly framework, or an earth-bound philosophy, such as provided by modern science, for example. Then also, according to Blocher, one who follows the framework hypothesis:

“... no longer stumbles at the 'problem' of the fourth day with its 'delayed' creation of the stars. He has no need to construct the problematic theory of days like solar days but without the sun, of which the text gives not the slightest hint.”¹¹³⁸

But why is the creation of the stars on the fourth day a problem? It only becomes a problem if you insist that light can only come from the stars. However the Lord created light first on day 1, and then the stars on day 4. If God so decided to create in this way, who are we to mangle and twist Scripture to fit in with our current understanding of things? There is an obvious theological reason why the creation of light precedes that of the stars. Surely the Lord wanted people to realise that the stars, of which the sun is our example, are not the originators of light, God is.

1135 We need to add here that true science depends on a renewed mind and must be pursued on the basis and ground of Scripture.

1136 It is amazing and indeed frightening how much is laid at this poor fellow's door!

1137 **Henri Blocher.** In the Beginning. P50.

1138 **Henri Blocher.** In the Beginning. P52.

A complex human view.

Blocher's arguments are complex and laboriously developed. He argues repeatedly for a middle ground, or middle way which at one time allows science its dominance, but at another limits this at the point of exegesis.¹¹³⁹ It is not possible to ignore all influences that come to bear upon an interpreter, but as far as possible one should allow the text to speak for itself. However his view of inspiration is also a concern. He is at pains to speak of the *inspired* word of God but his emphasis appears to favour the human author over the divine. Blocher's appreciation of the text and its form as a *human* literary unit masterly crafted, leads him to a number of conclusions. First because the text exhibits patterns closely akin to those of the ANE, this means that it is unlikely to preserve a chronological sequence:

“E. J. Young himself points out the frequency in ancient Near Eastern texts of the pattern 6 + 1 (and most often six days plus one). He does not seem aware of the implication of the fact, for it moves away from literalism. The more it appears that the biblical writer used a stereotype from his cultural milieu in presenting creation in the form of a week, the less likely is it that he limited himself to transcribing a chronological sequence.”¹¹⁴⁰

A second consequence for Blocher is that the text is mainly *human* in form and thereby is limited in scope and bears all the marks of its cultural setting. For example he states that:

“... we have the right to bring our prior knowledge of reality to bear only as far as we can presuppose it in the human author of the biblical text.”¹¹⁴¹

He completely discounts the divine aspect here. We can only accept the human element intended by the human author! This means that the text is severely limited to what humanity comes up with. Consequently there is no thought of true Biblical inspiration in Blocher's understanding. How this contrasts with what Scripture says! The apostle Peter, for example, reminds us that: *“no prophecy was ever made by an act of human will, but men moved by the Holy Spirit spoke from God.”¹¹⁴²* In the same way we believe that all Scripture is *“God-breathed,”* in that it originates with God, even though God used men as His spokesmen.¹¹⁴³ Why then limit the Scriptures to that which man alone may conceive or come up with?

A third consequence of Blocher's framework view deriving from the text being highly

1139 **Henri Blocher.** In the Beginning. P24.

1140 **Henri Blocher.** In the Beginning. P53.

1141 **Henri Blocher.** In the Beginning. P26.

1142 2Peter 1:21.

1143 2Timothy 3:16.

structured, is that it cannot have been written by Adam or any of the early patriarchs:

“... the subtlety of the overall structure of the text makes this theory improbable, and anyway how much information would survive after thousands of years of oral transmission, under conditions where life itself was precarious?”¹¹⁴⁴

Note the underlying assumptions here. For Blocher it is only later man who was sophisticated enough to craft such an ingenious piece! Early man was ignorant and brutish and only able to pass information down in an oral form which is unreliable! And yet in Genesis 5:1 we read that Adam was responsible for a book! Blocher then argues that we can only interpret the Genesis text from the point of view of the (recent) human author and his state or condition of knowledge. We are not to subvert the human author's intentions by setting *“forth a 'divine' meaning which they would never possibly have imagined.”*¹¹⁴⁵ The human author's intentions are paramount for Blocher, because: *“God in his condescension has limited himself to their instrumentality.”*¹¹⁴⁶ Blocher's elevation of the humanity of Scripture leads him to declare that *“our interpretation must conform to the corresponding discipline,”* by which he means that we must use only human (scholarly) means to find our interpretation.¹¹⁴⁷ So much for godly, Biblical interpretation!

What place for modern science?

Since it is not plausible that the human author of Genesis 1 would have any understanding of modern science and its findings, Blocher contends that we cannot allow these to help us exegete the text. It is only after we have carried out the exegesis that we can allow the sciences their part. Although the sciences can have no part in the work of Biblical interpretation, *“they act as warnings and confirmations at a later stage.”*¹¹⁴⁸ Arguing for this two stage approach in which Biblical exegesis is limited to the text and what the human author intended, which is then followed by an adjustment using information from the book of nature, Blocher writes:

“The inescapable comparison with the sciences of cosmic, biological and human origins will not come until after; this will no doubt have repercussions on the work of interpretation which is never completed, but they will be of a merely external nature. The sciences will stimulate the interpreter from without, driving him to verify his exegesis and test the evidence, or encouraging him by favourable convergences

1144 **Henri Blocher.** In the Beginning. P34.

1145 **Henri Blocher.** In the Beginning. P26.

1146 **Henri Blocher.** In the Beginning. P26.

1147 **Henri Blocher.** In the Beginning. P26.

1148 **Henri Blocher.** In the Beginning. P27.

which bear witness to the common origin of the two Books of God.”¹¹⁴⁹

So we see that modern science prevails! Thus the framework view is one which has been devised mainly to accommodate modern science. If the Genesis text is merely a literary construct we do not have to engage with the science within the text. We can ignore it or pass it by. Modern science, on the other hand, can be left to say what it will, for the text of Genesis makes no comments on how God made all things. Thus contrary to Blocher's charge of *Manicheism* against creationists, it would appear that framework hypothesisers themselves are guilty of a dualistic spirit!

Object!¹¹⁵⁰

There are several key objections we must bring against the framework hypothesis. First, whilst all writers have noted the (various) frameworks structure of the text, these are by no means clear, nor are they universally acknowledged. So, for example, the neat division into two sets of three days is not straightforward. For instance, the creation of plants on day 3 is usually considered a part of the forming action of God rather than filling. This is somewhat arbitrary as it is just as easy to consider the plants as filling the earth rather than forming it. Then on day 4 the sun, moon and stars are said to fill the heavens. However we could equally describe this as a creative act of forming. Much has been written in refutation of the neat literary framework approach. We do not mean to ignore the frameworks, but we do not accord it with the position of prime place. Instead we note that the main form of the text is historical narrative and that is why we affirm that the creation accounts are truly historical, informing us of the events of the creation of the universe, (physical, spiritual, visible and invisible).

A second objection we must bring against the framework idea is that simply stating that a framework exists does not logically lead to the rejection of an historical focus. There are many texts in Scripture which are accepted as historical accounts, relating real history, but which are clearly structured with a framework.¹¹⁵¹

A third objection to the framework hypothesis is that in accepting modern science, it limits the understanding of the Scriptures. We are left wondering, if the text is not historical, what and how did God create all things? Of course those who favour the framework hypothesis may well be happy with such a position, but this does not square with the rest of Scripture. We are taught in no uncertain terms throughout the Bible that this is God's world that He made, and that Christ is the

1149 **Henri Blocher.** In the Beginning. P27.

1150 This title is in homage to Reese Witherspoon's character Elle Woods in the film Legally Blonde.

1151 Numbers 2; 7:12f.

very agent of creation so that in Him (and in Him alone) are hid “*all the treasures of wisdom and knowledge.*”¹¹⁵² If science operated as it ought, it should be centred on seeing all things through Christ and His beauty. The fact that it doesn't leaves me to reject its whole schema and intention. The Christian does not deny creation by rejecting modern science. Rather he views all things with the eye of Christ. We must remember that general revelation is not the same thing as modern science. General revelation must be interpreted and the only hermeneutic for that is the Scriptures themselves (understood in the power of the Holy Spirit). We cannot understand the fallen relationships within creation except for a knowledge of the fall, for example. When modern science demands that the various predatory relationships within the animal world are *natural*, we must respond by saying that this is not what God originally created the world to be like. Whilst it may be true in this fallen world, it will not be the same when all things are made new.

1152 Psalm 24:1; Colossians 1:15-20; 2:2,3,8-10.

Chapter 14: John Sailhamer.

In the “extended” beginning.

John Sailhamer has come up with a new view of Genesis 1 and 2 which he described in his book *Genesis Unbound*, and which he labelled “historical creationism.” This label is misleading because his view denies the historicity of the Genesis accounts and rejects them as being the very record of creation. It is a novel combination of the gap theory but with an added twist. This view of Genesis 1 and 2 has been endorsed by many in the “New Calvinist” movement, and is followed by John Piper (and others at *Desiring God*), by Mark Driscoll, and by Matt Chandler.¹¹⁵³ In what follows we shall briefly outline this view with comments, and then end with an appraisal of the whole idea.

Essentially Sailhamer suggests two novel features in his approach to the creation accounts of Genesis 1 and 2. He makes this new view very clear, as the following statement shows :

“I contend that two distinct time periods are mentioned in Genesis 1. In the first period (the “beginning,” Genesis 1:1), God created the universe; no time limitations are placed on that period. In the second period (Genesis 1:2-2:4a), God prepared the garden of Eden for man's dwelling; that activity occurred in one week.”¹¹⁵⁴

An unlimited beginning.

First he discusses the scope and meaning of Genesis 1:1. Sailhamer rejects the idea that Genesis 1:1 is a title, for he wants to affirm that God really did create things in the beginning.¹¹⁵⁵ The problem is that the word “beginning,” for Sailhamer is not what most people understand! Sailhamer contends that the word “beginning” does not specify a point in time, but a duration:

“... the Hebrew word translated “beginning” refers to an indefinite period of time ...”¹¹⁵⁶

1153 **John Piper.** <https://www.desiringgod.org/interviews/do-you-accept-old-earth-and-evolution> and: “What Should We Teach About Creation?” *Desiring God*, June 1, 2010. (<http://www.desiringgod.org/interviews/what-should-we-teach-about-creation>). See also: <https://www.desiringgod.org/articles/science-the-bible-and-the-promised-land>. **Mark Driscoll.** *Doctrine: What Christians Should Believe.* (Wheaton, IL, Crossway, 2011). P96. **Matt Chandler.** *The Explicit Gospel.* (Wheaton, IL, Crossway, 2012). P96-97.

1154 **John Sailhamer.** *Genesis Unbound.* Book Villages. 1996. Second Edition 2011. P33.

1155 **John Sailhamer.** *Genesis Unbound.* P25,110,111.

1156 **John Sailhamer.** *Genesis Unbound.* P16.

“... there is no way to limit the duration of the word “beginning” (Hebrew, reshit). ... The length of time of this “beginning” is precisely what is left unspecified by the term. The whole point of using reshit to convey the concept of “beginning” (when other terms were readily available) is to leave the duration of time unspecified.”¹¹⁵⁷

“The first word, bereshit, translated “in the beginning,” tells us that God created the universe over a period of time, not in a single instance.”¹¹⁵⁸

To bolster this idea Sailhamer argues that the author, (whom he believes was Moses), could have used other words which give the idea of a point in time.¹¹⁵⁹ He suggests that the Hebrew word used in Genesis 1:1 translated “beginning,” is one used to describe the early portion of kings reigns.¹¹⁶⁰ Thus, for example, Jeremiah 28:1 describes the early part of king Zedekiah's reign (which included a number of events) as “the beginning.” The phrase “in the beginning” in Genesis 1:1 is thus taken to specify a length of time. But is this a viable option for the meaning? The problem with Sailhamer's view is that whereas Jeremiah 28:1 speaks of “the beginning of the reign,” Genesis 1:1 only speaks of “the beginning.” In Genesis 1:1 we do not have anything qualifying the first word, whereas in Jeremiah 28:1 we do.¹¹⁶¹ Consequently, in Genesis 1:1 there is absolutely no suggestion of any duration of time, and Sailhamer is left assuming this duration *within the word itself*. Such a move is surely a very desperate one. We ought not to import the use from another part of Scripture and insist that because it has a certain sense there, the same sense must be true in all cases. Words have a semantic range and the important thing in translation is not simply to suggest that the same meaning is necessary everywhere. Consulting Davidson's Hebrew Lexicon we discover that the word is a feminine singular noun with a prefix preposition “in.” The word derives from the Hebrew root *ro'sh* (ראש), which means, “head,” “chief,” or “ruler.” The essential meaning according to Davidson's Hebrew lexicon is thus:

[1] a beginning; former time; former state.

[2] the first of its kind in respect to time, rank, worth, hence firstling.¹¹⁶²

It will be seen from the above that Sailhamer's concept is a possibility, (some aspects of option [1]

1157 **John Sailhamer.** Genesis Unbound. P32,33.

1158 **John Sailhamer.** Genesis Unbound. P113.

1159 **John Sailhamer.** Genesis Unbound. P15,17,26,45.

1160 **John Sailhamer.** Genesis Unbound. P43,44.

1161 I am well aware of the fact that some argue that the first word is considered a construct and so should be translated “in the beginnings of,” but this is incorrect. The word “created” in the Hebrew would have to be a different form for this to be true. Furthermore the accenting of the first word indicates that it is an absolute form and should be rendered “in the beginning.”

1162 **Davidson's** Hebrew Lexicon. P113,672.

allow for it), but it is by no means a required understanding of the word. It is important to recognise the root idea here. The **head** of anything is singular and controlling, hence the idea of ruling. The main idea would then seem to be the idea of a start, not a duration. When we look at other uses of this same Hebrew word, Sailhamer's suggestion falls down, for all the uses seem to indicate the **start** of something.¹¹⁶³ The word is also translated as “*first*” in the AKJV on nine occasions which highlights the idea of a start or a point in time.¹¹⁶⁴

Sailhamer's contends that another word translated “*beginning*” (**tēchillah** תְּחִלָּה) would suit better at Genesis 1:1 if a point in time was meant. However it is a curious fact that both Hebrew words for “*beginning*” are used synonymously. For example the English translation of the first parts of Psalm 111:10 and Proverbs 9:10 read like this:

The fear of the Lord *is* the beginning of wisdom. (Psalm 111:10; Proverbs 9:10).

However whereas the Hebrew word for “*beginning*” in Psalm 111:10 is the same as that used in Genesis 1:1 (**re'shiyth**), the one used in Proverbs 9:10 is **tēchillah** (תְּחִלָּה). From this it would appear that even though the two words have come from different root ideas, both words mean essentially the same thing, namely, “the start,” or “the beginning.”

Sailhamer also misses an essential point when it comes to Genesis 1:1. There was no time at all to begin with as John 1:1f indicates. So the whole point of Genesis 1:1 is to indicate the start of all things, including *time*. Sailhamer's view amounts to limiting God by requiring Him to work within an (unspecified) time frame. A final point to make is that if Sailhamer's view is correct, we are left (as with other gap theory ideas) with an unspeakable gap in the knowledge revealed by God. Is God tantalising us? Does He reveal and not reveal? Of course we cannot know everything, because we cannot comprehend everything, but the idea that God covers things up and allows vast time spans left unrevealed seems wholly wrong in light of Scriptures like Isaiah 48:16.¹¹⁶⁵

To appease modern science.

Although Sailhamer suggests that the time span indicated by his understanding of the word “*beginning*” is unspecified and could be billions of years or a few days, in reality he suggests this novel idea because he wants to allow time for modern science.¹¹⁶⁶ This is very clear from what he

1163 Translated “beginning” in the AKJV at: Genesis 1:1; 10:10; 49:3; Deuteronomy 11:12; 21:17; Job 8:7; 42:12; Psalm 111:10; Proverbs 1:7; 8:22; 17:14; Ecclesiastes 7:8; Isaiah 46:10; Jeremiah 26:1; 27:1; 28:1; 49:34; Micah 1:13.

1164 Exodus 23:19; 34:26; Numbers 15:20,21; 24:20; Deuteronomy 18:4; 26:2; 33:21; Hosea 9:10.

1165 The reader is encouraged to look through Isaiah 40 to 48 and note how often the Lord refers to the beginning.

1166 **John Sailhamer.** Genesis Unbound. P32,33,113.

says in a number of places throughout the work.

“Such an understanding of Genesis 1 fits well with most contemporary scientific views of the age of the universe.”¹¹⁶⁷

“... much of the processes described by modern scientists fall into the period covered by the Hebrew term “beginning.” Within that “beginning” would fit the countless geological ages, ice ages, and the many climatic changes on our planet.

The many biological eras would also fit within “the beginning” of Genesis 1:1, including the long ages during which the dinosaurs roamed the earth. By the time human beings were created on the sixth day of the week, the dinosaurs already could have flourished and become extinct – all during the “beginning” recorded in Genesis 1:1.”¹¹⁶⁸

“The Bible allows for the creation of dinosaurs and all other forms of early plant and animal life “in the beginning,” since the Hebrew word for “beginning” in Genesis 1:1 could encompass eons during which God's work of creation was carried out.”¹¹⁶⁹

“Given what appears to be true about the age of the earth, it is likely that millions or billions of years transpired during this time of “the beginning.” When my children ask me where the dinosaurs fit into the biblical account of creation, I tell them they were created, lived, and became extinct during “the beginning.””¹¹⁷⁰

These statements amount to a full acceptance of modern science and its controlling influence upon the Genesis text. As much as Sailhamer would want to deny this, he has, in fact, come to the text with an agenda, and that agenda is provided by modern evolutionary science. In fact Sailhamer opens his book with some statements which reveal his position with regard to science and how many struggle with this issue. He suggests that the tension many Christians feel between accepting the findings of science or holding allegiance to the Bible is *“neither necessary nor helpful.”¹¹⁷¹* In his experience Christians have struggled to hold to the Bible in this scientific age because they are *“almost embarrassed by Genesis 1 and 2.”¹¹⁷²* Sailhamer's whole purpose in detailing a different view of Genesis 1 and 2 was to show how these first chapters of Scripture would *“fit in remarkably well with our current scientific models of the universe,”* thus removing the embarrassment felt by many Christians.¹¹⁷³ Further, his new view of the creation event would *“enable us to live in peace*

1167 **John Sailhamer.** Genesis Unbound. P32,33.

1168 **John Sailhamer.** Genesis Unbound. P33.

1169 **John Sailhamer.** Genesis Unbound. P37.

1170 **John Sailhamer.** Genesis Unbound. P113.

1171 **John Sailhamer.** Genesis Unbound. P15.

1172 **John Sailhamer.** Genesis Unbound. P17.

1173 **John Sailhamer.** Genesis Unbound. P17.

with the findings of modern science.”¹¹⁷⁴ He expresses confidence that in understanding Genesis 1 from the original author's viewpoint, the reader “will discover that little in this chapter truly conflicts with modern science,”¹¹⁷⁵ and, furthermore, that his new idea “fits well with what modern science tells us of early human life.”¹¹⁷⁶ For Sailhamer:

*“As far as the biblical record is concerned, nothing in Genesis 1 and 2 contradicts modern science. According to the Bible – just as in modern scientific theories – human beings arrived on the scene very recently in geological history, fully developed culturally and linguistically.”*¹¹⁷⁷

A limited (re-)creation.

The second new idea involves a re-interpretation of the remainder of the creation accounts (from Genesis 1:2 to the end of chapter 2), so that they are no longer to be thought of as part of the initial creation event, but rather must stand as a preparation by God not of creation as a whole, but of *the land of promise*. In doing this Sailhamer severely limits the scope of the major part of the text, and demands that it refer simply to a limited part of the earth. In effect only Genesis 1:1 tells us about creation in Sailhamer's estimation. Genesis 1:2 and following does not speak of creation in any way, for it merely speaks about God making ready a land that had already been created. Here is how Sailhamer expresses the idea:

*“While Genesis 1:1 describes God's creation of “the universe,” Genesis 1:2ff narrows the reader's focus to the land promised to Abraham and his descendants (Genesis 15:18f).”*¹¹⁷⁸

It isn't just that the narrowing of focus brings us down to the creation of the earth, for Sailhamer's idea is that what is being presented to us is the provision by God of a habitable place within a fully created universe which has stars, the moon and all types of animals ***already in place***. Key to Sailhamer's idea is that the land prepared by God in Genesis 1:2f is the same as the land promised to Abraham and the children of Israel.

“The second act of God recounted in Genesis 1 and 2 deals with a much more limited scope and period of time. Beginning with Genesis 1:2, the biblical narrative recounts God's preparation of a land for the man and woman He was to create. That

1174 **John Sailhamer.** Genesis Unbound. P18.

1175 **John Sailhamer.** Genesis Unbound. P32.

1176 **John Sailhamer.** Genesis Unbound. P37.

1177 **John Sailhamer.** Genesis Unbound. P37.

1178 **John Sailhamer.** Genesis Unbound. P117.

*“land” was the same land later promised to Abraham and his descendants. It was that land which God gave to Israel after their exodus from Egypt. It was that land to which Joshua led the Israelites after their time of wandering in the wilderness. According to Genesis 1, God prepared that land within a period of a six-day work week. On the sixth day of that week, God created human beings. God then rested on the seventh day.”*¹¹⁷⁹

Sailhamer insists that the boundaries of Eden are the same as the promised land.¹¹⁸⁰ In fact he even goes so far as suggesting that we may be able to re-locate the original garden.¹¹⁸¹ Given such views, it will come as no surprise to find that Sailhamer does not, therefore, believe in a global or universal flood.¹¹⁸²

To advance his view, Sailhamer re-interprets a number of key words and phrases. Thus he suggests that the word usually rendered “*earth*” in most translations of Genesis 1, should be translated as “land,” because the first readers would not have imagined the entire globe being the reference. He states that:

*“We have filled the word with a meaning it clearly did not suggest to its original readers.”*¹¹⁸³

How would Sailhamer know this? In truth he can only suggest such a thing by assuming an evolutionary world view in which former (ancient) man was way below our current intellectual standing. He contends that Moses and other ANE writers had a very limited perspective and were not focused on a universal scope, because they were writing for a small group of contemporary readers and not for us today.¹¹⁸⁴ Genesis 1 and 2 are the stage upon which the rest of the Pentateuch rests and so the intention of the author is merely to establish this and not to give a treatise on the origin of the world.¹¹⁸⁵ I am at loss as to how Sailhamer has come to the conclusion that Moses and his contemporaries had a limited perspective, especially as we remember that Moses spoke face-to-face with the living God! The idea that we need to approach Genesis as the original readers would have done is also a vacuous statement. Such a thing is impossible, and it goes against God's intention for His word which has been given for all ages and all peoples.¹¹⁸⁶

1179 **John Sailhamer.** Genesis Unbound. P16.

1180 **John Sailhamer.** Genesis Unbound. P17.

1181 **John Sailhamer.** Genesis Unbound. P76-79, 229f.

1182 **John Sailhamer.** Genesis Unbound. P233.

1183 **John Sailhamer.** Genesis Unbound. P53.

1184 **John Sailhamer.** Genesis Unbound. P65.

1185 **John Sailhamer.** Genesis Unbound. P89,90.

1186 Psalm 100:5.

A hard task to deny creation.

It is important to realise that by making Genesis 1:1 the only reference to creation, the only place where God acted as Creator, Sailhamer has to work very hard at showing why the rest of the text does not teach creation. For example he declares:

“God does not create “the land” in Genesis 1:3-2:4a: He has already created the land and the rest of the universe “in the beginning” in Genesis 1:1. In the remainder of the chapter, God is at work preparing the land for human habitation. As the narrative opens, “the land” is covered by water, and darkness blankets all the water. God brings light and dry land and fills it with fruit trees and animals. By the sixth day, “the land” is a suitable place for the man and woman to dwell.”¹¹⁸⁷

Genesis 1:2 however gives us absolutely no indication that there was any land present. All it speaks of is darkness, the deep, water, and the Spirit of God. To suggest that land was present and was covered by the waters of the deep is sheer invention, not exegesis.

To compound the issue, Sailhamer is insistent that **everything** was created during the initial period called “*in the beginning*” in Genesis 1:1.

“The whole of the universe, including the sun, moon, and stars, were created “in the beginning.” The “one day” of Genesis 1:3-5 was not the first day of God's creating the universe; rather, it was the first day of the week during which God prepared the promised land for the man and woman. Consequently, verse 3 does not describe the creation of light (or sunlight without the sun). In fact, it doesn't describe the “creation” of any kind of light. Rather, it describes the sunlight breaking through the darkness on the morning of the first day of the week. It is merely a description of the sunrise on the first day of the week.”¹¹⁸⁸

Note that the first day of Genesis 1:3-5 was not the first day according to Sailhamer, and light was not created on that first day either! He has to re-interpret the phrase “*let there be light*” to mean “*let the sun rise*”¹¹⁸⁹

With reference to Genesis 1:11,12, Sailhammer insists that the text only mentions fruit trees, and no other plant life, whilst Genesis 1:30 mentions other vegetation which he insists must have been created in the beginning, (i.e. in Genesis 1:1).¹¹⁹⁰ However the text itself speaks very differently, for Genesis 1:11,12 tells us also of “*grass,*” and “*herb yielding seed,*” as well as “*fruit trees.*”

1187 **John Sailhamer.** Genesis Unbound. P34.

1188 **John Sailhamer.** Genesis Unbound. P121.

1189 **John Sailhamer.** Genesis Unbound. P120,121.

1190 **John Sailhamer.** Genesis Unbound. P35,36.

As a final example, Sailhamer states that God's commands in Genesis 1:20 do not initiate the creation of creatures but:

“Rather, they simply assign the creatures to their proper domains, the waters and the sky. The narrative assumes there are already swarming creatures and birds.”¹¹⁹¹

The re-interpretation continues in Genesis 1:21 where the statement that God “created” the sea creatures and every living thing is reduced to merely a comment to the reader that God had already created things in Genesis 1:1:

“... the verb “to create” is used in verse 21 as a comment to the reader. It reminds the reader of an important part of the overall narrative – God “created” all the animals. The author does not say God created all the animals on the fifth day; he merely says it was God who created all the animals and that now He commands some to fill the waters and the skies over the promised land.”¹¹⁹²

The purpose of using the word “created” in Genesis 1:21 according to Sailhamer, is to point back to Genesis 1:1 and creation in the beginning, which Sailhamer has conveniently separated from the creation week!¹¹⁹³

Sailhamer tries desperately hard to convince the reader that the majority of the Genesis text does not teach creation but simply the preparation of the promised land. However the text does not seem to comply with Sailhamer's presentation.

View of Scripture.

How we think of Scripture has a dramatic effect on how we read it and understand it. Sailhamer believes that the Pentateuch was written by Moses. He does state a belief in inerrancy but he seems far more interested in understanding the text in **human** terms.¹¹⁹⁴ Sailhamer's ideas are all couched in the belief that what is central and the focal point in the Pentateuch is the covenant made at Mount Sinai. It would appear from his writing that this event governed the structure and form of Genesis 1:2f. Here is how he puts it:

“The events recorded in Genesis 1 have been carefully selected and arranged to serve a unique role as an introduction to the whole of the Pentateuch. ... In Genesis

1191 **John Sailhamer.** Genesis Unbound. P147.

1192 **John Sailhamer.** Genesis Unbound. P147.

1193 **John Sailhamer.** Genesis Unbound. P148.

1194 **John Sailhamer.** Genesis Unbound. P16

I the author carefully sets the stage for the narratives which follow: the primeval history (chapters 2-11) and the patriarchs (chapters 12-50). also in these early narratives the author provides the necessary background for understanding the central topic of the Pentateuch: God's covenant with Israel at Mount Sinai. In nearly every sentence of the creation account the author's interests in the Sinai Covenant and God's chosen people can be clearly seen. ... Each of these central themes of the Sinai Covenant finds its initial statement in the opening chapters of Genesis. The Covenant is grounded in the events of creation. The author of Genesis 1 wants to show that the stretch of land which God promised to give Israel in the Sinai Covenant – the land where Abraham and his family sojourned, the land of Canaan – was the same land God had prepared for them at the time of creation.”¹¹⁹⁵

Later Sailhamer suggests connections between God's work on day 5 with the plagues of Egypt. The swarming of creatures in the seas and in the air on day 5, for example, is “*reminiscent of God's filling the waters and skies of Egypt with swarms of water creatures in Moses' day.*”¹¹⁹⁶ He continues by asserting that just as the frogs in the Nile, were not created, so the creatures that swarmed in Genesis 1:20,21 were not, in fact, created, but simply manifested from elsewhere.¹¹⁹⁷ Such a way of interpretation is not only without foundation, but wholly dangerous. What other errors can be promoted by such interpolation?

Now given that Sailhamer believes that Moses wrote the entire Pentateuch, it seems that what he is claiming is that the Genesis creation story was constructed to give ground and support to the central focus, namely, the Sinai Covenant. Consequently the correspondences Sailhamer sees between Genesis and other parts of the Pentateuch are not retrospective, but engineered or designed. By this I mean that Moses wrote the entire Pentateuch and so when he began with Genesis he merely skates over initial creation with Genesis 1:1, and then writes the 'creation-week' part with the whole Sinai Covenant in view. Contrary to this it seems much more believable (and far more clear) to assume that the story of creation was written by the Lord God Himself when He was in communion with Adam before the fall. The correspondences between the creation account and aspects of the Sinai Covenant are there, of course, because God is the author of both, and He is consistent with Himself. Sailhamer's perspective is all from the point of view of the human author, Moses. Apart from the obvious discrepancies and torturous explanations we have so far covered, Sailhamer's idea that Moses constructed the entire Pentateuch is woefully inadequate because it does not accord with the structure of Genesis, nor with how Genesis relates to Exodus. Key to an understanding of Genesis comes from a consideration of the *tôledôt* statements we have discussed elsewhere, but it is important to note also that the ending of Genesis and the beginning of Exodus

1195 **John Sailhamer.** Genesis Unbound. P90,91.

1196 **John Sailhamer.** Genesis Unbound. P149.

1197 **John Sailhamer.** Genesis Unbound. P149,150.

do not form a neat link. It would appear that the writer of Exodus (Moses) started from a point before the end of Genesis to make the narratives tie-in.¹¹⁹⁸ If Moses was the author of Genesis as Sailhamer believes, it is curious that such a situation ever arose!

Sailhamer's work is nothing short of desperate. When a person capitulates to the thinking of mankind the end result is always a sorry state of affairs. It may be the case that many Christians are embarrassed about Genesis 1 and 2, but this is only because they are worried about their reputation and how they may be seen. Many in academic or leadership positions cannot bring themselves to go so against modern science as Scripture forces us to, and so attempt some form of compromise. Sailhamer's version is unique but, sadly, uniquely wrong.

1198 Compare Genesis 46:8: *Now these were the names of the children of Israel, Jacob and his sons, who went to Egypt*, with Exodus 1:1: *Now these are the names of the children of Israel who came to Egypt; each man and his household came with Jacob*.

Chapter 15: John Lennox.

Mind the many gaps!

With John Lennox, who is notable amongst Christians through his debates with Richard Dawkins, we arrive at a more complex version of the gap theory.¹¹⁹⁹

The Bible is a library of books.

Despite his appeal and disarming ways with the new atheists, Lennox has fallen into line with the academic world by following the new secular hermeneutical rules we will discover elsewhere (for example, in Tremper Longman's work). For instance, Lennox focuses on the Bible as a human production which must be considered as, “*a whole library of books.*”¹²⁰⁰ Such a statement immediately leads to the (erroneous) idea that there will be differences of theology and understanding across the Bible.

According to Lennox, the task of interpretation requires us to get into an ancient way of thinking to discern what the original (human) author intended.¹²⁰¹ So, with regard to Genesis for example, Lennox states:

*“Genesis is, of course, a text that comes to us from a time and culture very different from our own. It is from the ancient Near East, so we cannot simply read it as if it were a contemporary Western document written to address contemporary Western concerns.”*¹²⁰²

*“The Genesis text comes to us from the ancient Near East, and so any attempt to understand it will be enriched by knowledge of the literature and culture of the time.”*¹²⁰³

Lennox presents a curious position on the nature or genre of Genesis. He acknowledges the debate between those who claim that the first chapters are meant to be read as history, and those who argue that “*the author's intention*” was to convey “*timeless truths through figurative, theological*

1199 <https://www.johnlennox.org/>
<https://www.youtube.com/watch?v=zF5bPI92-5o>

1200 **John C. Lennox.** Seven Days that Divide the World. 2011. Zondervan. P21.

1201 **John C. Lennox.** Seven Days that Divide the World. P21,22,23.

1202 **John C. Lennox.** Seven Days that Divide the World. P43.

1203 **John C. Lennox.** Seven Days that Divide the World. P120.

language.”¹²⁰⁴ However, in favouring a non-historical approach to the early chapters of Genesis, he does not want to give the impression that Genesis 12 – 50 is not historical:

*“I say ‘early chapters,’ since the impression given by the rest of the book of Genesis is that of a historical narrative which describes the rise of the Hebrew nation from among the Gentile nations of the ancient Near East ...”*¹²⁰⁵

Such a distinction between the two major parts of Genesis is arbitrary because Genesis is a unit. If the second part (Genesis 12-50) must be seen as historical, the first eleven chapters should be seen in the same way.

A three part analysis.

After much discussion Lennox opts for a three part analysis of Genesis 1:1-2:3. Thus, there is an opening statement regarding the creation of the heavens and the earth in Genesis 1:1,2, followed by the “six-day” creation story in Genesis 1:3-2:1, and the whole concludes with the seventh day recounted in Genesis 2:2,3.¹²⁰⁶ For Lennox the first day of “creation” does not start at Genesis 1:1, but at Genesis 1:3, for the opening statement on creation in the first two verses is separated from the six days that follow. His reason for suggesting this gap comes from the suggestion that each day is patterned in the same way. Thus according to Lennox, each day begins with the phrase “*and God said*” and concludes with the phrase “*and there was evening and there was morning, the nth day*.”¹²⁰⁷ The trouble with this approach is twofold. In the first place it does not work as a neat division of the text. The phrase “*and God said*” comes in verse 3, 6, 9, 11, 14, 20, 24, 26, 28 and 29.¹²⁰⁸ The phrase “*and there was evening and there was morning, the nth day,*” comes in verses 5, 8, 13, 19, 23 and 31. It is clear from this that there are ten occasions where the first phrase appears, and only six for the second. How then can these phrases indicate a division in the text? The first two might work (v3 & 5 and v6 & 8), but then we get the phrase “*and God said*” twice in verses 9 and 11 before the phrase “*and there was evening and there was morning, nth day,*” acts as the conclusion in verse 13. The fourth and fifth day might appear to have the pattern Lennox suggests, but the phrase “*and God said*” comes four times (verses 24, 26, 28, 29) before the day concludes in verse 31. Thus these phrases do not act as a clear and unambiguous division at all! A second problem with Lennox's suggestion is that it makes a repeated phrase an arbitrary marker

1204 **John C. Lennox.** Seven Days that Divide the World. P42,43.

1205 **John C. Lennox.** Seven Days that Divide the World. P42,43.

1206 **John C. Lennox.** Seven Days that Divide the World. P48.

1207 **John C. Lennox.** Seven Days that Divide the World. P52,53.

1208 Note that the conjunction in Hebrew can be rendered as “and,” “then,” “but,” etc.

for dividing up the text. We could equally well suggest the word “good” or the phrase “and it was so” or the word “blessed,” depending on our own personal whims! What Lennox is anxious about (and at great pains to avoid) is any consideration of the *time statements* given in the text, (i.e. “beginning” and “evening and morning nth day”), acting as markers, which would seem to be the most natural way of dividing up the text.

As a consequence of his arbitrary decision to cut up the text according to repeated phrases, Lennox is now free to hold that the universe is extremely ancient:

“This implies that “the beginning” of Genesis 1:1 did not necessarily take place on day 1 as is frequently assumed. The initial creation took place before day 1, but Genesis does not tell us how long before. This means that the question of the age of the earth (and of the universe) is a separate question from the interpretation of the days, a point that is frequently overlooked. In other words, quite apart from any scientific considerations, the text of Genesis 1:1, in separating the beginning from day 1, leaves the age of the universe indeterminate.

It would therefore be logically possible to believe that the days of Genesis are twenty-four-hour days ... and to believe that the universe is very ancient.”¹²⁰⁹

Having decoupled Genesis 1:1,2 from Genesis 1:3-2:1, Lennox goes on to make further gaps within “creation week” (see table 17). He follows another writer (Alan Hayward) who suggests that the activity described for each day after God has “said” must be considered as parenthetical. Here is how he puts it following Alan Hayward:

“Alan Hayward. ... suggests that each of the first six days of Genesis involves a parenthesis. On this understanding, using brackets to indicate the parenthesis for clarity, day 1, for example, would read as follows: “And God said, ‘Let there be light.’ (And there was light. And God saw that the light was good. And God separated the light from the darkness. God called the light Day, and the darkness he called Night.) And there was evening and there was morning, the first day” Gen. 1:3-5). According to this approach, Genesis 1:3-5 is:

“... basically an account of the great creative fiats which were uttered upon the six (presumably literal, consecutive) days. Inserted into this primary narrative is a whole series of parentheses which describe the subsequent fulfilment of the fiats. The out-workings of the fiats, of course, could have taken any amount of time to occur. The fiats of God are uttered swiftly, but his mills grind slowly.”¹²¹⁰ ¹²¹¹

1209 **John C. Lennox.** Seven Days that Divide the World. P52,53.

1210 **Alan Hayward.** Creation and Evolution. 1987. London: SPCK. P176-77.

1211 **John C. Lennox.** Seven Days that Divide the World. P56.

Table 17: Lennox's seven gaps in Genesis.

	Event	Text	Time frame
Gap 1	In the beginning	Genesis 1:1,2	Unspecified length of time.
			Unspecified length of time.
	Day 1	Genesis 1:3a	24 hours
Gap 2		Genesis 3b-5	Unspecified length of time.
	Day 2	Genesis 1:6a	24 hours
Gap 3		Genesis 1:6b-8	Unspecified length of time.
	Day 3	Genesis 1:9a	24 hours
Gap 4		Genesis 1:9b-13	Unspecified length of time.
	Day 4	Genesis 1:14a	24 hours
Gap 5		Genesis 1:14b-19	Unspecified length of time.
	Day 5	Genesis 1:20a	24 hours
Gap 6		Genesis 1:20a-23	Unspecified length of time.
	Day 6	Genesis 1:24a	24 hours
Gap 7		Genesis 1:24b-31	Unspecified length of time.
	Day 7	Genesis 2:1f	Unspecified length of time still ongoing.

Lennox wants this idea so that he can allow modern science its grip on our understanding of the origin of all things. He argues that the original human author was not concerned about us understanding creation as having occurred in a single earth-week,

“... but rather as a sequence of six creation days; that is, days of normal length (with evenings and mornings as the text says) in which God acted to create something new, but days that might well have been separated by long periods of time.”¹²¹²

In this way Lennox hopes to appeal to those who demand a six literal day view, but deftly allows the long ages required by science. He comments:

“We have already seen that Genesis separates the initial creation, “the beginning,” from the sequence of days. What we are now suggesting in addition is that the individual days might well have been separated from one another by unspecified periods of time.”¹²¹³

Notice that Lennox originally assumes his case for a gap between Genesis 1:2 and Genesis 1:3, but

1212 **John C. Lennox.** Seven Days that Divide the World. P54.

1213 **John C. Lennox.** Seven Days that Divide the World. P54.

in the above statement he is now stating it as being clear and definite.

To give Lennox some credit he does go on and admit that his viewpoint on separating out each literal day by gaps of millions of years does seem “*rather far-fetched*.”¹²¹⁴ However he continues by appealing to the reader to be generous and listen to what he has to say! And this is what he wants the reader to accept:

*“... the six creation days themselves could well have been days of normal length, spaced out at intervals over the entire period of time that God took to complete his work. The outworking of the potential of each creative fiat would occupy an unspecified period of time after that particular creation day. One consequence of this is that we would expect to find what geologists tell us we do find – fossil evidence revealing the sudden appearance of new levels of complexity, followed by periods during which there was no more creation (in the sense of God speaking to inaugurate something radically new).”*¹²¹⁵

The motive is not denied. Having stretched Genesis out of all proportion we can now accept what the world of geology demands.

Stretching a point.

The suggestion of parentheses in between the 24 hour days has absolutely no basis whatsoever in the text. Lennox's position is, in effect, no different to the day-age idea which ignores the 24 hour implication of the phrase “*the evening and the morning the nth day*.” Consequently what Lennox engages in, is not exegesis but tampering to accommodate modern science. And yet he also candidly admits that the Genesis creation accounts do appear both to ancient and modern alike as real history. Those who lived within Biblical times counted it as history:

*“As to how the Genesis text was understood by those living in the culture that it ultimately generated, we have the evidence of the Old and New Testaments to show us that they took the Genesis material as history.”*¹²¹⁶

And readers of the Bible throughout the ages have equally viewed Genesis as literal:

*“It is surely fair to say that most people throughout the ages have understood Genesis 1:1 to be referring to the creation of the physical universe, and therefore making a cosmological statement that is understandable to all ages and cultures.”*¹²¹⁷

1214 **John C. Lennox.** Seven Days that Divide the World. P54.

1215 **John C. Lennox.** Seven Days that Divide the World. P55.

1216 **John C. Lennox.** Seven Days that Divide the World. P121.

1217 **John C. Lennox.** Seven Days that Divide the World. P139.

Why then should we sacrifice what is obvious to the gods of science?

There are many other issues Lennox raises which derive from his stretched viewpoint, including an acceptance of death before the fall, a discussion of the impossibility of the sun being created on day 4, and an approval of the view that the seventh day cannot be taken literally because there is no ending formula (*“and the evening and the morning were the seventh day”*).¹²¹⁸ Taking the so-called problem of the definition of days before the sun was made, Lennox asserts that it is not possible to speak of a “day” during the first three days in any way that makes sense:

*“The word “day” makes no obvious sense in the absence of the sun and the earth's rotation relative to it. In order to overcome this difficulty, some have postulated the existence of a nonsolar light source that functioned for the first three days. However, apart from the fact that this would still leave the first three “days” undefined, we know nothing about such a light source, either from Scripture or from science.”*¹²¹⁹

I wonder how Lennox comes to such conclusions here? We are speaking about what God has said about what He has done! If He decides the definition of a day (*“and the evening and the morning”*) who are we to say it doesn't make sense to us because there is no sun at this time? Notice further that he ends this quote by dismissing the concept of a light source apart from the sun because *“we know nothing about such a light source either from Scripture or from science.”* Is Lennox claiming that because we have no knowledge of something then it cannot possibly be true? Surely not!

With regard to death before Adam's sin Lennox attempts to argue that Paul was only referring to physical death for humans:

*“... Paul says that death passed upon all human beings as a result of Adam's sin; he does not say that death passed upon all living things. That is, what Scripture actually says is that human death is a consequence of sin. That makes sense, humans are moral beings, and human death is the ultimate wages of moral transgression. We do not think of plants and animals in terms of moral categories. We do not accuse the lion of sinning when it kills an antelope or even a human being. Paul's deliberate and careful statement would appear to leave open the question of death at levels other than human.”*¹²²⁰

Such a position creates more problems than it solves and, what-is-more, it goes against many texts of Scripture into the bargain. Take for example such passages as Isaiah 24 and Romans 8, not to mention Genesis 3 where we are taught clearly that the ground was cursed and would, as a result,

1218 **John C. Lennox.** Seven Days that Divide the World. P75f,80.

1219 **John C. Lennox.** Seven Days that Divide the World. P58,59.

1220 **John C. Lennox.** Seven Days that Divide the World. P78.

bring forth thorns and thistles! Lennox continues with this divisive view by claiming that since whales currently live on *living* sea-food, how are we to view this as a result of Adam's sin?¹²²¹ Well, of course, Lennox is making the classic mistake of viewing the universe as we *now* see it in terms of its original creation, instead of a universe broken and disrupted by the fall of man. He states, for example that:

“... the view that animal death did not exist before humans sinned makes the existence of predators problematic.”¹²²²

Following this he enumerates a number of examples amongst created things which would appear to be design features for predation, and suggests that their presence argues against the idea that the animal kingdom fell along with mankind.¹²²³ But this raises a whole series of problems for those who follow theistic evolution. At what point did death enter the world of men? If man is related to the animal kingdom as evolution requires, it would mean that man was always subject to death, so how did death as a result of sin enter in? What Lennox does not understand is that whilst animals may have features and characteristics that are now useful for predation, these will not have been their original function when they were originally created “good” at the beginning.

In conclusion Lennox has come to his viewpoint mainly because of his ready reception of the modern scientific view of our origins. He clearly believes that modern science is correct in its views of origins.¹²²⁴ His approach to the text has been guided by science and as a result he has introduced not one gap for the long ages, but at least seven!

1221 **John C. Lennox.** Seven Days that Divide the World. P79.

1222 **John C. Lennox.** Seven Days that Divide the World. P79.

1223 **John C. Lennox.** Seven Days that Divide the World. P79.

1224 **John C. Lennox.** Seven Days that Divide the World. P28,85,183.

Chapter 16: Bruce Waltke.

No absolute creation.

Although Bruce Waltke has written a commentary on Genesis, in this chapter we will only look at Waltke's view of the opening of the Genesis creation texts as expressed in a series of articles published in *Bibliotheca Sacra*.¹²²⁵ Concerning Genesis 1 and creation, Waltke takes the view that the first verse of Genesis is simply a title or summary statement. He writes:

*".. verse 1 is a summary statement, or formal introduction, which is epexegeted in the rest of the narrative. It appears to this author that this is the only viewpoint that completely satisfies the demands of the Hebrew grammar."*¹²²⁶

Holding such a view leads to the conclusion that there is no absolute beginning, for if the opening verse is merely "*a summary statement*," it does not reveal any definite information about creation. According to Waltke, the first creative act does not appear until Genesis 1:3 where we read for the first time that "*God said*," an indication of creation by word.

Genesis in an ANE context.

So how does this Old Testament and Hebrew scholar come to such an assertion? To begin with we discover that, along with many others advocating 'alternative' views of Genesis, Waltke holds that the text is an ancient document which was written in the context of the ANE cultures. Waltke believes that the Israelite who wrote Genesis made use of the Canaanite myths which describe a dragon-monster who resisted creation, but that he interpreted this with a monotheistic focus.¹²²⁷ Genesis, then, is not the original but was written later with the Canaanite myths as a heavy influence. In his fourth article Waltke makes the link with the ANE plain:

1225 **B. K. Waltke.**

The Creation account in Genesis 1:1–3, Part I, *Bibliotheca Sacra*. **132**:25–36, 1975.

The Creation account in Genesis 1:1–3, Part II, *Bibliotheca Sacra*. **132**:136–144, 1975.

The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975.

The Creation account in Genesis 1:1–3 Part IV, *Bibliotheca Sacra*. **132**:327–342, 1975.

The Creation Account in Genesis 1:1–3 Part V, *Bibliotheca Sacra*. **132**:28–41, October 1975.

1226 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975. P225,226.

1227 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part I, *Bibliotheca Sacra*. **132**:25–36, 1975. P34.

“Of course, this continuity of literary structure comes as no surprise, for Israel belonged physically to the peoples of the ancient Near East. Her language was Canaanite and her literary compositions, in their physical outward form, conformed to the literary conventions of her age.”¹²²⁸

Waltke does not believe that the Israelite writer simply borrowed from the ANE literature. Instead both Genesis and the Canaanite myths owe their origin to a common ANE source of greater antiquity:

“The only satisfying answer is that proposed by Ira M. Price of the University of Chicago. He suggested that these versions sprang from a common source of some kind. He attributed the common elements to a common inheritance of man going back to “a time when the human race occupied a common home and held a common faith.””¹²²⁹

Genesis 1:2 is a picture of chaos.

Key to his work, Waltke demands that Genesis 1:2 depicts a chaos or disorder.¹²³⁰ According to him, the Biblical writer (Moses) has re-interpreted the mythological elements of the ancient story of a dragon-monster writhing in the deep, and has divested the account of its mythical and fantastical elements. Now the “uncreated, unformed state” of Genesis 1:2 with its “darkness” and “deep” is “*a great mystery*,” but it must not, according to Waltke, be credited to the creative activity of God, for:

“... the Bible never says that God brought these into existence by His word.”¹²³¹

To bolster this idea Waltke points out that in the new heavens and earth there will be no sea nor darkness, so the idea that God was responsible for these in the original creation cannot be true. He writes:

“... it is significant that in the new and perfect cosmos to come there will be no sea ... and in the new Jerusalem associated with it there will be no darkness ... This revelation about the new cosmos suggests that the deep and darkness in verse 2 are less than desirable and were not called into existence by the God of order and goodness.”¹²³²

1228 **Bruce Waltke.** The Creation account in Genesis 1:1–3 Part IV, *Bibliotheca Sacra*. **132**:327–342, 1975. P329.

1229 **Bruce Waltke.** The Creation account in Genesis 1:1–3 Part IV, *Bibliotheca Sacra*. **132**:327–342, 1975. P331.

1230 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part I, *Bibliotheca Sacra*. **132**:25–36, 1975. P34.

1231 **Bruce Waltke.** The Creation account in Genesis 1:1–3 Part IV, *Bibliotheca Sacra*. **132**:327–342, 1975. P338.

1232 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975. P221.

Waltke suggests that the traditional view of Genesis 1:1,2, (i.e. that God created all things in the beginning and the earth as an immediate consequence existed in the three-fold description found in Genesis 1:2), is untenable because it creates a logical contradiction. The phrase “*the heavens and the earth*” is considered to be a term depicting the *ordered* universe, and, Waltke asks, how can it then be that the earth was in a *chaotic* state as shown in Genesis 1:2? He writes:

“Logic will not allow us to entertain the contradictory notions: God created the organized heavens and earth; the earth was unorganized. Plessis rightly asked, “If the heavens and earth signified the organized universe how, then, can it denote heaven and earth in a formless state?”¹²³³

Waltke then concludes that the only way of avoiding God being the author of chaos as depicted in Genesis 1:2, is to to make Genesis 1:1 “*an independent clause and verse 2 as a circumstantial clause connected with verse 3.*”¹²³⁴ He writes:

“The evidence, therefore, seems convincing that verse 1 should be construed as a broad, general declaration of the fact that God created the cosmos, and that the rest of the chapter explicates this statement. Such a situation reflects normal Semitic thought which first states the general proposition and then specifies the particulars. This structure of thought is consistent with Hebrew grammar and with Semitic literature in which specification follows the broad general statement.”¹²³⁵

He concludes his third article by giving a summary outline for the Genesis 1 creation account as follows:

“It is concluded, therefore, that the structure of the account of the creation of the cosmos is as follows:

- I. Introductory summary statement, 1:1.*
- II. Situation prior to the creation, 1:2.*
- III. Narrative of creation, 1:3-31.*
- IV. Concluding summary statement, 2:1.*
- V. Epilogue: the Sabbath rest, 2:2-3.”¹²³⁶*

No absolute creation.

Now these statements of Waltke's and his resulting outline yield the serious consequence, as we have already noted, that there is no absolute creation. It is worth spelling out precisely the inter-

1233 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III. *Bibliotheca Sacra*. **132**:216–228, 1975. P225,226.

1234 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III. *Bibliotheca Sacra*. **132**:216–228, 1975. P228.

1235 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III. *Bibliotheca Sacra*. **132**:216–228, 1975. P227.

1236 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III. *Bibliotheca Sacra*. **132**:216–228, 1975. P228.

connected series of views Waltke expresses. First, he relegates the first verse to the status of a mere title or heading, denuding it of any creative intent. It merely states that God was responsible for all creation. Then next, Waltke takes on board the modern idea that Genesis was written in the context of the ANE and that it was influenced by Canaanite mythology. On the basis of this, he suggests that verse 2 cannot be attributed to God's creative activity because nowhere do we read of God's speech or active word, and also because it describes darkness and chaos, which states God would never have created. Thus, by denying any creative content in the first verse, what we end up with in the second is a universe already in existence and which is dark and chaotic. To be clear here, Waltke states that “*the chaotic state*” found in Genesis 1:2 must be seen “*as existing before the creation spoken of in the Bible.*”¹²³⁷ Finally, he asserts that it is on this chaotic and dark existence that God began His work of creation, and that this action does not begin until we reach verse 3. Creation, therefore for Waltke, is not initial absolute creation, but a creation acting upon a pre-existing universe which is chaotic and dark.

A response.

In response to Waltke we must begin by pointing out once again that the Bible (including its first chapter), has its origin not in the minds of men, but in the very being of God Himself. Limiting Scripture to the work of man is liberalism. I know that many may protest and point out that Waltke (and others like him) claim to uphold divine inspiration, but their writings and arguments betray them. For Waltke, Genesis is a **human** book compiled by an Israelite who had a range of ancient texts before him, (with perhaps the Canaanite version his favourite), and then proceeded to make up his version to agree with his monotheistic view point. Such a view is untenable when it comes to Scripture. God has always taken the initiative and it is blasphemous nonsense to hold that revelation did not come about until way after the rise of the ANE cultures, and that godly Israelites had to scrabble about amongst the myths of ancient times to be inspired.

For our second objection to Waltke's view we cannot accept that the first verse is a mere summary statement. We object for two main reasons. First because Genesis is constructed using titles that end sections, rather than begin them. The first section of Genesis ends in Genesis 2:4a where we read: “*This is the history of the heavens and the earth when they were created.*” The next ends at Genesis 5:1a with a similar concluding “title,” and the third at Genesis 6:9a, again with a concluding statement, and so on. Our second objection comes from a plain reading of Genesis 1:1. We have a very clear statement of God's **creative** activity for we are told that God “*created.*” Also

1237 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III. *Bibliotheca Sacra*. **132**:216–228, 1975. P225.

we are told precisely what was created, and that with definite force, namely, *“the heavens and the earth.”* Finally we are told that such a creation also brought into existence time itself. We note this because the word for *“created”* and the word for *“beginning”* are very close in sound. John used these very words to speak of creation by the Saviour and the writer to the Hebrews did as well.¹²³⁸ To insist that no real creative work occurred in Genesis 1:1 because nowhere is there any mention of creation *through the word* as in Genesis 1:3f is also, to say the least, rather limiting. Why should God be held to one form of work? The fact that Genesis 1:1 tells us that *“God created”* must surely be enough to believe that He did in fact create!

Our third objection homes in on Waltke's skewed view of Genesis 1:2. Perhaps he has been influenced by certain dispensationalists who love their gaps! Well the idea that darkness indicates evil is nonsense in the context of Genesis 1, for darkness is named, and all of creation is described as being *“good.”* Furthermore the introduction of evil into the world does not come until Genesis 3. Then also to say that Genesis 1:2 depicts a chaos as suggested by ancient Canaanite myths is poor scholarship at the very least. There are no close correspondences between Genesis 1:2 and ancient myths. The *“deep”* cannot be linked with any mythological creature either directly or etymologically. What is described in Genesis 1:2 is a statement of the threefold condition of the earth, namely, that it was dark, unformed and unfilled, and that the Spirit of God was hovering or brooding over these raw materials. There is no idea of disorder or chaos. Think of a block of marble. It is yet to be formed into a statue. Think of a blank *“word”* document. It is yet to be filled with text. But would you conclude that the block of marble or the blank *“word”* document are chaotic or disordered? Of course not! So why assert such for Genesis 1:2? It is only on the assumption that the writer was mimicking the ANE cultures. Then also we ought to point out that if God was not responsible for the darkness and the (supposed) chaos, who was? How, in point of fact, did creation begin? Waltke has no answer to this at all.

Finally we cannot end without some comment on the main implication of Waltke's views, namely that Genesis does not, in fact, give us a statement of absolute creation. Now Waltke is clear that the first word of the Bible must be taken as an absolute (*“in the beginning”*), and not a construct (*“in the beginning of/when”*). This is helpful because there are some who take this latter erroneous view. Equally he holds that Genesis 1:1 is an independent clause. He points out that the early Christians and the ancient versions of Scripture all assume the first word to be in the absolute form, and the first verse to be an independent clause:

¹²³⁸ See: Isaiah 40:21; 41:4,26; 46:10; 48:3,5,,7,16; 64:4; John 1:1; Hebrews 1:10.

“More convincing that the word [in the beginning] should be understood as an absolute is the fact that all ancient versions (LXX, Vulgate, Aquila, Theodotion, Symmachus, Targum Onkelos) construed the form as absolute and verse 1 as an independent clause.”¹²³⁹

“In sifting all the data, two facts emerge: (1) In both the Jewish and Christian tradition, the first word in the Bible was unanimously understood as being in the absolute state and the first verse was considered an independent clause. (2) Moses could not have used any other construction to denote the first word as in the absolute state, but he could have opted for a different construction to indicate clearly the construct state. It is therefore concluded that the text which has come down to us should be understood as an independent and not a dependent clause.”¹²⁴⁰

But Waltke then goes on to assume that the independent nature of Genesis 1:1 renders it non-informative. I cannot see any reason for this. Genesis 1:1 is independent from Genesis 1:2 **grammatically**, precisely because it is teaching us about an absolute creation. If Genesis 1:1 was connected grammatically to Genesis 1:2 (or any other sentence), the absolute nature of the first verse would be lost. Waltke affirms the absolute nature of the first word and the independent nature of the first verse, but denies it any force of meaning. This is very curious, and leaves us clueless and helpless. When did God create? Genesis 1:1 asserts: “*in the beginning*”! Waltke believes that such a statement has no force because it is merely a title or summary, and so we cannot answer the question! Thus Waltke leaves us in a sea of unknowingness!

1239 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975. P223.

1240 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975. P224.

Chapter 17: Howard Van Till.

A very liberal framework.

With Howard Van Till, we have yet another exponent of the framework hypothesis.¹²⁴¹ However my reason for dealing with Van Till is because of his treatment of God's creative work on the fourth day in Genesis 1;14-19. Van Till presents the problem observed there by all who believe in the framework hypothesis. If the text must be taken literally, how is it possible, they ask, for light to be made on day 1, whilst the sun is not made until day 4? Here is how Van Till discusses the problem:

“Within the creation-week scenario, we find the creation of light on day one, but the sources of light – the sun, moon, and stars – do not appear until the fourth day. How is it possible to have light before lights? My imaginative powers are put to shame by the multitude of clever conjectures and adroit arguments that have been fabricated to solve this puzzle. But the puzzle should not be solved. It should instead be summarily dismissed. It needs no solution because the question itself is unwarranted. The question presupposes that the order of events in the Story of the Creator has some physical basis. It does not. It may have a cultural basis, but surely not a physical or material basis.”¹²⁴²

Undergirding Van Till's response is his assumption that light cannot exist without a sun to generate it. This is the essential problem of the modern scientist. We see the sun and observe the stars today, and understand that light is generated from the deep thermo-nuclear reactions occurring in the core of these immense bodies, and we conclude that this is the **only** way light can be truly generated in space. But why is this assumed to be the case? Pertinent to this discussion is the whole question of miracles. Modern science dismisses them without a thought, but, as Christians, the central feature of our faith are the miracles of the incarnation, the resurrection and the new birth. Why then is it considered impossible or unreasonable to have light before the sun? If God be God, is it not possible for Him to create light first and then place this in the core of the stars on day 4? Arguing that the only way to generate light is for a sun to radiate it, seems to be limiting, restricting and unreasonable. Why should modern science be the determinative factor? Van Till dismisses the various “arguments ... fabricated to solve this puzzle,” by stating that the details in Genesis 1 have

1241 **Howard Van Till.** The Fourth Day. 1986. William B. Eerdmans. P3.

1242 **Howard Van Till.** The Fourth Day. P90.

no “*physical basis*.”¹²⁴³ How has he come to this position? Well to answer this question we need to examine Van Till's view on Scripture and Science.

Where does your loyalty lie?

In the first place we learn that Van Till had been brought up in an evangelical setting where a creationist position was the staple diet.¹²⁴⁴ He writes:

*“I was taught that the correct way to understand Genesis 1 is to treat it as a chronicle of discrete creative acts of God – a list of historical events that occurred in precisely the order and time frame given there. Creation, I was told, must be understood as a series of extraordinary acts that took place within a six-day period, after which God stopped creating. Was taught to interpret Genesis 1 in a literalistic manner – to treat it as a verbal photograph that records, in a very concise manner, exactly what happened during a most unusual week just a few thousand years ago.”*¹²⁴⁵

Van Till adds in a footnote an example of the kind of material that was used, namely, Louis Berkhof's *Manual of Christian Doctrine*.¹²⁴⁶ However since those days he has come to recognise that what he had been taught was, in point of fact, naïve. In time Van Till became a physicist and astronomer, so that modern science became more formative for his understanding. Now the path he has traversed is curious, for it is often assumed that many have departed from the church and from orthodox belief because pastors and preachers have fudged the issue over creation by saying it isn't important, or by compromising with evolution. Van Till seems to have had a Biblical creation start to his life but has rejected this in favour of the unassailable evidence (as he describes it) for a universe that has evolved.¹²⁴⁷ We shall return to this theme later but for now it is pertinent to note that departure from orthodox belief is no simple affair.

Scripture – word of God or word of man?

Van Till begins his book *The Fourth Day*, with an appraisal of Scripture, its nature and how it is to be used. Coming from an evangelical Calvinistic background it isn't surprising to find that Van Till begins with a discussion of the phrase “*the word of God*.” How is the Bible to be

1243 **Howard Van Till**. *The Fourth Day*. P90.

1244 **Howard Van Till**. *The Fourth Day*. P75,76. **Howard Van Till**. *Partnership: Science & Christian Theology as Partners in Theorizing*. Chapter 4 of: *Science & Christianity: Four Views*. 2000. Edited by Richard F. Carlson. IVP. P195.

1245 **Howard Van Till**. *The Fourth Day*. P76.

1246 **Louis Berkhof**. *Manual of Christian Doctrine*. 1953. Published by Eerdmans, Grand Rapids. PP95-110.

1247 **Howard Van Till**. *The Fourth Day*. P112,113,118,201.

considered as coming from God? This is what he has to say:

“Though it has the status of the “Word of God,” the Bible comes to us in the form of thoroughly human language and literature.

The Bible is the “Word” of God not the “words” of God. ... Yet, while the words of the Bible were produced by human writers, the Bible as an organic whole functions as God's Word, holy Scripture.”¹²⁴⁸

Notice that Van Till makes a distinction between, the “Word,” (capitalised W) by which he means “the Bible” functioning as “an organic whole,” and, the “words of the Bible” (lower case w) themselves which are the product of the “human writers.” This is a subtle way of dividing what God has revealed (His Word) from what man has written (the words of the Bible). Part of the process of promoting a new and novel view of Scripture includes the dragging down of caricatures of orthodoxy. Van Till is keen to avoid two extremes (as he sees them) when discussing Scripture. On the one hand we cannot limit the Bible to the status of just another human production, but on the other hand we must avoid:

“... placing the Bible entirely outside the category of human literature as if it were divinely dictated to mechanical printing machines.”¹²⁴⁹

This statement is a dig at the evangelical view of inspiration. Of course no one should believe that the Bible is simply the product of automatic writing. It hasn't simply been “dictated” by God and printed by man. So how does Van Till really view the word of God, the Bible? In this next quote he appears to continue with the distinction noted earlier between the revealed Word and the words written. He states:

“The true status of the Bible, then, is properly identified by the phrase “Word of God.” This clearly indicates that it occupies an elevated position relative to other human literature. And if we understand that the term Word is being used in a metaphorical sense to acknowledge divine revelation, rather than in the restricted literal sense to indicate mere words, then we can also avoid the error of denying the form in which God has chosen to reveal himself to us.”¹²⁵⁰

The effort that is put into Van Till's distinctions between God's “Word” revealed, which is no more than a metaphor for divine revelation, and the human words written, which are the “form in which

1248 **Howard Van Till.** The Fourth Day. P5.

1249 **Howard Van Till.** The Fourth Day. P5.

1250 **Howard Van Till.** The Fourth Day. P5.

God has chosen to reveal himself to us,” is, quite simply, staggering. What this amounts to is that whilst God chooses to reveal Himself to us in some divine way, He does so exclusively through the form of human words. Now at first blush this appears to be a regular way of talking about inspiration, but in reality it is nothing of the sort.

Scripture as an incarnation.

Later Van Till speaks loosely of the Bible as a type of incarnation, made up of a human element and a divine. However his discussion of Scripture with reference to the human and the divine elements does not show much confidence in the real doctrine of the incarnation. The reader will recall that Christ Jesus, the Second Person of the Holy Trinity, has two natures, human and divine, which co-exist in a single person. Thus Christ is a single person but with two natures. We can refer to the Lord Jesus as fully 100% human, the second Adam, and we can also refer to Him as fully 100% divine (*“in Him dwells all the fullness of the Godhead bodily”*), and yet He is always just one person.¹²⁵¹ With regard to Christ's two natures, the statement made at Chalcedon in 451 AD defines the union of natures using a series of negative statements. The two natures of Christ must be recognised:

*“... without confusion, without change, without division, without separation; the distinction of natures being in no way annulled by the union, but rather the characteristics of each nature being preserved and coming together to form one person and subsistence, not as parted or separated into two persons, but one and the same Son and Only-begotten God the Word, Lord Jesus Christ ...”*¹²⁵²

We must also add the fact that as a man, the Lord Jesus was pure and sinless. Scripture attests to the Lord's sinless human nature in many places.¹²⁵³ Now the classic doctrine of inspiration takes these ideas of the incarnation to heart. Note that Christ the **Word** is both sinless human, and divine, in a single unified person. In the same way the Scriptures are the product of God's perfect revelation as transmitted via human writers whose personalities were not violated and who penned Scripture without error or corruption. How then does Van Till want his readers to view Scriptures? Here is how he puts it:

1251 The hypostatic union. Colossians 2:9.

1252 <https://www.monergism.com/definition-council-chalcedon-451-ad>

1253 Luke 1:35; 2Corinthians 5:21; Hebrews 4:15; 1Peter 1:18,19; 2:22.

“In discussing the status of Scripture, we noted that the Bible is neither exclusively human nor exclusively divine.”¹²⁵⁴

This statement is far removed from the truth where Scripture is both fully. Van Till has effectively split Scripture into two elements. Thus he can hold that the divine element is the message (the Word), whilst the form in which the message is conveyed (the words of the Bible) is the human element:

“Yet, while the content of the Bible's kerygmatic message, its proclamation of the gospel, is thoroughly divine because of its origins in divine revelation, the form of that message and the historical-cultural context in which it was revealed is thoroughly human. Though the taproot of Scripture reaches into the depths of divine revelation, the lateral roots extend into the soil of human experience.”¹²⁵⁵

Such a view point is nothing more nor less than the old liberal idea that Scripture **contains** the word of God but is not the word of God in its entirety. With regard to the classic doctrine of inspiration, Van Till is dismissive.¹²⁵⁶ He writes:

“For centuries theologians have struggled to understand the mechanism of divine inspiration. Such terms as “verbal inspiration” and “organic inspiration” and “plenary inspiration” will be found in the abundant literature on this subject. I have no desire to attempt a review of the technicalities of such distinctions, nor am I convinced that the heart of the matter lies in these technical differentiations.”¹²⁵⁷

In responding to a creationist perspective on the relationship between science and Christianity, Van Till stated that he found the idea of an inerrant Bible *“highly problematic.”¹²⁵⁸* In connection with this notion, he concludes by stating:

“It is my conviction that this proposition, often used as a litmus test for identifying “true” Christians from others, can be either impossible or misleading when applied uncritically to issues relevant to modern natural science.”¹²⁵⁹

Van Till continues by offering what he believes to be a better approach that is rooted in the

1254 **Howard Van Till.** The Fourth Day. P7.

1255 **Howard Van Till.** The Fourth Day. P8.

1256 **Howard Van Till.** The Fourth Day. P8,9.

1257 **Howard Van Till.** The Fourth Day. P8,9.

1258 **Howard Van Till.** A Partnership Response to, Creationism: An Inerrant Bible & Effective Science. Wayne Frair & Gary D. Patterson. Chapter 1 of: Science & Christianity: Four Views. 2000. Edited by Richard F. Carlson. IVP. P61.

1259 **Howard Van Till.** A Partnership Response to, Creationism: An Inerrant Bible & Effective Science. P62.

incarnation, but such an approach is too difficult to really comprehend for it is “*a mystery beyond human understanding.*”¹²⁶⁰

Scripture and interpretation.

This dualistic view of Scripture as comprising two separate elements can be seen more clearly when it comes to how the Bible reader is to understand Scripture as far as Van Till believes. Van Till offers a number of hermeneutical tools for the reader. However none of these are Biblical, rather they are the “*critical tools*” provided by (secular) academia.¹²⁶¹ Van Till begins by arguing that the:

*“... overarching structure of the Bible is the structure of the suzerainty covenant – a legal and literary form of treaty (covenant) administration that was well established in the ancient Near East at the time the Old Testament was written,”*¹²⁶²

For Van Till the dating of Scripture is uncertain. Rather than accept the historical information contained within Scripture, he follows the lead of modern scholarship, which assigns dates based on an evolutionary view of mankind, and “*archaeological evidence.*”¹²⁶³ Accordingly he states that Palestine had known human occupation “*as long ago as 8000 BC,*” and that “*the Sumerians ... are credited with the development of writing, even before 3000 BC.*”¹²⁶⁴ With regard to the formation of Israel he writes:

*“Though Israel did not attain the status of a nation until after the Exodus, its origin is commonly assigned to the much earlier period of the patriarchs. Sometime early in the second millennium B.C., Abraham and his clan migrated from northern Mesopotamia ... to ... Palestine. The Bible, drawing from the memory of the Hebrews as it was preserved primarily in oral tradition, provides us with sketches of some events and individuals of the patriarchal period but is far more concerned with providing religious history and with presenting a testimony to the reality of divine action and leading. Specific dates are not available for either the life of Abraham or his entry into Egypt, although this event is generally agreed to have occurred before the middle of the second millennium, perhaps around 1700 B.C.”*¹²⁶⁵

*“The Exodus is commonly dated around 1280 B.C. and the Israelite presence in Canaan was firmly established by around 1200 B.C.”*¹²⁶⁶

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- 1260 **Howard Van Till.** The Fourth Day. P9.
1261 **Howard Van Till.** The Fourth Day. P12.
1262 **Howard Van Till.** The Fourth Day. P10
1263 **Howard Van Till.** The Fourth Day. P21.
1264 **Howard Van Till.** The Fourth Day. P21.
1265 **Howard Van Till.** The Fourth Day. P21.
1266 **Howard Van Till.** The Fourth Day. P22.

Now all of the above is in direct opposition to the history detailed in Genesis, where we discover, that writing began with Adam who was created around 4000 BC, that Abraham entered Canaan at the age of 75 in the year 2083 after creation, that Jacob aged 130 entered Egypt 215 years later, and that the Exodus occurred 430 years after Abraham received the promise!¹²⁶⁷

Van Till's acceptance of modern scholarship is the great problem here. He gives the broad sketch of the secular view of Biblical history in order to make the point that Israel were heavily influenced by the nations that surrounded them.¹²⁶⁸ By this association he then discusses how the Scriptures should be viewed as a *human* formed document. First he notes that:

*"The form of scriptural material has remarkably close parallels in ancient Near Eastern international treaties used in the second millennium B.C."*¹²⁶⁹

He then references Meredith Kline, (a key developer of the framework hypothesis), who argues that the ANE treaty form:

*"... was, therefore, available, needing only to be taken up and inspired by the breath of God to become altogether what the church has confessed as canon."*¹²⁷⁰

Such a statement made by Kline (and fully endorsed by Van Till) flies in the face of what the Scriptures declare. Kline goes on to assert that:

*"Yahweh adopted the legal-literary form of the suzerainty covenants for the administration of his kingdom in Israel."inspired by the breath of God to become altogether what the church has confessed as canon."*¹²⁷¹

Such a view is devastating to the cause of Christ! What Kline and Van Till want us to believe is that God merely came in sometime late on the scene to steer the course of history in a new direction. The Scriptures teach us quite the opposite, for it has always been God who has taken the initiative. The ANE cultures are derivative. God created mankind in the beginning, drove out Adam and Eve from the garden after they sinned, remonstrated with Cain and those who followed the way of

1267 See: Genesis 5:1 for Adam being the father of writing. See also Genesis 12 – Exodus 12; Galatians 3:16,17. Understanding the chronology of Genesis is vital for Bible students and the reader is advised to consider my work on this (Ushering in an Old Age) and that of other writers.

1268 **Howard Van Till**. The Fourth Day. P24.

1269 **Howard Van Till**. The Fourth Day. P78.

1270 **Howard Van Till**. The Fourth Day. P78. Quote from: **Meredith Kline**. The Structure of Biblical Authority. 1975. Eerdmans, Grand Rapids. P37.

1271 **Howard Van Till**. The Fourth Day. P78. Quote from: **Meredith Kline**. The Structure of Biblical Authority. P37.

corruption, warned of an impending world-wide flood and then carried this judgment out, confused language at Babel where rebellion had fomented, and then called Abraham out of Mesopotamia. The cultures and countries that formed after the flood are derived from this stream of history. They must have taken elements of the true history of the world and intermingled them with their own ideas, myths and legends. The ANE cultures are not the source from which we need to look to discover what the Bible is about! We should rather be studying these ANE cultures from the Biblical perspective. But Van Till faithlessly promotes the secular view that the Bible is derived from an ANE setting.

Features of Genesis 1, such as light and dark, the waters above and below, and so on are seen not as original material as revealed by God, but are “*common ancient Near Eastern concepts*.”¹²⁷² Genesis 1 is a text which was composed “*against the background of ancient Near Eastern naturalistic polytheism*”¹²⁷³ Van Till asserts not only that Genesis 1 is an ANE production, but that it does not admit categories familiar to a modern mindset. The ancient cultures did not think abstractly, and merely reported stories to develop their ideas. He declares that:

*“Primeval history is Hebrew literature written in the literary tradition of ancient Near Eastern cultures. Hebrew literature displays little abstraction but instead relies almost exclusively on concrete illustration to make a point. The most common literary genre in the Old Testament is the narrative – the story in simple, straightforward prose form. The qualities of God, humanity, and nature are not discussed abstractly in philosophical exposition but rather are illustrated by stories of events and actions carried out by God, humanity and nature. As characters in a story, God, humanity, and nature perform specific actions that illustrate their identity, their character, and their relationships. The stories serve as “packaging” that contains the message-content conveyed by the vehicle of primeval history.”*¹²⁷⁴

One of the curious things about many who object to taking Genesis 1 at face value is the contradictions they produce along the way. Van Till wants to assert that the way ancient man thought (which includes the Israelites he thinks responsible for Genesis) was so far removed from how modern man thinks, that in order to read Genesis we must get into an ancient mode of thought. But then later in his book he wants to assert contradictorily that whoever wrote Genesis 1 asks the same questions that we ask!¹²⁷⁵ Well of course cultures both across the world and through time and have their peculiarities, but mankind since Adam is a unified species. The same basic questions and curiosity permeates culture. To argue otherwise is to reject reality. Even secular historians of science

1272 **Howard Van Till.** The Fourth Day. P86.

1273 **Howard Van Till.** The Fourth Day. P87.

1274 **Howard Van Till.** The Fourth Day. P82.

1275 **Howard Van Till.** The Fourth Day. P80.

recognise the same essential features in the general quest to understand things among disparate cultures.¹²⁷⁶

Vehicle-package model.

Now Van Till in discussing the cultural setting of Genesis considers that the stories of Genesis merely “serve as “*packaging*” that contains the message-content conveyed by the vehicle of primeval history.”¹²⁷⁷ Here again we have the old liberal idea that the Bible is not the word of God, it merely contains the word of God. To make clear what Van Till is holding to, we shall unpick his view of hermeneutics. Van Till argues that we ought to “*make proper use of critical tools*” of literary analysis to grasp Scripture's meaning.¹²⁷⁸ These are not the Biblical tools but secular ones. The primary purpose of Scripture is “*to bring the reader into a right relationship with God, with fellow human beings, and with the rest of the Creation,*” and not to state how things came to be.¹²⁷⁹ However the incidental information we find in Scripture (such as “*information about the material world expressed in pre-scientific language*”), is only really useful for academic study, because it “*makes little or no impact on our experience of redemption.*”¹²⁸⁰ The Bible is all about salvation, or how to go to heaven, and not about how the heavens go.¹²⁸¹ Van Till continues by saying:

“Taking the Bible seriously does not require us to treat such matters as the product of divine revelation; on the contrary, taking the Bible seriously requires, I believe, giving such incidental information the lesser status that I have suggested.”¹²⁸²

And so Van Till provides us with his own version of the liberal view of interpreting Scripture. He describes it as the “*vehicle model.*”¹²⁸³ In his representation different vehicles convey different contents, each of which are packaged in precise ways. For example milk is (or used to be) conveyed in milk carts with crates of bottles. The milk contained in the bottle is the essential thing, not the crates, nor the bottles. Sensitive or fragile contents are wrapped in foam and packaged in carefully designed boxes. The foam and boxes are incidental to the fragile thing that we really want. Here is how Van Till sums up his use of this idea:

1276 See, for example: **Colin Ronan**. The Cambridge Illustrated History of the World's Science. 1983. Cambridge University Press and Newness Books.

1277 **Howard Van Till**. The Fourth Day. P82.

1278 **Howard Van Till**. The Fourth Day. P12.

1279 **Howard Van Till**. The Fourth Day. P12.

1280 **Howard Van Till**. The Fourth Day. P13.

1281 This phrase comes from **Galileo** in a letter to the Grand Duchess Christiana. G. GALILEI, *Lettere*, Einaudi, Torino, 1978,. PP128-135.

1282 **Howard Van Till**. The Fourth Day. P13.

1283 **Howard Van Till**. The Fourth Day. P14.

*“To complete the introduction to this vehicle model of Scripture, let me note, finally, that the Bible can be viewed as a complete unit, including the vehicle (literary genre), packaging (specific story, symbols, etc.), and contents (God's message to us). ... We can be confident that all of the content of God's message in the Bible is delivered to us undamaged and unspoiled. It ought never to be viewed as a mixture of teachings, some true and others false. However, as our model suggests, just as a consumer must first unload the packaged goods from a delivery vehicle and then carefully unpack those goods for use or consumption, so we as readers of Scripture must be studiously and prayerfully wise in separating the contents (the trustworthy teachings of God) from the vehicle and the packaging.”*¹²⁸⁴

Note that the “content” (the milk in the bottles) is “undamaged and unspoiled,” but the packaging and vehicle must be discarded or separated out.

Van Till then takes a look at how C. S. Lewis has viewed the subject.¹²⁸⁵ C. S. Lewis, whilst a popular writer, was by no means an evangelical believer, especially when it comes to Scripture and Genesis. In the chapter on Scripture in his *Reflections on the Psalms*, he states that he

*“... no difficulty in accepting, say, the view of those scholars who tell us that the account of Creation in Genesis is derived from earlier Semitic stories which were Pagan and mythical.”*¹²⁸⁶

In the same chapter Lewis explains his view of how Genesis and other Old Testament Scriptures have come to be a part of our Bible. It is through the human telling and re-telling of stories which become, through the passage of time, adapted to present “the idea of true Creation and of a transcendent Creator.”¹²⁸⁷ Lewis has no problem with such a human development for he views this process as one which God has used and at some point invested with His divine imprint:

*“Thus something originally merely natural – the kind of myth that is found amongst most nations – will have been raised by God above itself, qualified by Him and compelled by Him to serve purposes which of itself it would not have served. Generally thus, I take it that the whole Old Testament consists of the same sort of material as any other literature – chronicle (some of it obviously pretty accurate), poems, moral and political diatribes, romances, and what not; but all taken into the service of God's word. Not all, I suppose, in the same way. There are prophets who write with the clearest awareness that Divine compulsion is upon them. There are poets like those in the Song of Songs who probably never dreamed of any but a secular and natural purpose in what they composed ...”*¹²⁸⁸

1284 **Howard Van Till.** *The Fourth Day*. P15.

1285 **Howard Van Till.** *The Fourth Day*. P16,50-54

1286 **C. S. Lewis.** *Reflections on the Psalms*. 1998. (First published 1958). Fount (Harper Collins). P95.

1287 **C. S. Lewis.** *Reflections on the Psalms*. P95.

1288 **C. S. Lewis.** *Reflections on the Psalms*. P96.

Van Till offers Lewis as a similar (and perhaps more palatable) alternative to his ideas. He then quotes Lewis's conclusions on the nature of the word of God, which we here reproduce from Lewis's original work.¹²⁸⁹

“The human qualities of the raw materials show through. Naïvety, error, contradiction, even (as in the cursing Psalms) wickedness are not removed. The total result is not ‘the Word of God’ in the sense that every passage, in itself, gives impeccable science or history. It carries the Word of God; and we (under grace, with attention to tradition and to interpreters wiser than ourselves, and with the use of such intelligence and learning as we may have) receive that Word from it not by using it as an encyclopaedia or an encyclical but by steeping ourselves in its tone or temper and so learning its overall message.”¹²⁹⁰

It is quite clear that Van Till and Lewis both hold to the liberal idea that Scripture is not the word of God, it merely contains the word of God. In particular, according to Lewis, the science or history of the Bible may not be “*impeccable*,” and what we are to do is to bathe ourselves in Scripture so that we may somehow imbibe the message contained within. Concerning Lewis' view, Van Till comments:

“Lewis's picture of Scripture is not one of God's Word “sent down” from heaven in the guise of human literature but rather one of human literature being “taken up” into God's higher service. The Scriptures are “holy” not because of extraterrestrial origins, he suggests, but for their heavenly function.”¹²⁹¹

Such an assessment is not wholly correct for Lewis did hold that the prophets wrote “*with the clearest awareness that Divine compulsion*” was “*upon them*.”¹²⁹² Nevertheless Lewis's view is quite close to that which Van Till is promoting.

Van Till's method of interpretation.

Now Van Till presents his liberal view as “*a “vehicle-packaging-content” approach to biblical interpretation.*”¹²⁹³ The content is the essential thing, and the vehicle and packaging must be removed. These may be studied academically but they have no force or value for the believer. The task of interpretation, then is to identify what is content and what is package or vehicle:

1289 **Howard Van Till.** The Fourth Day. P17.

1290 **C. S. Lewis.** Reflections on the Psalms. P96.

1291 **Howard Van Till.** The Fourth Day. P16.

1292 **Howard Van Till.** The Fourth Day. P16.

1293 **Howard Van Till.** The Fourth Day. P18.

“If we are correct in supposing that the Scriptures represent a unified combination of vehicle, packaging, and contents, then the first operation of biblical interpretation must be to distinguish among the three categories. The next will be to extract the contents from both the vehicle and the packaging. Or, to put it in “real” terms instead of “model” terms, the task of biblical interpretation is to extract the original meaning, God’s message or teaching, from the specific event, account, or story as it has been conveyed to us by a particular literary genre, such as chronicle, epic, or parable.”¹²⁹⁴

But how is this cutting up and dissecting of the Scriptures to be done? Van Till appeals to the various secular critical tools such as “*linguistic analysis*,” “*cultural*” studies and so forth:

“All of the traditional principles of biblical hermeneutics must be employed ... We must ... employ the principles of linguistic analysis and literary criticism to identify correctly the literary genre, the grammatical constructions, and the specific meaning of each word ... We must be thoroughly familiar with the cultural settings of a passage to ascertain what its original readers would take it to mean. ... Finally, we must interpret any Scripture passage in the context of the primary function of Scripture – to reveal God’s marvellous work of redemption.”¹²⁹⁵

Having utilised the various tools of academia to surgically remove the true content from the vehicle and packaging we finally have at our disposal what Van Till may call the real “word of God.” However, our task is not yet finished! To interpret the newly dissected content, we have to understand its “*primary function*,” which, according to Van Till, is simply a matter of “*redemption*.”¹²⁹⁶ Such a scheme introduces at least two barriers to ordinary readers of Scripture. First, the reader must hurdle the barrier of deciding what is the true unvarnished content in the Bible. This is no small task which, in reality, can only be done by academics and experts like Van Till! That will keep the presses rolling and the dollars coming in! Then second, we are only to consider the content as having reference to redemption, or matters of faith and practice. Now when I read Scripture I see quite the opposite. He who has ears to hear can know exactly what the Lord is saying:

21 Have you not known? Have you not heard? Has it not been told you from the beginning? Have you not understood from the foundations of the earth? ... **25** “To whom then will you liken Me, or *to whom* shall I be equal?” says the Holy One. ... **28** Have you not known? Have you not heard? The everlasting God, the Lord, the Creator of the ends of the earth, neither faints nor is weary. His understanding is unsearchable. **29** He gives power to the weak, and to *those who have* no might He

1294 **Howard Van Till.** The Fourth Day. P18.

1295 **Howard Van Till.** The Fourth Day. P18.

1296 **Howard Van Till.** The Fourth Day. P18.

increases strength. **30** Even the youths shall faint and be weary, and the young men shall utterly fall, **31** but those who wait on the Lord shall renew *their* strength; they shall mount up with wings like eagles, they shall run and not be weary, they shall walk and not faint. (Isaiah 40:21,25,28-31).

Furthermore, what God has to say encompasses everything, not just matters of faith and practice.¹²⁹⁷

The place of modern science.

What then of Van Till's view of science and how this should relate to the Bible and Christian faith? To begin with we must note that he has a great deal of implicit trust in modern science. He writes:

*“Modern natural science stands as a paragon of analytical achievement in the effort to understand certain aspects of the world in which we live and of which we are a part. The scientific enterprise ought not to be the object of unquestioning trust, but it has rightly earned a high degree of respect.”*¹²⁹⁸

In fact it seems clear that science ought to be our first refuge for truth. At one point in his discussion on how to understand Genesis 1 he laments the fact that most writers take it as “*reportorial prose*,” or, in other words, literally.¹²⁹⁹ For Van Till such a lamentable situation;

*“That assumption raises a considerable number of difficult questions of an essentially scientific nature, however – questions pertaining to the material properties, physical behaviour, and temporal development of the universe.”*¹³⁰⁰

Thus the information science produces must come first in Van Till's estimation, and taking Genesis literally must be obviously wrong. The data of modern science cannot be ignored and its conclusions are reliable and trustworthy. According to Van Till, “*the physical evidence, both geological and astronomical, ... strongly indicates that cosmic history extends over a period greater than ten billion years.*”¹³⁰¹

In the second part of his book, ***The Fourth Day***, Van Till discusses his view of modern science, in which he opens by noting a number of its basic assumptions. To give grounding and warrant for these assumptions he appeals to human ingenuity, human curiosity, and human intellectual endeavour. Listen to how he puts this:

1297 Colossians 2:2,3.

1298 **Howard Van Till**. *The Fourth Day*. P113.

1299 **Howard Van Till**. *The Fourth Day*. P89.

1300 **Howard Van Till**. *The Fourth Day*. P89.

1301 **Howard Van Till**. *The Fourth Day*. P91.

*“... what might we say concerning the warrant for theses assumptions? On what basis are these presuppositions made? On mankind's desire for order? On our observations and our experience with natural phenomena? On human creativity and imagination? On our intellectual curiosity to propose and test hypotheses? On the cumulative insight gained from past curiosity, experience, observation, and creative organization of information? If my understanding of the history of science is correct, all of these factors have contributed significantly to our list of working presuppositions.”*¹³⁰²

In short, the presuppositions made by modern science are those garnered from human experience. Modern science, according to Van Till, has its ground and impetus from man and his thinking. Such a position is supremely worrying for the Christian, (although this is the only basis for secular humanism), for we understand from Scripture that man's mind and thinking is dark, futile and vain.¹³⁰³ There are many who would argue that modern science actually gained its status from the reformation and the promulgation of a Biblical world view. Only the Scriptures give us reason to trust that the universe is worth investigating.¹³⁰⁴

Historical science.

Van Till has a deep faith not just in observational science, the knowledge that can be measured today and then repeated tomorrow, but also in historical science which discusses knowledge of singular events in the past. He refers to such historical science as that which deals with “*indirect evidence*.”¹³⁰⁵ Immediately prior to this he discusses the use of probes and inferences from observations, such as observing trees swaying indicating a strong wind. But such a discussion papers over the immense difficulties inherent in trusting to historical science. He states:

*“While we cannot generally observe a past event directly (with the exception of some fascinating astronomical phenomena that we'll discuss later), we may be able to observe the perceptible consequences of that event – the physical record the event has produced – and from that record we can in many instances infer both the character and chronology of the event or process. A comparison with similar behaviour displayed by comparable systems at the present time can then aid us in evaluating our reconstruction of the event.”*¹³⁰⁶

1302 **Howard Van Till.** The Fourth Day. P103.

1303 It is quite astonishing that Van Till brought up in a calvinistic setting does not acknowledge the place of sin. One wonders whether his background was truly calvinistic at all. For Scriptures that demonstrate man's mind being dark and so on, see: Psalm 94:11; Romans 1:21; 1Corinthians 3:20; Ephesians 4:18; 5:8. A read through the book of Ecclesiastes ought to prove this point to but see especially Ecclesiastes 7:29; 8:16,17.

1304 See, for example, **Henry Morris.** The Biblical Basis for modern science. 1984. Baker Books.

1305 **Howard Van Till.** The Fourth Day. P106.

1306 **Howard Van Till.** The Fourth Day. P106.

Did you notice the particular claim being made here? Van Till tells us that historical science, the astronomical data and measurements, gives us a “*physical record*,” and that from this “*record*” we can then write out what happened in the past. But, I insist, we have a **true** “record” in Genesis 1 where 31 times we read about God doing something! Can you see how faith in science has triumphed in Van Till's thinking over faith in God's word? Van Till clearly accepts that observations of the cosmos come with information about chronology and time frames. After mentioning a variety of geological and cosmological situations, along with an acceptance of the principle of uniformitarianism, he sums up by saying:

*“The essential point here is that the present properties, structures, and behaviour of material bodies provide a wealth of information concerning the history of those bodies. The cosmos is permeated with evidence of its own history. The study of that history lies legitimately within the domain of the natural sciences.”*¹³⁰⁷

*“And I believe that cosmic chronology can be reliably inferred from the physical record formed by events and processes in cosmic history.”*¹³⁰⁸

Now to be fair to Van Till, he does suggest limits to the nature of modern science. It cannot answer questions of purpose or ethics which ought to be directed to Scripture. However it does have the power to unravel history from the start at the big bang:

*“As I have already suggested, the natural sciences cannot determine the meaning, significance, or ultimate cause of such an event (or of any other event, for that matter), but they can legitimately investigate the physical character of that event and the time at which it occurred.”*¹³⁰⁹

The framework view.

When it comes to origins as depicted in Scripture, any attempt at reconciling Genesis and its days (which he believes are ordinary days) is futile.¹³¹⁰ He states this because of his view that the story of creation is not historical but merely a literary construct. He writes that even though the days in Genesis 1 “*are clearly ordinary solar days*,” nevertheless they:

“... have nothing to do with the cosmic timetable; they are simply literary devices in the story, not actual temporal intervals directly corresponding to events in cosmic

1307 **Howard Van Till.** The Fourth Day. P107.

1308 **Howard Van Till.** The Fourth Day. P118.

1309 **Howard Van Till.** The Fourth Day. P118.

1310 **Howard Van Till.** The Fourth Day. P91.

history.”¹³¹¹

Earlier in his treatment on Genesis as a prologue to the covenant he spells out his view of the framework hypothesis:

*“The seven-day chronology that we find in Genesis 1 has no connection with the actual chronology of the Creator's continuous dynamic action in the cosmos. The creation-week motif is a literary device, a framework in which a number of very important messages are held. The chronology of the narrative is not the chronology of creation but rather the packaging in which the message is wrapped. The particular acts depicted in the Story of the Creator are not the events of creative action reported with photographic realism but rather imaginative illustrations of the way in which God and the Creation are related.”*¹³¹²

Van Till asserts that Genesis 1 is “*the preamble and prologue*” to the covenant, and that as such it utilises the “*vehicle of primeval history and the packaging of a seven-day cycle of work and rest.*”¹³¹³ He can only suggest such an approach because of a pre-committent to science and its truths. The seven-day cycle that we find clearly in Genesis 1, is merely copied from ANE sources.¹³¹⁴ However if that be true, where did these ancient peoples get the idea of a seven-day pattern? The day length, a month, and the year duration are all astronomical, but the week duration has no association with the movements of the heavens.¹³¹⁵ The vehicle and packaging of these borrowed literary frameworks based on the week cycle must be removed to reveal the main message intended. Van Till then attempts to forestall objections to such a liberal approach by making a statement of faith. He writes:

*“Let no one say that identifying Genesis 1 as primeval history and the seven-day creation week motif as a literary framework reduces the importance or the impact of its contents. On the contrary, I firmly believe that an honest recognition of and respect for these canonical and literary qualities. Arising appropriately in the historical and cultural milieu of the ancient Hebrews, allows us to perceive the true message of Genesis 1 with greater force and clarity than ever before was possible.”*¹³¹⁶

What a claim! By denuding the text of all its historical content, and by assuming its derivation from

1311 **Howard Van Till.** The Fourth Day. P91.

1312 **Howard Van Till.** The Fourth Day. P84,85.

1313 **Howard Van Till.** The Fourth Day. P85.

1314 **Howard Van Till.** The Fourth Day. P25.

1315 Van Till's attempts at linking the week with the month are speculative and fraught with problems. **Howard Van Till.** The Fourth Day. P25.

1316 **Howard Van Till.** The Fourth Day. P85.

ANE sources (it is simply “*primeval history*”), all on the firm foundation that modern science comes first, Van Till reckons that what God has to say comes to us with more of an impact and is much clearer to boot! I believe that this is rather like the person who has a whole bunch of photographs and who cuts them up with a particular idea in mind and then pieces them together onto a board and in a frame they have devised and decorated themselves. (Perhaps akin to the cover of the Beatles' album St. Pepper's Lonely Hearts Club Band?) This is not what the believer should do with Scripture! If we read Genesis 1 as God intended it to be read (i.e. literally), not only is it simple to understand – God created all things in a week – but also it come with tremendous power as well – God spoke and all of creation came to be (what power!)

Science and Scripture are separate.

The problems discerned in Genesis 1 by those who favour this 'framework hypothesis' such as “*solar days before sol,*” and “*light before lights,*” cannot be reconciled with any literal view of Genesis.¹³¹⁷ He comments:

*“Genesis 1 gives us no clues to the solution to this riddle – and for good reason. The riddle presents to us a nonsensical question, a “non question.” The days of Genesis 1 are a literary device: they are story elements, not temporal specifications. Their relative lengths are a matter of no significance whatsoever. To waste time worrying about such matters is poor stewardship of our mental energies. Nonsense questions generate only nonsense answers.”*¹³¹⁸

Instead Van Till suggests that we ought to separate the realms of science and Scripture. In order to answer questions of our origins from a physical point of view, it is hopeless going to Genesis, instead we must go to creation itself:

“If we accept this responsibility and choose to investigate the properties, behaviour, and chronology of the Creation, we will have to turn to the Creation itself as a source of information, and to the natural sciences – employing both empirical observation and theoretical analysis – for our methodology. To find the answers to questions about the physical properties, the material behaviour, and the chronological development of stars, we must go not to ancient Palestine, but to Palomar. We must scan the skies with the aid of the modern observational instruments of an astronomical observatory. The spectacles of Scripture enable us to perceive the status, origin, governance, value, and purpose of stars – all matters of their relationship to the Creator. The telescopes of modern astronomy give us the opportunity to look into the properties, behaviour, and history of stars – all matters

1317 **Howard Van Till.** The Fourth Day. P90.

1318 **Howard Van Till.** The Fourth Day. P90.

of the qualities as things in themselves.”¹³¹⁹

Science deals exclusively with the material world, separate “*from any non-material influence.*”¹³²⁰
The Scriptures are only concerned with our redemption, or matters of faith and practice. And so Van Till comes to his distinctive position on the relationship between modern science and the Scriptures.

*“The view of the cosmos we get when we look through the lens of science is different from the view we get when we look through the spectacles of Scripture. There's no reason to deny that difference, and every reason to respect and appreciate it ... In my judgement, however, the two views differ not because they contradict one another but because each is incomplete: neither view by itself will give us a complete picture of the physical world.”*¹³²¹

According to Van Till, the Bible and modern science answer different categories of questions.¹³²²
each of these different avenues to truth are incomplete in themselves:

*“It is my contention that neither the scriptural nor the scientific view of the cosmos is complete in itself, despite the fact that each view contributes an essential perspective on the complete reality. Through the spectacles of scriptural exegesis, we Christians see the cosmos as Creation; we see where it stands in relationship to God as Creator, who is its Originator, Preserver, Governor, and Provider. Through the lens of scientific investigation, natural scientists are able to observe the internal affairs of the material world – its coherent properties, its lawful behaviour, and its authentic history. Both views are integral parts of what I call the “creationomic perspective,” the view of the cosmos that is gained when natural science is placed in the framework of the biblical doctrine of creation.”*¹³²³

Note here that Scripture provides a “*framework*” and not the foundation. This is significant, for a framework may be constraining but it is essentially a template from which a growing thing may develop. Van Till's foundations seem to be an amalgam of his view on the Christian faith and his trust in modern science, particularly astronomy and cosmology. Van Till's model of the relationship between modern science and Scripture may be summed up by the term “divorce.” There are a variety of complimentary views amongst those who write on science and religion, but Van Till seems insistent that the two categories must be held at bay from one another, and that neither should encroach on the terrain of the other.¹³²⁴ Here, for example is what says about asking questions

1319 **Howard Van Till.** The Fourth Day. P93.

1320 **Howard Van Till.** The Fourth Day. P104.

1321 **Howard Van Till.** The Fourth Day. P202,203.

1322 **Howard Van Till.** The Fourth Day. Pvii,viii.

1323 **Howard Van Till.** The Fourth Day. Pviii,ix.

1324 **Howard Van Till.** The Fourth Day. P93,105.

concerning the origin of the universe:

“We do not err by asking these questions – they arise from perfectly normal human curiosity – but we commit a colossal blunder if we bring them to Scripture for answers. In the light of the time and manner in which the Bible was written, the limited vocabulary and cosmological concepts available to the writers, and the principal functions and purposes for which the Scriptures were written, I am convinced that questions about cosmic chronology and the physical history of the universe prior to human history should never be addressed to the Bible.”¹³²⁵

So then, how do we seek a unified understanding of the world around us according to Van Till?

Here is what he concludes:

“In light of what we have considered thus far, I recommend the following as four particularly important principles: (1) we must recognize the diversity of questions that we can ask regarding the material world, and we must carefully categorize those questions; (2) we must recognize two principal sources for answers to those questions: the Bible and the Creation itself; (3) we must direct to each source only those questions that are appropriate to it; and (4) we must respect the integrity and credibility of the answers provided by each source to appropriate questions.”¹³²⁶

Van Till objects strenuously to the Biblical creationist position, and argues that an either/or view of the debate, between special creation and evolution (in all its forms), is disturbing.¹³²⁷ He therefore offers his position as a third or alternative way.¹³²⁸ The problem is that his treatment of both science and Scripture leaves an awful lot to be desired. Van Till calls his approach “*categorical complementarity*.”¹³²⁹

“The view through the spectacles of scriptural exegesis reveals information about the relationship of the cosmos to God, providing answers to questions in the categories of status, origin, governance, value, and purpose. The view through the lens of natural science, on the other hand, reveals information about the internal intelligibility of the cosmos, providing answers to questions in the categories of physical properties, behaviour and history. As long as these categorical distinctions are honoured, no contradictions will arise.”¹³³⁰

1325 **Howard Van Till.** The Fourth Day. P73,74.

1326 **Howard Van Till.** The Fourth Day. P194.

1327 **Howard Van Till.** The Fourth Day. P219.

1328 **Howard Van Till.** The Fourth Day. P206.

1329 **Howard Van Till.** The Fourth Day. P202f.

1330 **Howard Van Till.** The Fourth Day. P205.

A modern deism?

In Van Till's list of assumptions he makes the assertion that scientists ignores any non-material influences, (i.e. spiritual existence), and that the universe is essentially a gigantic machine.

“Perhaps the most general statement that we could make about the modern scientific study of the cosmos is that the natural sciences assume that the behaviour of matter is far more like the workings of an impersonal machine than like the actions of a wilful personal agent. It is this assumption or attitude that provides the fundamental contrast between the modern scientific age and the era of primitive animism. In our day, the scientific enterprise views the cosmos as an insentient machine that behaves according to rigorously set patterns.”¹³³¹

Such a view point reeks of deism. It cannot be squared at all with what we read in Scripture about God who is at one and the same time both transcendent (beyond), and immanent (involved down to its very roots) with respect to creation. In this connection it is pertinent to ask how Van Till views miracles. Unfortunately, having read his main work, I can find no direct treatment of the subject. There is no reference to the resurrection of Christ, no mention of the miracles that He performed, and no reference to the many other miracles we see in Scripture. This is rather curious. In discussing the cosmos in relation to Genesis 1 Van Till asks:

“How did God bring it into existence? What is the mode of God's creative activity? Poetic references to divine speech, while sufficient to establish the essential relationship of Creator and Creation, give us no clues as to the mechanism of divine origination, preservation, or governance. But we should not be disturbed by that omission. Surely the character of our relationship to the Creator is far more important than the particular mechanism by which he chose to establish and maintain that relationship. Perhaps we would be unable to comprehend the mechanism even if we were told about it.”¹³³²

What is truly startling about the statement that Van Till makes here, is that he does not even acknowledge the clear indication in Genesis 1 that creation came about through the means of God's word, His speaking. This idea is reinforced throughout Scripture but especially in the New Testament.¹³³³ Christ is the Agent of creation. One reason for Christ's works of miracle was to point us to His very nature as God the creator. So that just as God made light on day one in an instant of time, (as Psalm 33:6,9 teaches us), so too Christ healed the sick, raised the dead, walked on water, made water into wine and stilled the storm with a word all in a moment of time. With regard to

1331 **Howard Van Till.** The Fourth Day. P99,100.

1332 **Howard Van Till.** The Fourth Day. P50.

1333 John 1:1f; Colossians 1:16,17; Hebrews 1:1f etc.

Christ's walking on water and His stilling the storm it is clearly evident that the disciples began to recognise from these events that Jesus was indeed God. Thus immediately after the stilling of the storm the disciples ask the question: "*who can this be, that even the winds and the sea obey Him?*"¹³³⁴ Then following Peter's experience of walking on water with the Lord, the disciples exclaim in worship (a response only fitting to deity for Jews): "*Truly You are the Son of God.*"¹³³⁵ This correspondence between Christ's work of miracles of creation and the original, instantaneous, creation is a connection that cannot be missed. When talking of the new birth (another remarkable miracle) Paul points us back to the first creative act of God after the beginning:

For it is the God who commanded light to shine out of darkness, who has shone in our hearts to *give* the light of the knowledge of the glory of God in the face of Jesus Christ.¹³³⁶

The connections between the first creation and its miraculous beginning at the word of God, and the coming of the Messiah, who is the Word of God should not be missed.

A sorry end.

We must draw our treatment of Van Till's assessment of Scripture and modern science to a close with a warning. In the following I have drawn information from a number of websites dealing with the controversy over Van Till's journey.¹³³⁷ Van Till claimed to be a Christian who was greatly disturbed by the war between the two sides of the creation-evolution debate. Upon publication of *The Fourth Day*, in 1986 Calvin College, where he held a professorship, called him to account on a charge of heresy and deviating from the College's statement of faith. He was allowed to continue teaching up until 1999 but was subject to scrupulous and frequent reviews of his eligibility to teach. During these years he began to drift from his Calvinist origins, and in 2006 he finally gave up all semblance of Christian belief. In 2006 Van Till gave an address at the West Michigan Freethought Association, whose stated aim is to "*foster a secular society based on science, reason, freedom of inquiry, and humanist values.*"¹³³⁸ The title of the lecture was: "*From Calvinism to Freethought,*" and he concluded this with the following assessment of his journey having departed from Calvin College:

1334 Matthew 8:27. See also Mark 4:41; Luke 8:25.

1335 Matthew 14:33.

1336 2Corinthians 4:6.

1337 **Charles Honey.** Scientist still explores 'mystery' of God. The Grand Rapids Press. Updated Apr 05, 2019; Posted Feb 02, 2008. https://www.mlive.com/grpress/2008/02/scientist_still_explores_myste.html. **Howard J. Van Till** . https://www.wikiwand.com/en/Howard_J._Van_Till. **Wes Bredenhof.** Howard Van Till's Lightbulb Moment. <https://yinkahdinay.wordpress.com/2012/12/25/howard-van-tills-lightbulb-moment/>

1338 <https://cfimichigan.org/about/>.

“My goal is to craft my new Portrait of Reality as consciously and intentionally as I am able. In order to do so I must often admit that I don’t “know” nearly as much as I once did. The kind of certainty I once professed — authority-derived and institutionally-enforced — is now gone. In its place I find deep satisfaction in “giving it my best shot” each day and taking responsibility for bringing my professed Portrait of Reality in line with my operative Portrait of Reality. The journey of life is good.”¹³³⁹

Van Till abandoned his Calvinist heritage and moved to worship with his wife Betty in an independent and theologically liberal church, (Christ Community Church). In a Theology and Science article published in 2016, he expressed his new view of reality as, *“a comprehensive but non-reductive naturalism.”*

Disturbingly, it would appear that Van Till has come right away from any Christian content completely. The following information comes from a single source, a blog by an individual and so has not been verified by any other corroborative witnesses.¹³⁴⁰ In this blog the author claims that Van Till now avoids using the term *“God,”* preferring terms like: *“The Sacred,”* and, *“The Sacred Universal More than Matter Alone.”* The reason for sidestepping the name *“God”* is *“because of its tight associations with supernaturalism.”* Van Till is reported to have said:

“If 'God' represents some external (other worldly) agent whose character and relationship to the world is of the sort that is presumed by traditional supernaturalism, then 'God' is culpable for horrendous failures and caprice. ...That's why I have abandoned supernaturalism's portrait of 'God' and am on a search to find a better portrait of what 'God' represents. I seek a 'God' who is intimately resident in all that transpires 'naturally.’”¹³⁴¹

The trajectory from Calvinist Christian to liberal pantheist is staggering.

1339 <https://yinkahdinay.wordpress.com/2012/12/25/howard-van-tills-lightbulb-moment/>

1340 <http://nycphantom.com/journal/?p=2063>.

1341 <http://nycphantom.com/journal/?p=2063>.

Chapter 18: C. John Collins.

Its just an analogy (but with a gap)!

An analogical way of reading Genesis has been promoted by C. John Collins,¹³⁴² An analogy is a comparison between two dissimilar things based on resemblance of a particular feature. For example, I might say that my house is so cold that it is like a refrigerator. The resemblance between my house and the refrigerator lies only in the temperature! Collins offers a brief history of how the creation week of Genesis 1 has been understood in times past:

*“It is probably safe to say that, prior to the rise of the new geology in the eighteenth century, most Bible readers simply understood the creation period to be one ordinary week and the genealogies to be complete, thus the creation took place somewhere in the vicinity of 4000 BC. Many of the pioneers of the new geology were pious church members and so they were convinced that neither the Bible nor the evidence of nature could lie. Between 1800 and 1850, exegetes developed most of the major exegetical moves and options available today.”*¹³⁴³

It is very important to make clear that Collins' opening sentence would, in fact, hold good for all time up until 1800 AD, and that it is only in the last 200 years or so that people have investigated alternative views.¹³⁴⁴ The brief details Collins offer are largely correct, but there is one glaring omission. Not all the “pioneers” of geology followed Hutton and Lyell, even though some did, (e.g. Thomas Chalmers). Many were committed to a literal understanding of the Genesis text as Terry Mortenson has detailed in his PhD work and a subsequent book.¹³⁴⁵ What has happened in these last two hundred years to create such havoc and mayhem in Biblical interpretation?

1342 <https://biologos.org/author/c-john-collins>

1343 **C. John Collins.** Genesis 1-4. A Linguistic, Literary, and Theological Commentary. 2000. P & R Publishing. Phillipsburg NJ. P123.

1344 I am well aware that many others have experimented with all sorts of ideas in times past, such as the early Greek thinkers from Thales of Miletus and so on. My point is that Bible readers from the earliest days until about 1800 have universally held to a recent creation and a literal creation week. Even Augustine chided those who argued for a creation older than 6,000 years, (see: <http://www.ccel.org/ccel/schaff/npnf102.iv.XII.10.html>).

1345 **T. J. Mortensen.** British Scriptural Geologists in the first half of the nineteenth century. PhD Thesis. September 1996. Coventry University & Wycliffe Hall, Oxford. **T. J. Mortenson.** The Great Turning Point: The Church's Catastrophic Mistake on Geology—Before Darwin. 2004. Green Forest, AR: Master Books. Online at: <https://curve.coventry.ac.uk/open/file/c2ca3d9b-4617-006a-3cba-cba9e86062f0/1/Mortenson1996.pdf>

Analogy because of science.

Collins particular view is that the days are analogical and not literal. How does he come to this viewpoint? First we need to establish that Collins is clear about his commitment to modern science. He has stated unequivocally that:

*“The evolutionary history of mankind tells us that death and struggle have been part of existence on earth from the earliest moments.”*¹³⁴⁶

Further he holds to the scientific picture presented by modern astronomers and cosmologists:

*“I, as a modern who accepts contemporary cosmology as part of my world picture, can share a world view with some ancient whose world picture involved a stationary earth with an orbiting sun.”*¹³⁴⁷

And yet he is also very keen to hold to some form of belief in an original Adam and Eve, and an original fall of man, although his viewpoint is not quite what it may appear.¹³⁴⁸ For example, whilst he believes that “humankind is actually one family, with one set of ancestors for us all,” and that “God acted specially (“supernaturally”) to form our first parents,”¹³⁴⁹ he also believes that the “first ancestors, at the headwaters of the human race, brought sin and dysfunction into the world of human life” and yet he holds that physical death existed prior to the fall of mankind.¹³⁵⁰

Genesis – exalted prose!

With regard to the Genesis text, Collins claims that it is “exalted prose narrative” and therefore cannot be taken literally.¹³⁵¹ He suggests that:

*“... by calling it exalted, we are recognising that when we come to examine the author's truth claims we must not impose a “literalistic” hermeneutic on the text.”*¹³⁵²

1346 The Case for Adam and Eve: Our Conversation with **C. John Collins** April 24th 2012. <http://byfaithonline.com/the-case-for-adam-and-eve-our-conversation-with-c-john-collins/>

1347 **C. John Collins**. Genesis 1-4. P262.

1348 **Jim Stump**. Interpreting Adam: An Interview with **Jack Collins**. Part 1. April 14, 2014. By Jim Stump on Faith and Science Seeking Understanding. Online at: <https://biologos.org/blogs/jim-stump-faith-and-science-seeking-understanding/interpreting-adam-an-interview-with-jack-collins-part-1>.

1349 **Jim Stump**. Interpreting Adam: An Interview with **Jack Collins**. Part 2. April 15, 2014. By Jim Stump on Faith and Science Seeking Understanding. Online at: <https://biologos.org/blogs/jim-stump-faith-and-science-seeking-understanding/interpreting-adam-an-interview-with-jack-collins-part-2>

1350 **C. John Collins**. Genesis 1-4. P161,165.

1351 **C. John Collins**. Genesis 1-4. P44,83.

1352 **C. John Collins**. Genesis 1-4. P44.

To do our exegesis we must read the text as “*the original audience would have done,*” and we must “*reconstruct their literary competence,*” and it is this task which “*alone is our criterion for finding the sense of Scripture.*”¹³⁵³ In short, we cannot understand the Genesis text unless we first understand it as the ancients to whom it was written understood it. To do this we have to ascertain exactly how the ancients would have comprehended the text by analysing their culture and so on. Collins suggests that the cultural milieu within which Genesis was written “*was ancient Israel, before the Hellenistic period.*”¹³⁵⁴ In other words sometime before 323 BC when Alexander the Great died. Collins believes that the ANE creation stories:

*“... provide the ideological background against which the biblical narrative speaks; they may even provide some literary conventions and motifs.”*¹³⁵⁵

It would seem that Collins holds to the idea that the Genesis creation story was written *after* the Mesopotamian versions, but that the writer of Genesis sought to correct these in detail:

*“... Genesis is offering the true story of mankind's past. Even if the Mesopotamian tradition got the broad structure “right.” Genesis corrects many of the details; but even more, it provides the true interpretation of these events.”*¹³⁵⁶

However rather than speaking of the Genesis story as a polemic against the Mesopotamian versions, Collins wants us to understand it as an alternative construct with a specific purpose:

*“Rather than call it a polemic, then, we may take the Genesis narrative as an alternative story to those in Mesopotamian – a story whose purpose is to shape Israel's view of God, the world, and mankind, and their place in it all.”*¹³⁵⁷

Genesis – exegesis – and God's days.

Collins starts his exegesis on the Genesis text by (surprisingly) contending that the opening verses do not actually fit within the creation week:

“The first verse as I see it narrates the initial creation event; then verse 2 describes the conditions of the earth just before the creation week gets under way. These two verses stand outside the six days of God's work-week, and – just speaking grammatically – say nothing about the length of time between the initial event of 1:1

1353 C. John Collins. Genesis 1-4. P5,125.

1354 C. John Collins. Genesis 1-4. P5.

1355 C. John Collins. Genesis 1-4. P238.

1356 C. John Collins. Genesis 1-4. P243.

1357 C. John Collins. Genesis 1-4. P242.

and the first day of 1:3.”¹³⁵⁸

In fact he suggests that because God waited for an unspecified time between verses 1 and 2, we can have no idea from Scripture how old the universe really is:

*“If we had only Genesis 1:1-2:3 we could leave the discussion at that: the creation account makes no claim about how old the universe is or about how old the earth itself is, since the author does not specify how long God waited between verses 1 and 2.”*¹³⁵⁹

Speaking on the days of Genesis, Collins want us to understand these not as ordinary days, but as “*God's workdays.*”¹³⁶⁰ By this understanding Collins can then make the startling assertion that the opening chapter of Genesis:

*“... makes no claim about how long the creation period was, because it is non-committal about how long the days were.”*¹³⁶¹

What does he mean by claiming that the days were “*God's workdays*”? Well in an attempt to explain this, Collins makes the following statement in connection with the refrain “*and there was evening and morning ...*” :

*“We have also discussed the refrain; its effect is to present God as a workman going through his work-week taking his daily rest (the night between the evening and the morning) and enjoying his Sabbath “rest.” To speak this way is to speak analogically about God's activity; that is, we understand what he did by analogy with what we do; and in turn, that analogy provides guidance for man in the proper way to carry out his own work and rest.”*¹³⁶²

Thus Collins argues for an analogical understanding of the text:

*“The view that I shall advocate can be called the analogical day position: namely, the days are God's workdays, their length is neither specified nor important and not everything in the account needs to be taken as historically sequential.”*¹³⁶³

1358 C. John Collins. Genesis 1-4. P78.

1359 C. John Collins. Genesis 1-4. P126.

1360 C. John Collins. Genesis 1-4. P124,161.

1361 C. John Collins. Genesis 1-4. P126.

1362 C. John Collins. Genesis 1-4. P125.

1363 C. John Collins. Genesis 1-4. P124.

The seventh day too is not a real earth day of 24 hour duration.¹³⁶⁴ Collins argues that the author of the text is someone who knew farming and lived in an agrarian culture, so that the writer presents the origins of all things within such a setting and has no interest in any absolute time frame.¹³⁶⁵

In sum.

To sum up Collins viewpoint we note the following:

1. Collins has a firm belief in evolution and cosmology.
2. Collins believes that the Genesis text must be read as an alternative to the Mesopotamian accounts, and was constructed within the ancient cultures of that time to correct the details of the broadly “right” Mesopotamian versions.
3. Collins believes that in order to understand the Genesis creation story we must read it as the original audience would have done.
4. Collins believes that the first two verses of Genesis stand outside the creation week and tell us nothing about the length of time that existed between initial creation, and the beginning of creation week.
5. Collins believes that the days of creation week are not literal but analogical, because they are “God's workdays” and not man's.

Objections.

Several objections can be made against Collins' viewpoint. First of all he does not come to the Genesis text without some prior beliefs. Of course we all do this, but we ought to be ready to allow the text to correct us. Collins favours modern science, but really he ought to favour God's revelation. There is more than enough detail within Scripture which warns us against the ideas and statements made by man. God truly made man upright but (sadly) man keeps on seeking strange and varied schemes.¹³⁶⁶ The whole concept of evolution is anathema to the Bible and its revelation, particularly in its demand that death is a natural event, so why would any man allow these thoughts to govern their exegesis?¹³⁶⁷ There are several reasons. It could simply be a matter of prestige and honour. Some who have expended valuable time in science and have earned their degrees may not be ready easily to jettison the humanistic bent of this enterprise. It could be fear. Those who do not want to be considered foolish will accept the modern views espoused by science to save face and

1364 C. John Collins. Genesis 1-4. P161.

1365 C. John Collins. Genesis 1-4. P126,127.

1366 Ecclesiastes 7:29.

1367 The Scriptures teach clearly that death is an enemy which has been conquered by Christ. See: 1Corinthians 15:26,55,56.

reputation. It may be because having been so indoctrinated by modern science, it becomes very difficult, almost impossible, to see things outside of the modern scientific paradigm. This is often evident amongst believers who betray their evolutionary education. For example, when we look at ancient man the temptation is always to consider these folk as far less intelligent than modern man. They were not capable of the intellectual heights achieved by modern man and they did not have the incredible technology we now possess. This is false reasoning.

A second objection concerns Collins' viewpoint of the nature and date of the Genesis text. Collins accepts the *Wellhausen Documentary Hypothesis* which suggests that the text was written by a variety of different 'authors' each with specific (and different) theological preferences.¹³⁶⁸ The whole was not stitched together until just before the Hellenistic period and so comes well after the original Mesopotamian creation stories. However the Scriptures themselves teach us that God revealed His will and ways from the very beginning.¹³⁶⁹ The text of Genesis itself indicates that it is historical narrative, and Collins' "*exalted prose narrative*" view which seeks to hold onto the narrative whilst rejecting the historical and literal is forced and deceitful.¹³⁷⁰

A third objection we must bring to Collins' viewpoint concerns his hermeneutical principles. It is disheartening to find that the text is nearly always credited to human authors without any recourse or even acceptance that these words are the very words of God. Following on from this we despair of the reliance on secular ways of dissecting Biblical texts. The Scriptures themselves teach us very clearly how we should approach the Bible, and we do not need any other source as a help.¹³⁷¹ The insistence that we somehow transport ourselves into an ancient person in order that we can then understand the text is hopeless. Who can transform themselves into an ancient being able to hear as the ancients did? Which ancient culture should we select? Is it the time of the Exodus, or the exile or later? Just to list these different options shows us the impossibility of doing such a thing. Instead we hear our very Saviour, (the Lord God Himself), teach the Sadducees that what they read of in the book of Exodus was that which God was actively speaking to them as they read!¹³⁷²

A fourth objection must be raised against the idea that the days are analogical, that is, that they are "*God's workdays*." We ask immediately, what are we as human beings meant to understand by the idea of "*God's workdays*"? God is not limited to time. He needs no time to do any of His work! If God intended to give us a story of origins and used the idea of a working week, why can't

1368 C. John Collins. Genesis 1-4. P221

1369 Isaiah 48:16 is just one example in the section from Isaiah 40 to 48, wherein many others could be selected.

1370 C. John Collins. Genesis 1-4. P44,83.

1371 See chapter 5.

1372 Matthew 22:31.

we understand this in a literal sense? What purpose would God intend by talking about His workdays if we have no understanding of them? From Collins' own words we assume that the only reason to reject the literal is the views of modern science, for before 1800 everyone held to a literal view. It seems plainly obvious to me that the Lord did indeed work over a period of six days in order to teach us how we should work.¹³⁷³ It makes absolutely no sense for God to speak of *His* workdays, because He does not have workdays as He is not limited by time, and yet God did work over six days and these from all appearances seem to be ordinary days. If we surmise that a human author imagined God working over six God-style workdays, and this forms the basis and rationale for the human working week, that would be all well and good, except for one small point. We have no indication that the text was written by a man (or woman) who was imagining such things. What we do have is God's revelation.

A fifth objection to Collins' viewpoint concerns his exegesis of the first few verses of Genesis 1. To suggest a massive time gap between the first two verses and the rest of the chapter is wholly arbitrary. The *only* time references in the text are the word “*beginning*” of Genesis 1:1 and the six time repeated refrain “*the evening and the morning, ... day ...*” A large time gap is suggested but there is no evidence of its presence! This is probably the worst argument from silence ever to be made.

A sixth objection concerns Collins' treatment of the main time reference point he refers to as a “refrain.” How anyone can state that there is no clear definition of the time indicated, by stating that the author was “*non-committal about how long the days were,*” is quite beyond me!¹³⁷⁴ Suggesting an analogical meaning is mere subterfuge and deceit. All through Scripture we understand that the word day linked to a number always means a literal day, so why not here in Genesis 1, especially as we are also given the descriptive phrase “*there was evening and morning*”!¹³⁷⁵

1373 Exodus 20:8f.

1374 C. John Collins. Genesis 1-4. P126.

1375 Examples taken only from the book of Exodus. “First day” Exodus 12:15; “second day” Exodus 2:13; “third day” Exodus 19:11; “sixth day” Exodus 16:5; “seventh day” Exodus 12:15; “eighth day” Exodus 22:30.

Chapter 19: Vern Poythress.

More on analogy.

Many other views of Genesis and of the relation between science and Scripture have been proffered. Perhaps by far the most popular today take Genesis in some form of poetic, schematic, or literary way in order to sidestep problems with science.¹³⁷⁶ Vern Poythress is a case in point and I want to examine his book *Reclaiming Science* to show several features that are at fault with modern evangelical thinking. Poythress begins in his discussion of creation by recommending four “evangelical” writers who have produced commentaries. Amongst these is one by C. John Collins and another by Derek Kidner neither of whom follow an historical view of creation.¹³⁷⁷ This is not a good omen. Like many scholars Poythress exhibits this constant tendency to affirm fellow evangelical colleagues, and whilst an irenic spirit is a godsend, we must also be as wise as serpents.¹³⁷⁸ The literature on Genesis is now so extensive with the vast majority following alternative views that it must be well nigh impossible to do justice to them all if you want to keep your academic standing.

Reclaiming Science – some starting assumptions.

Poythress's unusual angle in his work is that scientists, even if they claim to be atheists, are in fact *believers* in God. Not, of course, believers in any overt or obvious way, but merely because they operate and live in God's world and therefore cannot help but take “truth” from the very hand of God. However his claim is made on the basis of prior assumption concerning the nature of truth. Poythress's intentions are good. He wants to reclaim science for the Christian faith. However his approach is flawed, and flawed in a way which is characteristic of much modern thinking amongst evangelical Bible-believing people.

First we need to note Poythress's basic assumptions on how God reveals truth to us.

1376 Note the NIV Bible sets Genesis 1 in indented text indicating the translators' belief that it is poetic in genre.

1377 **Vern S. Poythress**, *Redeeming Science: A God-centred Approach*. 2006. Wheaton ILL: Crossway Books. P69. The other two writers are: Gordon Wenham and Victor P. Hamilton whose works I have not read. Gordon Wenham is, however, a contributor to the BioLogos website dedicated to theistic evolution (<https://biologos.org/people/Gordon-J-Wenham>). He argues for a schematic rather than literal view of Genesis 1 according to his commentary on Genesis 1-15. [Gordon J. Wenham. Genesis 1-15. 1987. Word Books. P39,40]. See also: <https://answersingenesis.org/days-of-creation/evangelical-commentaries-on-the-days-of-creation-in-genesis-one/>

1378 Matthew 10:16.

Poythress doesn't really like the word "revelation" because it is too wide in his opinion, so he talks more about how God *speaks*. He looks at Psalm 19 and suggests that the laws governing this world, the scientific laws, must be considered to be "*the word of God.*"¹³⁷⁹ For Poythress there are two sources of truth, the Bible and science.¹³⁸⁰ Although he never mentions it, he seems to be advocating the old "Two Book" idea of revelation. This idea has been around since at least the sixteenth century, and has proponents in ancient times. God has spoken through the Bible and in creation. This, of course, is a clear inference from Psalm 19 where David talks first about God's creation, which is represented as the voice of God going out to all places on earth so that there is no language or speech where this word through creation does not reach.¹³⁸¹ In the next part of the Psalm David speaks of the Bible.¹³⁸² Here there is a step up in status. Whilst the heaven declares the glory of God so that Paul can argue in Romans 1 that people are without excuse because of creation, the Bible is characterised by words such as "*perfect,*" "*sure,*" "*right,*" "*pure,*" "*clean,*" and "*true.*" These thoughts lead naturally to the idea that general revelation (God's word in and through creation) must be subordinated to special revelation (God's word the Bible), since the latter is clearer than the former.¹³⁸³

From the seventeenth century and the scientific revolution it became fashionable to claim that reading the "book of nature" (general revelation) was far easier than reading Scripture. This was in part due to the fact that there was much debate and confusion concerning how Scripture was to be applied during those times. It was also due to the fact that "science" was in its earliest stages so that *simple* observations of phenomena could be explained in *simple* terms, and anyone with the time to do so could check what was being *read* in this way from the world. However a moments reflection will show that Scripture is always easier to *read* compared to creation. First we must recognise that Scripture was *written* for man and his understanding. God has taken immense pains to reveal all that we need to know so that we can be made right and restored. There are difficult things in Scripture, of course, but most of what is found in the Bible is straightforward and readily discerned. In contrast without help and some guidance how do we *read* what we find in creation? Take for example the record of rock formations. Do these "speak" to us? Of course not! In order to read the record of the rocks we have to come to them with some form of understanding. We have to apply our thoughts and views to what we observe. Creation speaks in a low level way. According to

1379 Vern S. Poythress, Redeeming Science. P25.

1380 Vern S. Poythress, Redeeming Science. P33.

1381 Psalm 19:1-6.

1382 Psalm 19:7-10. I am well aware of the difference between the terms "Bible" "Scripture" and other words for part of the written revelation but if we accept that each represents what God has revealed in written form infallibly and inerrantly, then all may be effectively be referred to as the Bible.

1383 Westminster Confession of Faith. Chapter 1: Of the Holy Scripture. Point 1.

Paul in Romans 1, creation speaks to us of God's great attributes, his eternal nature and greatness and so on, but their voice, whilst plain and available to all, nevertheless is sorely limited.

A second major assumption Poythress makes is that we must come to these two sources of truth with the same essential attitude. We must “*endeavour to understand*” both what God says in the Bible and what he says in creation.¹³⁸⁴ In each case as we come, our understanding is both partial and subject to correction. Where there is a vital difference between the two sources we must be ready to reconsider our understanding of both:

*“In the case of apparent discrepancies between the Bible and science, we must therefore be ready to re-examine both our thinking about the Bible and our thinking about science.”*¹³⁸⁵

Now on the surface all of this sounds good, humble, and just what any Christian may lay claim to, but there is a serious problem here. I think Poythress has forgotten something very important. Now I do not want to be misunderstood here because we are all sinners, we all fail and make mistakes, and we all only know things partially. However the Christian has a serious advantage over the unbeliever. We must be very careful of not vaunting this truth, this position of superiority, and we must be careful never to display spiritual pride, but the fact of the matter remains that the Christian holds all of the trump cards! Why so? Well the thing is that the Bible is from God's very mouth and therefore cannot be trumped. God wanted us to know things, including where we are from, what our nature is like, and where we are going. The Psalmist wrote that he knew not only more than his teachers, but more than the ancients.¹³⁸⁶ Paul wrote that in the Lord can be found all the treasures of wisdom and knowledge, that we have the mind of Christ, and that all the world's philosophy and knowledge is mere rubbish.¹³⁸⁷ The way in which we view general revelation and its relation to special revelation is vital.

Going further we must remember that the Christian has many privileges that an unbeliever knows absolutely nothing of. For a start, think of how the Lord Jesus spoke to the crowds, and contrast this with how he spoke to the twelve. To the multitudes he spoke in parables, in obscurity! To the twelve he expounds and explains the parables so that they would understand things.¹³⁸⁸ However such knowledge requires not just proximity to the word of God (either Christ in the case of the disciples, or the Bible in our day), it requires access to God. The Lord Jesus pointed out to

1384 Vern S. Poythress, *Redeeming Science*. P42.

1385 Vern S. Poythress, *Redeeming Science*. P43.

1386 Psalm 119:99.100.

1387 Colossians 2:8,18; Philippians 3:8.

1388 Matthew 13:34.

Peter when he made his confession of who Christ really was, that this was revealed to him by the Father.¹³⁸⁹ This brings us to another vital point. The believer is born again of the Spirit of God and has the truth, the very word of God grafted within.¹³⁹⁰ Thus we have an access to knowledge which the ordinary unbeliever does not. The truth is plain and observable to all through the Scriptures, but unbelievers do not “see” it. They need to be turned around in order that in seeing what is plain and obvious they may truly comprehend it.

Understanding Scripture and Genesis.

When it comes to interpretation of Scripture Poythress has taken a very modern line of reasoning. This is demonstrated by his insistence that we must look at Scripture and creation for ourselves and we must recognise that we may be wrong. It would appear that Poythress is advocating that we stand as arbiters of truth. I am not sure that he is definitely claiming this, but his writing leads to this way of thinking. We come to Scripture and creation and we seek to understand both as though we have the means to do so as impartial judges. This is not the way the Bible tells us how we ought to approach things. Of course we must examine our hearts and hold ourselves to account for what we think, the only thing that acts as judge is the word of God (the Bible). In other words we come to Scripture in a very different way compared to how we approach creation. We must sit under the word of God as authority. God has spoken and we must adjust our thinking according to His word. We then approach creation having come under the authority of God's word. Poythress (and many writers we are considering in this work) have this false (academic) view that we as individuals are duty bound to view things critically and circumspectly so that we can make an “informed” assessment.

We must also recognise that the Christian has the Holy Spirit within, and it is this fact that is missing in Poythress's treatment. What do I mean? I mean that because we have been translated from the kingdom of darkness into the kingdom of the Son of his love, we are not neutrals standing over the two making up our minds in some independent manner.¹³⁹¹ No! The Holy Spirit will lead his people into all truth.¹³⁹² On the other hand given our position in God's kingdom, we must also note that the Bible teaches clearly that we should reject the world's philosophy and versions of truth.¹³⁹³

When it comes to understanding Genesis, Poythress again takes a very modern view.

1389 Matthew 16:17.

1390 James 1:18,21.

1391 Colossians 1:13.

1392 John 16:13.

1393 Colossians 2:8,18; 3:1,2; 1John 2:15-17.

Genesis was written according to Poythress in an ANE background.¹³⁹⁴ The early chapters of Genesis do not deal with modern questions relating to science or history.¹³⁹⁵ Two extreme views of Genesis 1-3 must be rejected. The first holds that it is merely a “*hopelessly primitive*” account, whilst the other takes Genesis 1-3 as “*a scientific description of events.*”¹³⁹⁶ Thus to understand Genesis 1-3 we must take note that it was written for an ancient people whose outlook on life was not the same as ours. Considering Genesis 6-9, Poythress concludes that it does not say clearly that the flood covered the entire globe because the ancient mind could not think of the world in terms of a globe or sphere.¹³⁹⁷

These are all very modern *critical* ways of viewing the text. It is almost a sacrosanct dictum that to understand what the Bible says we must first understand what it meant to the original hearers.¹³⁹⁸ However a moment's reflection will show this idea to be at fault. I am not saying we can ignore the culture surrounding what is written, but the modern obsession with seeking first to locate the meaning that would be conveyed to the original readers before any understanding could be had is patent nonsense. In the first place how can we be sure of the setting for the text we are considering? There may be indications of the setting, the culture and the influences on the people in the text itself. This is all important to bear in mind. What Poythress and many modern critics are doing however, is to make the claim that the ANE is the cultural location for Genesis 1-3. Having done this they then take the cultural setting as the reason, or at least the basis and purpose for the text that has been written. Thus in the case of Genesis 1-3, it was written, according to these ideas as expressed by Poythress, to counter the ANE stories of creation. Genesis 1-3 is thus a polemical text.¹³⁹⁹ It was written to go against the gross inadequacies of polytheistic idolatry. Now this view is quite wrong. I am not saying that Genesis 1-3 does not serve a good apologetic cause, for it definitely does do this. What I am saying is that the motivation for its being written cannot be derived from the cultural setting assigned to it. By suggesting that Genesis 1-3 was written to argue against the *earlier* Babylonian and Egyptian creation accounts, Poythress and others have fallen into a subtle trap. I contend rather that Genesis 1-3 is the original and much earlier account, and that the Babylonian and Egyptian accounts are in fact poor derivatives, formed through an admixture of

1394 Vern S. Poythress, Redeeming Science. P72,91,92,128,162. The reader is reminded that “ANE” stands for “ancient Near East.”

1395 Vern S. Poythress, Redeeming Science. P73,98,225.

1396 Vern S. Poythress, Redeeming Science. P87,88.

1397 Vern S. Poythress, Redeeming Science. P127-129.

1398 See, for example, I. Howard Marshall. How Do We Interpret the Bible Today? *Themelios* 5.2 (January 1980): 4-12; Robert H. Stein. Is our reading the Bible the same as the original audience's hearing it? A case study in the gospel of Mark. *JETS* 46/1 (March 2003). PP63–78.

1399 It is very interesting to note how often the opposite claim is made by many scholars! This dichotomy indicates the vacuous nature of much academic debate. If you can argue that the Genesis account is polemic according to a reading of ANE texts *and* that it is definitely not polemic according to the ANE sources, what value is such debate?

legendary tales passed through the ages, and perhaps in objection to the original Genesis account. If we believe that Genesis 1-3 was written *after* the Babylonian and Egyptian accounts we lose much force. If this were so then the Bible's account of creation is thence a latecomer, desperately catching up with the world's pioneering charge! What nonsense! As if the Lord God needs to follow suit! God is clear in the book of Isaiah that he did not reveal as a latecomer. In fact the Lord charges the idolatrous world with being hopelessly failing and desperately lacking in comparison to His openness and eagerness to make truth known.¹⁴⁰⁰

Furthermore, such an obsession with locating the culture of the writing means that we become beholden to the extra-Biblical data. If we must learn all about the ANE and its world view before we can come to Genesis 1-3 to understand what it says, then our understanding rests more on the extra-Biblical information than on the text. In short, an interpretive screen or barrier that stands between us and the text has been constructed. Understanding the text requires an understanding of the cultural setting first. This is why Poythress can dismiss any “*scientific*” content to Genesis 1-3 because, of course, the ANE cultures knew nothing of modern science so how can they have addressed such things? Now I think that there is a serious mistake in this way of interpreting Scripture. What do we need to interpret the Bible? We need several things (all of which the Bible talks about) but we do not need extra-Biblical information. If we did need such information then the Bible loses its authority. It fails to be the *standard* by which everything else must be measured. This is because to understand the Bible you need first the cultural setting, the extra-Biblical data, the interpretive screen which is all provided by the world of academia. These become the standard, or at least hand-maidens, without which the Bible is lost! In sharp contrast, I would want to emphasise the divine authorship of Scripture. I am not neglecting or denying the human component, but the Authorship of Scripture is most definitely the Lord God. The Scriptures teach that what God has revealed and his salvation are freely and readily available for all generations.¹⁴⁰¹ When the Lord God superintended Genesis 1-3 he had in mind not only the original hearers but also us in this day of science as well as all those in between! This does not excuse careful handling of the text, an understanding of the culture as revealed in Scripture, and connections with other Scripture. What I am advocating is that the text does not need to go through some decoding mechanism which modern critical scholars have devised.

1400 See: Isaiah 41:21-24; 43:9; 45:21. Compare: Isaiah 40:21; 41:4; 46:10; 48:3,16; 64:4.

1401 See, for example: Psalm 68:20; 100:5; 117:2.

The consequences of an ANE perspective.

Poythress (and many other well meaning writers) go on to conclude that Genesis 1-3, as a consequence of being written against the ANE background, does not speak about either science or history, because the ANE reader would not understand such themes. There are two major things wrong with this line of reasoning. The first is to misunderstand the nature of man. The second is to give an undue elevated status to modern thought. Poythress misunderstands the nature of man because it is assumed that the ANE cultures had no category of truth. Further, he misunderstands man because he seems to suggest that former peoples were not as sophisticated as modern man is today. In our arrogance we assert that we have our science and history which is far above the reasoning powers of ancient man. But what do we mean by “science” and “history”? Well, in short, we are talking about *truth* here. Observations of objects and events and some connections linking them in time and space is all that science and history are concerned with. Somehow we have given to our modern versions of “science” and “history” a status and designation far above what they really deserve. The Scriptures are the truth. As such they must, *of necessity*, be correct whatever they speak on, whatever they touch, whether it be science, history, geography or whatever. In modern times we have set apart certain things such as “science” as though only modern man could attain to such knowledge. It seems to be a new form of gnostic heresy!

When it comes to specific teaching on the major themes in Genesis, Poythress does his utmost to appease all people. For example, taking the view that Genesis was written against the ANE as a background, he concludes that the flood may have been global but does not need to have been. The text, he tells us, gives us no clear view because the ancient mind had no idea that the world was a globe or a sphere hanging in space.¹⁴⁰² To discover whether it was local or universal we need to go to the extra-Biblical data.¹⁴⁰³ This smacks of the type of reasoning to be found in the early part of Genesis 3. Any reading of the flood account must conclude that the intention of the narrative was to show the end of the entire world that then was, as Peter takes it.¹⁴⁰⁴ Poythress can only say that the flood may have been local *if* his assumption that ancient man had no idea that the world was globe be true. But how do we know what ancient man thought? We have no idea!

Poythress does not speak much about the fall, but what he does say is based not on an interpretation of Genesis, but a consideration of Psalm 104. From his reading of Psalm 104 Poythress concludes that it “*does not ... suggest that lions' carnivorous eating habits are a “bad” thing,*” and that consequently “*we do not have any firm basis for saying that animal death started*

1402 Vern S. Poythress, Redeeming Science. P129.

1403 Vern S. Poythress, Redeeming Science. P129.

1404 2Peter 3:6.

only after the fall of man.”¹⁴⁰⁵ Here he displays a misunderstanding of the contrast between God's “good” creation in Genesis 1 compared to the world we inhabit ravaged by sin, predation and death.

With regard to Genesis 1 and his view of creation, Poythress is very clear after detailing all the other possible views, that he favours the analogical day view.¹⁴⁰⁶ Poythress suggests that the six days of Genesis 1 are effectively God's working days which are analogous *but not identical* to our working days. He uses the apparent identity in Exodus 20:8-11 to develop this idea. For Poythress there is no evidence in Genesis 1 of what he refers to as “clock-time” measurement for time.¹⁴⁰⁷ The phrase “*evening and morning*” does not count as a “clock-time” measurement but is merely a reference to events. Such reasoning is contorted to say the very least! As a variant of the framework hypothesis, and very much like its cousin, Poythress's analogical day theory stretches credulity. It is surely a natural (and expected) response to take the phrase “*evening and morning*” to refer to what we may call “clock-time” and meaning a literal 24 hour period. The description of days in Genesis 1 are clear. The same types of designation (i.e. reference to “*evening and morning*” or a numeral connected with the Hebrew word “*yom*”) are found throughout Scripture, and in no other case are they taken as meaning anything other than a literal 24 hour day.

Is it this or is it that?

But it appears that Poythress is clearly a little unhappy with the conclusions he comes to, because he seems to want to have his cake and eat it. He concludes that the Genesis 1 text does indicate creation in 6 days, but then again the duration is equally 14 billion years:

“God really did create the world in six days. That is to say, when we speak in everyday human terms, and think in terms of the human rhythms of work and rest, we are right to say that God created the world in six days, because we are thinking of days within an interactive orientation. Only within the technical sphere of consistent clock orientation and calculation do we develop another, complementary perspective on time. Within that sphere, where we define “time” in an unusual, precise way that separates it from human rhythms, we obtain a figure of 14 billion years.”¹⁴⁰⁸

Thus two time-frames are operating, the six days of God's creation, and 14 billion years of real time. What does this mean? Well it can only mean that the six days are not really literal 24 hour periods. What Poythress is claiming is similar to what framework hypothesisers who hold that

1405 Vern S. Poythress, Redeeming Science. P122.

1406 Vern S. Poythress, Redeeming Science. P131,146,256.

1407 Vern S. Poythress, Redeeming Science. P142,143,147,256.

1408 Vern S. Poythress, Redeeming Science. P220.

Genesis 1-3 is nothing but a literary framework and must be interpreted by literary means not by scientific or truth content means. Framework hypothesisers often refer to the six days as “days of God” and Poythress seems to share in this conviction. But let us ask what earthly good could there be in God revealing creation to us by means of days which refer not to our experience but to His? What exactly do we mean by “a day of God”? Certainly such a phrase has a meaning in other texts, signifying a time period in which God acts in and through history, (e.g. “*the day of the Lord*”).¹⁴⁰⁹ But what is meant by such an idea in the context of creation? To talk of a “day of God” in the history of the world is one thing, but it has no meaning at all for us when set in the context of creation. God is eternal. He has no need to refer to a day in *His* experience. Such a concept is meaningless. In connection with history and with events in this world, this created order, we can talk of “a day of God” but in creation the meaning falls into a vacuum. The analogical day theory fails to do justice to the text because it invents an idea which has no meaning. Everyone knows what is meant by the term “day” and the natural conclusion in reading Genesis 1 – which was given for our instruction not for God or the heavenly realms – is to understand the term in its normal usage. A day means a period of 24 hours.¹⁴¹⁰ If we start advocating a “day” which has no earthly meaning and which only God can know, what earthly good does it for us? None whatsoever.

Poythress's understanding of creation is based on accepting science as a means to truth, and of interpreting Scripture alongside science.¹⁴¹¹ He does not like to make any definite conclusions, saying that creation harmonizes with fiat creation, progressive creation or theistic evolution.¹⁴¹² All three are possible as far as the text of Scripture is concerned and it requires us to use extra-Biblical data to settle the issue.¹⁴¹³ Poythress's consistent appeal to extra-Biblical data, to “*evidence outside Scripture, that is, evidence deriving from general revelation and the world that God rules*” suggests clearly that he does not hold to the Biblical doctrine of the sufficiency of Scripture.¹⁴¹⁴ Scripture requires supplements according to Poythress. He asserts that we cannot settle the issue of origins using the Bible alone. Such a position is a dangerous one because whatever else we think we are doing by supplementing Scripture with some hand-maiden, what will inevitably happen is that that hand-maiden will become the mistress and will usurp authority.

1409 See, for example: Joel 2:11; Zephaniah 1:7; Malachi 3:2.

1410 Let not the reader be hoodwinked and sidetracked by the meaningless discussion of some who like to point out that the word “day” can mean “daylight” for this adds nothing and takes nothing from the argument being pressed here. The time frame of Genesis 1 is one ordinary week.

1411 Vern S. Poythress, *Redeeming Science*. P33.

1412 Vern S. Poythress, *Redeeming Science*. P255.

1413 Vern S. Poythress, *Redeeming Science*. P256.

1414 Vern S. Poythress, *Redeeming Science*. P256.

The missing ingredient – the fall.

From a Biblical perspective it is difficult to ignore the doctrine of the fall and man's sin. Various ideas are suggested to explain this state of affairs but the central focus is more often than not on mankind and his relation to God. What is often totally overlooked is how the fall affected everything else besides the will and disposition of man. We have already discussed this universal effect of sin in part 1, but it is essential to point out here that any science that is engaged in, which does not take account of the fall of the universe, will seriously miss the mark. God created all things “good” but we do not *now* see the world and the universe in such a way. When naturalists look at the world of living things today they do not see the lion laying with the lamb as it was in the beginning of creation and will be when all things are restored.¹⁴¹⁵ The fierce and harsh world in which parasites prey on their hosts, and food chains with top predators can be formulated, is not one which God initially created, although he certainly allowed for it in his sovereign plans. All animate life were created to eat fruit, nuts, seeds and vegetation to begin with, and the allowance for the consumption of animal flesh only came about after the great flood when their original food would have been very scarce.¹⁴¹⁶ We do not have all the details of what life was like on Noah's ark but after the flood the Lord declared that: “*the dread of you shall be on every beast of the earth, on every bird of the air, on all that move on the earth, and on all the fish of the sea,*” so that there was need for care and hunting as the animal population increased.¹⁴¹⁷ The concepts of predation, hunting and meat-eating are all part of the fall, but where is consideration of these facts taken into account in modern biology? It is one thing to make accurate descriptions of the habitats and behaviour of animals we can observe today, but any description of the “natural history,” (i.e. an extrapolation back in time), of these same animals must take this degeneration into account.

What of the physical world of stars, planets, oceans and mountains? These too have suffered the degeneration of the curse. But exactly how? This we cannot really know, but that a “fall” – a downgrading and distortion – has occurred must feature somewhere in our discussions. Further, the restoration and redemption of all things to glory must feature equally in any presentation of the nature of things. Again we have sketchy details, but that this creation-fall-redemption schema must govern our thoughts in science is something we cannot deny.

1415 Genesis 2:19; Isaiah 11:6; 65:25.

1416 Genesis 1:29; 9:1f.

1417 Genesis 9:2; 10:9.

The supremacy of Scripture.

It is with this discussion of the fall and of creation's future redemption that we are forced back to view Scripture as supreme. The world of general revelation cannot give us such history nor the future we need to understand things. Man looks in vain within creation for the details of creation and in particular of the fall, and of final glory. But in Scripture these are plain to see. It is for this reason, amongst many others, that supremacy must be given to Scripture when we discuss science (or any other subject for that matter). In interpreting Scripture we must ensure that we have no other arbiter or handmaiden determining what is or is not the case. Scripture is sufficient. When interpreting general revelation, creation and providence, we must look at it carefully but with *Scriptural* eyes. Of course, we cannot just look at Scripture alone to understand the world. That is a mistake made by medieval Christians. But to look at the world on its own terms, that is a mistake of modern Christians. The true way is to view all things through the Scriptures. We view Scripture as the standard by which everything else must be examined.

Up to this point I hope that the reader will have come to realise a number of salient points concerning science and also about the Christian faith. With regard to science it should be readily apparent that it operates only because the world is ordered and regular, which is only so because God has created it. Far from an independent mindset we ought to recognise our place in God's world. But then also I hope that the reader recognises the severe limitations modern science operates under. It is limited because of our finite nature. We have only five senses and we must *analyse* creation, (i.e. split it up according to sense), before we reconstruct it in our minds. All of this works very well in general, but again only because God is Creator. The moment we lose sight of God as Creator and originator of what we observe, we are lost in a fog of confusion. But even with an acceptance of God's creative and sustaining power, we are still limited as to what we can observe. Science is further limited by forgetting that our five senses are not comprehensive of creation. Whom is to say that there isn't information of a type for which we have no sense? In fact modern science's arrogance that it can operate *only* with its five senses and extended probes severely limits its progress. Science is also limited because of its refusal to accept the spiritual world. How this interacts with the physical is impossible to really discuss. (Perhaps the starting point for discussion about this is the incarnation of Christ, where two natures, perfect human and divine were united in the one person). We have been given wonderful apparatus with which to observe this world and enjoy it. We ought to praise the giver and use them for his glory rather than seeking to use them to construct our own towers of Babel.

The Christian faith, as described in the Scriptures, has one main focus, namely Christ the

incarnate one and his great work. It is His person and His great work which answers all needs. We cannot deal with this subject in depth here, but for now I want just to point out that in the conflict between science and the Christian faith we are pitting the mere ideas and inventions of men against God. As Christians we offer Christ and him crucified, risen and exalted. This is far, far greater an object of worship, a source of life, a meaning to life, a satisfaction of soul and a restorer of health than anything modern science offers. Do remember that this is God's world. The things within it that God has provided for our good are not owned by science, they are God's. So the wonderful natural remedies found in plants that drug companies try and mimic were manufactured by God. The minerals and precious metals mined by modern technology and processed into our numerous gadgets were all given by God's good hand. Science has usurped authority to itself which rightly belongs to God. In comparing science with Scripture the contest is a walkover – it is a “no contest”!

Chapter 20: Tremper Longman III.

A question of approach (hermeneutics).

Tremper Longman appears to be an advocate of the framework hypothesis and suggests that the text is mainly figurative. Concerning Genesis 1 and 2 he writes:¹⁴¹⁸

*“...the intense use of obviously figurative language, the lack of sequence between the two creation accounts, and the text’s pervasive interplay with ANE creation accounts indicate that we are not getting a literal or precise depiction.”*¹⁴¹⁹

In his book *How to Read Genesis*, Longman's main point is to give the reader the interpretive tools required for a correct understanding. It appears that any straightforward reading of the text, such as may be done by the ordinary Christian in the pew, would be flawed because of a lack of scholarship and academia. Longman contends that “*Genesis is not an easy book to understand.*”¹⁴²⁰ He continues with a discussion of the role of teachers (the academic world), and the idea of the priesthood of all believers. To what extent do we require the academics and to what extent do ordinary Christians grasp the Scriptures? Longman suggests that whilst the Bible is perspicuous (readily understood), this *only* applies to the message of salvation. Christians have “*wrongly understood and applied*” the Reformers' idea of perspicuity, for these folk taught that it was *only* “*the message of salvation that was clear and understandable to all without the need of a priestly mediator or scholarly input.*”¹⁴²¹ For an example of our indebtedness to academia, Longman suggests that it is only “*thanks to the discoveries of archaeologists and language experts over the past couple of centuries,*” that we have available “*some of those ideas that would have competed for the hearts and minds of ancient Israelites.*”¹⁴²² It is these ideas which Longman then uses as interpretive tools to grasp Genesis. In many ways statements such as these made by Longman bring us right back to the days of “higher criticism” which so dogged and doomed the church of the nineteenth century.

1418 http://www.westmont.edu/academics/departments/religious_studies/tremper-longman-iii.html

1419 Tremper Longman. Reading Genesis 1–2: An Evangelical Conversation. J. Daryl Charles (Ed.). 2013. Hendrickson Publishers, Peabody, MA. P109.

1420 Tremper Longman III. How to read Genesis. 2005. IVP Academic. P19.

1421 Tremper Longman III. How to read Genesis. P20.

1422 Tremper Longman III. How to read Genesis. P72.

The place of science and the age of the earth.

We shall examine Longman's rules for interpretation shortly but it is instructive to note that woven through his work is the assumption that the earth is very old, and that the Bible does not give any indication of the age of the earth. He states that the book of Genesis encompasses “*an unknown but certainly vast length of time,*” and, in particular, that the first 11 chapters cover “*an indeterminably long period of time in the far-distant past,*” and “*a vast, though unspecified, period of time.*”¹⁴²³ In his work: *An Introduction to the Old Testament*, written along with Raymond Dillard, Longman states:

*“Genesis covers an immensely long period of time, longer perhaps than the rest of the Bible put together. It begins in the distant past of creation, an event about whose absolute date we cannot even speculate, through millennia to reach Abraham at the end of chapter 11.”*¹⁴²⁴

However it is worth pointing out also, that in discussing the later chapters of Genesis in his work with Dillard, Longman undoes some of the attacks he makes against the early chapters of Genesis. Thus, he points out the historical nature of the work linking inseparably as an historical document with not only the remainder of the Pentateuch, but also with the other historical books:

*“Much of the book, for instance, is recounted using the so-called waw consecutive verbal form that is the basic characteristic of narrative in the Hebrew Bible (Aalders, 45). Furthermore, the frequent tôledôt formulae that structure the book also indicate a historical impulse. In addition, there are no dramatic genre shifts between the book of Genesis and the rest of the Pentateuch, and none between the Pentateuch and the so-called historical books that would lead us to read it in any other way than as history. Indeed, if we are speaking of the original intention of the biblical writer(s), the style of the book leaves little space to argue over the obvious conclusion that the author intended it to be read as a work of history that recounts what has taken place in the far-distant past.”*¹⁴²⁵

Since the format of the first eleven chapters is the same as that of chapters 12-50, why not attribute the early chapters to the genre of history too? Although Longman does not deal with science in this book, it is clear from other works that he accepts the scientific story of creation including the big bang, and biological evolution. Longman identifies as “*an advocate of theistic evolution*” and states that readers of Genesis must come to the text “*in the light of scientific discoveries and theories.*”¹⁴²⁶

1423 Tremper Longman III. How to read Genesis. P9,64,99,100.

1424 Tremper Longman III & Raymond B. Dillard. An Introduction to the Old Testament. 2006. 2nd edition. P38.

1425 Tremper Longman III & Raymond B. Dillard. An Introduction to the Old Testament. P54.

1426 Tremper Longman. Reading Genesis 1–2: An Evangelical Conversation. P121.

Genesis 1.

So what of his understanding of the first chapter of Genesis? Longman is undecided about how Genesis 1:1 should be translated. Both the absolute (“in the beginning God created”) and the temporal (“In the beginning when God created”) are possibles.¹⁴²⁷ But on the question of the term “day” (yom), Longman is more definite. He acknowledges that prior to Darwin the problem was not how did creation occur so quickly, but how did it take so long.¹⁴²⁸ By pointing this out Longman wishes to introduce scepticism on a literal view for the word “day.” He proceeds by suggesting that a “*superficial reading of Genesis 1*” should lead to such a scepticism because the sun and moon were “*not even created until the fourth “day,”*” and “*a twenty-four-hour day is defined by the alternation of sun and moon,*” so that the only conclusion must be that a twenty-four hour day is not required.¹⁴²⁹ Longman pours scorn on any who attempt to wriggle out of this conclusion by stating: “*attempts to suggest that there were alternative and temporary light sources are really cases of special pleading.*”¹⁴³⁰ The obvious riposte is: why can't an Almighty, omnipotent, omniscient, God create “light” before the sun?

One of the most startling comments Longman makes on the issue of the word “day” comes alongside his mention of good principles of interpretation. Anything that is essential for us to believe must be clear and it must be frequently mentioned. He asserts the following:

*“We will later see that some of the most vociferous debates about Genesis (for instance, the length of the creation days) are based on fairly tenuous interpretations. It's a good principle to operate with the belief that what God considers essential for our relationship with him is taught clearly and in many places; in other words we can't miss it if we tried.”*¹⁴³¹

Note those last words: “*we can't miss it if we tried*”! I wonder how in the world Longman has missed the repeated statements in Genesis 1 about the very nature of the days? Of course Longman has limited the text to being primeval, and not true history, and so he has blinded himself to the obvious.

Interpretive tools.

So what are the interpretive tools that Longman suggests? Interestingly, he does not appeal to the Scriptures themselves for these tools, but appears to favour a secular approach to

1427 Tremper Longman III. How to read Genesis. P103.

1428 Tremper Longman III. How to read Genesis. P103,104.

1429 Tremper Longman III. How to read Genesis. P104.

1430 Tremper Longman III. How to read Genesis. P104.

1431 Tremper Longman III. How to read Genesis. P34.

hermeneutics (the discipline of interpretation). Essentially Longman suggests three key ideas necessary for a correct interpretation, which we shall outline briefly before discussing each in more detail. First we must consider Genesis as a piece of literature.¹⁴³² This may seem like an obvious thing to say, but what is meant by this is that the Bible is to be treated in the same way as any other piece of literature. The Bible may be God's word, but in reading it we are to approach it just as we would any other book. The second key theme Longman develops is that in order to understand Genesis, we must read it within the context of when it was written, which is the ANE cultures and literature. In making this a principle Longman has assumed that Genesis was written much later than the ANE literature. The third key idea, which follows on from the first two, is that we must consider Genesis to be a human production. Longman does not want to deny that God is the ultimate author, but he (effectively) ignores this truth, for all our efforts in interpretation stem from the idea that we are dealing with a human book.

Genesis as literature.

To begin with, Longman asserts that the task of interpretation “*deserves our careful reflection,*” with which sentiment we can heartily agree!¹⁴³³ However the direction such reflection starts from, and then pursues, is something I think Longman forgets. It would be better to start from God's view of things and follow how He wants us to interpret a passage in Scripture, but Longman has opted for a secular approach. He states:

*“The Bible is similar to other books, and so we should study it with many of the same issues in mind that we have for literature in general.”*¹⁴³⁴

But is such a statement acceptable? Well that all depends on how the secular world views the task of interpretation. For the most part it operates along the lines of distrust and scepticism borne from the influence of modern science and academia. The Bible has a lot to say about the mind of man and how we should distrust it!

Longman points out that we are at a great distance from the original author and so, naturally, we cannot really hear what they have to say correctly without some form of academic exercises.¹⁴³⁵ According to Longman:

1432 Tremper Longman III. How to read Genesis. P41.

1433 Tremper Longman III. How to read Genesis. P17.

1434 Tremper Longman III. How to read Genesis. P23.

1435 Tremper Longman III. How to read Genesis. P21.

“... one of the biggest mistakes we can make in interpretation is to read it as if it were written for us today.”¹⁴³⁶

I wonder how Longman would respond to our Lord Jesus who when speaking to the Sadducees about their denial of the resurrection stated:

31 But concerning the resurrection of the dead, have you not read what was spoken to you by God, saying, **32** ‘I am the God of Abraham, the God of Isaac, and the God of Jacob’? God is not the God of the dead, but of the living.¹⁴³⁷

It is clear from this statement that our Lord Jesus believed that what the Sadducees could read in the Torah they had in their hands, was, in fact, that which was “*spoken to*” them “*by God*.” Our Lord's interpretive principle is clear. Read the Scriptures and you are hearing God speak!

Longman proceeds in his discussion of the Bible as literature by trying to make a distinction between an ancient (far-distant) text and a conversation. In a conversation we can ask for clarification if we are unclear, but with an ancient text we are left high and dry with what we have.

“However, reading the writings of other people is different from carrying on a conversation with them. In both cases an act of communication is taking place, but in a conversation we can ask for clarification or expansion. Quite simply, we can ask, What do you mean? when something is unclear. We don't have that luxury when it comes to another's writings, and the matter only becomes more complicated when the writing under discussion was written centuries, even millennia, ago in a language that is now not spoken by anyone, as is the case with the Hebrew language of the book of Genesis.”¹⁴³⁸

It needs to be stated loud and clear that the Christian is not alone, for the very Author of Scripture dwells within! Furthermore we can ask the Lord for clarification by a very important principle of *Biblical* interpretation. The Scriptures are their own interpreter. We can look elsewhere in God's word to understand what we read in any particular passage which may be unclear.¹⁴³⁹

Another point Longman makes from a secular approach to interpretation is that, because of the distance between us and the original author, the literature is necessarily different and operates on different principles. As he puts it, “*the Bible is a literature of antiquity and not modernity*.”¹⁴⁴⁰ On the question of the type of literature (genre) that Genesis fits into, Longman suggested that whilst it

1436 **Tremper Longman III.** How to read Genesis. P22.

1437 Matthew 22:31,32.

1438 **Tremper Longman III.** How to read Genesis. P21.

1439 This principle needs some qualification however because many have abused it.

1440 **Tremper Longman III.** How to read Genesis. P25.

was vital to discover this, he then goes on to say that *“the question of the genre of Genesis is not an easy one, and it is highly controversial.”*¹⁴⁴¹ Longman further asserts that the ancient texts of Genesis are not *“purely self-referential,”* or, in other words, self contained, but rather *“they are the products of the times that produce them,”* and we must *“explore those times as best as can be determined.”*¹⁴⁴² With these thoughts we are brought to the unenviable position of being indebted to the scholars and academics! We must do our “best” to study the times and cultures of Genesis! But when was Genesis written? Longman responds with the kind of reply any modern scientist may make: we cannot be sure, but we must “do our best”!

*“When was Genesis written? The answer to this question We might end up with certainty or doubt ... We may be able to find an exact date or a general date. However, in all cases it is important to do our best with the evidence that is presented to us.”*¹⁴⁴³

And so we are left in the uncertain arms of man – academic man – who is trying desperately to fathom just exactly when Genesis was written so that we can set it within its context and then try to make sense of it all! This is hopeless! The Scriptures were given by God for us and our salvation. They are not something that gives us an uncertain sound but give us a clear record of the very voice of God.¹⁴⁴⁴

Longman accepts that Genesis has, for the most part (even today), been read in a straight forward sense, that is, as history. However he then casts serious doubt on whether the text can be taken as true history. He writes:

*“The history of interpretation indicates that for centuries the book of Genesis was happily read as a literary and authorial unity. Indeed, it is likely that the vast majority of readers across the world today still read the book in this way. However, if we are honest, a close reading of the book raises questions. We might ask why there are two accounts of the creation ...”*¹⁴⁴⁵

Notice how Longman begins to sow doubts in the minds of his readers. It is only *“if we are honest”* and attend to *“a close reading of the book”* that we will come to the truth! This smacks of the methods of the serpent in Genesis chapter 3!

Longman also suggests that there are two creation accounts, and these signal the fact that

1441 Tremper Longman III. How to read Genesis. P23.

1442 Tremper Longman III. How to read Genesis. P25.

1443 Tremper Longman III. How to read Genesis. P25,26.

1444 1Corinthians 14:8.

1445 Tremper Longman III. How to read Genesis. P24.

what we have is a human and fallible document. However such an assertion is wholly without faith. The two accounts are not contradictory at all. The first is that which God has given us, and the second begins that section which was probably written by Adam.¹⁴⁴⁶

Genesis in the context of ANE.

Establishing a date for the book is one of the most important things that is required before we can locate the cultural milieu within which Genesis was written. However this is no easy task. Longman ends up by assuming that whilst the main date for the writing is some time after the Exodus, that is, some time in the mid second millennium BC, there have also been significant editing at later dates.

*“The earliest literatures that bear on the study of the Bible come from ancient Mesopotamia and Egypt, the two cultural powerhouses of the day. At the earliest, Moses should be dated to the fifteenth century B.C., while the first pieces of Sumerian and Egyptian literature come from the first part of the third millenium. Also significant for the study of the Old Testament is the literature, particularly that written in Ugaritic, from Israel's nearest neighbours, literature that reflects Canaanite religious ideas,”*¹⁴⁴⁷

This means that: “ ... we need to read the book against an ancient Near Eastern background and not unconsciously interpret it in the light of contemporary customs and events.”¹⁴⁴⁸ The ANE texts enable the reader to “recover the ancient world-view of those who lived in biblical times,” and a knowledge of them also acts as “a guard against reading modern scientific perspectives and questions back into Genesis.”¹⁴⁴⁹ We are to “look at creation and the flood in the light of the ancient Near East,” and such a procedure “will illustrate some broader principles for interpreting the Old Testament.”¹⁴⁵⁰ Thus the reader must avail himself of these texts ANE texts **before** he can begin to approach the Genesis text!

But then we ask, how do these ANE texts help us in interpreting the Genesis account? Well Longman responds by asserting that we need to look at both the similarities and the differences of these but tellingly he states that he will be “guided by textual data of the Near East,” in this endeavour.¹⁴⁵¹ Such an admission is very revealing. I want the reader to be clear at this point.

1446 Genesis 2:4; 5:1.

1447 Tremper Longman III. How to read Genesis. P71.

1448 Tremper Longman III. How to read Genesis. P27. See also: Tremper Longman III & Raymond B. Dillard. An Introduction to the Old Testament. P52.

1449 Tremper Longman III. How to read Genesis. P70.

1450 Tremper Longman III. How to read Genesis. P70.

1451 Tremper Longman III. How to read Genesis. P77.

Longman is saying that we cannot understand Genesis unless we view it through the ANE texts and it is these texts which will interpret the Genesis account for us. This is monstrous. Longman's insistence that we must view the text through the eyes of the ANE leads him to further strange conclusions. He contends that the Genesis creation stories are not clear about detail, and are only intent on telling us that God was Creator:

*"It appears that Genesis itself is not interested in giving us a clear and unambiguous understanding of the nature of the creation days. This ambiguity fits in with the overall impression we get of the passage, that it is not concerned to tell us the process of creation. Rather it is intent on simply celebrating and asserting the fact that God is Creator."*¹⁴⁵²

*"As we read Genesis 1-2 closely, we note just how little the narrative is interested in telling us about the process of creation. Some interpreters press the text in ways that it does not intend to be read in order to argue against modern scientific conclusions concerning the origins of human beings."*¹⁴⁵³

Now it is obvious that Genesis 1-2 does not give us much detail. But to say that these chapters are disinterested in telling us *some* detail about what happened through creation week is patent nonsense. There are details and these are given in the context of an historical setting. God made light and darkness, separated land from sea, covered the land with vegetation, and created sea creatures and land animals.

On the flood, Longman continues to assert the greater antiquity of the Mesopotamian version over the Biblical account. He declares that:

*"... it is highly unlikely that the Gilgamesh Epic borrowed from the written account of the flood in the Bible. In the first place, the Mesopotamian tradition has its roots in Mesopotamian literature long before the written account in Genesis. Furthermore, rarely does an advanced culture borrow from an inferior culture."*¹⁴⁵⁴

However Longman is very tentative about the real relationship between the Biblical and ANE accounts, so that he comments: *"we can't be dogmatic in our assessment ... we can't prove our interpretation of the matter beyond all doubt."*¹⁴⁵⁵ It never ceases to amaze me that writers want to be tentative and so cautious when they explore possibilities, but when it comes to the Bible as the ground or foundation for assertions they are more definite. Longman rules out the Biblical account

1452 Tremper Longman III. How to read Genesis. P104.

1453 Tremper Longman III. How to read Genesis. P106,107.

1454 Tremper Longman III. How to read Genesis. P86.

1455 Tremper Longman III. How to read Genesis. P86.

coming first because of the “*nature of our knowledge*,” by which he means the certainty that the Biblical account is much later!¹⁴⁵⁶ Why trust the findings of modern scholars who have discovered the plethora of ANE texts? More to the point, why trust the *pagan* ANE texts?

According to Longman, the Biblical writer was guilty of copying ANE sources and then modifying them for his own pious purposes. Thus the very idea of a covenant is a borrowed concept and not original, and the sacrifice described in Genesis 15 where the animals are divided and a smoking furnace travels between the parts is also copied.¹⁴⁵⁷ Circumcision was also a borrowed practice as Longman, commenting on Genesis 17, states:

*“This isn't the first time anyone was circumcised. As a matter of fact, circumcision was the rule in the ancient Near East, and when a culture did not practice circumcision of some sort, it was a matter of note (“those uncircumcised Philistines”). Here God takes a known practice and invests it with new meaning.”*¹⁴⁵⁸

Do such ideas fit in with what we know of God? Is God so late on the scene that He must copy the pagan ideas and baptise them for His own purposes? The whole scheme suggested by Longman is preposterous. God always takes the initiative. The idea of sacrifice predates creation, for Christ was to come as the “*Lamb slain from the foundation of the world*.”¹⁴⁵⁹ When Adam and Eve sinned it was the Lord God who instituted sacrifice. The pagan nations borrowed the concept of sacrifice, the idea of a covenant, and many other ideas from the Biblical originals.

Genesis a human book.

Longman also emphasises the human nature of the book of Genesis, and it is this feature which drives the formation of many of his interpretive principles. He outlines his strategy to: “*focus on discovering the intention of the human author*,” for fear of “*importing all kinds of foreign ideas into the ancient text*.”¹⁴⁶⁰ Whilst he recognises the divine authority over the text so that God “*is the ultimate author*,” we must, nevertheless “*ground our interpretation in what we propose is the meaning of the human author*.”¹⁴⁶¹ Furthermore, he asserts that “*we can only recognize*” what God may have intended, “*if a later author brings this meaning out*.”¹⁴⁶² These are quite staggering statements. We acknowledge that Longman has attempted to affirm divine inspiration, but it appears

1456 Tremper Longman III. How to read Genesis. P86.

1457 Tremper Longman III. How to read Genesis. P30,95.

1458 Tremper Longman III. How to read Genesis. P133.

1459 Revelation 13:8.

1460 Tremper Longman III. How to read Genesis. P18.

1461 Tremper Longman III. How to read Genesis. P18.

1462 Tremper Longman III. How to read Genesis. P18.

from what he has written that such divine intention is effectively ignored, because the “ground” or basis of interpretation is the intention of the human author!

To get a grasp on the type of human author that wrote Genesis Longman must date the book and locate its cultural milieu. Longman divides Genesis up into three separate parts, assigning the first part (Genesis 1-11) as primeval history, the second (Genesis 12-36) to the patriarchs, and the last to the story of Joseph (Genesis 37-50).¹⁴⁶³ He does, however, acknowledge the division of the book by the Hebrew word *tôl’dôt*, but considers this word as a heading.¹⁴⁶⁴ With regard to the genealogies that this word points to, Longman makes some startling conclusions. He begins his discussion of genealogies by asserting that they are “*a literary form*,” continues with the assertion that: “*genealogies are not intended to be exhaustive*,” and then uses a curious modern-day illustration to back his claim.¹⁴⁶⁵ Genealogies cannot be used to calculate dates! This is particularly the case concerning the genealogy of Genesis 5 for it “*has wrongly been used to try to determine how much time has passed from Adam to Noah and then to date the time Adam and Eve were created*.”¹⁴⁶⁶ Longman then makes a statement which shows his view of those who believe in a literal view of Genesis:

*“This “young earth” view is then thrown in the face of the scientific community that believes the age of the earth is immensely old. In truth, the Bible does not speak to the issue of when the world was created.”*¹⁴⁶⁷

I am afraid that I find these statements of Longman's wholly indefensible. If you look carefully at Genesis 5 and 11, it is **abundantly** clear that the intention is indeed to show the span of time from Adam to Noah, and from Shem down to Abram. No other meaning is more clear. There are lessons to be drawn from these genealogies, of course, but the fact that they recount actual, literal, history seems blindingly obvious and sets the tone for the lessons we can learn from them. It is the same for Christ's death and resurrection. These events were indeed literal history from which we derive numerous lessons. In the same way, unless the genealogies recount true history, what are we to derive from them? The idea that truth can come from error is something which cuts no ice. For Longman, however, the real purpose of the genealogies is not to give us a time-line, rather they are intended to show “*different sorts of important relationships between the members of its list*.”¹⁴⁶⁸

1463 Tremper Longman III. How to read Genesis. P64.

1464 Tremper Longman III. How to read Genesis. P46,47,63.

1465 Tremper Longman III. How to read Genesis. P122.

1466 Tremper Longman III. How to read Genesis. P123.

1467 Tremper Longman III. How to read Genesis. P123.

1468 Tremper Longman III. How to read Genesis. P123.

How does Longman come to this position? He states: “we learn these facts about the genre of genealogy from a comparison with other genealogies from the broader ancient Near East.”¹⁴⁶⁹ He has already made clear that he believes that creation is a very far-distant event, but, as though to strengthen his case, he demands that the genealogies are not complete. Talking about the earliest genealogies Longman asserts:

“Since they follow a line of descent rather than listing every generation exhaustively, the genealogies of these chapters do not allow us to know when creation took place. Even so, it is certain that the period of time covered by Genesis 1-11 is longer than the time from Genesis 12 (Abraham) until today!”¹⁴⁷⁰

After denying the genealogies their integrity, he is audacious in his claim that the first eleven chapters of Genesis covers a longer time period than from Abraham until today! How can he do this? Only on the basis that Genesis is a late document written after the ANE cultures, and that modern science with its vast ages are correct! Well so much for a belief in divine inspiration!

If we cannot use the genealogies of Genesis to help us date the text what must we do? Well, needless to say, we must look to extra-Biblical sources and, in particular, to ANE sources:

“Does our knowledge of the ancient Near East help us understand Genesis? We are interested in not just extra-biblical confirmation but also setting the story of Genesis in the light of a broader historical context. To do so we will have to do our best to situate the biblical account in relationship to the history of the area ...”¹⁴⁷¹

For Longman Genesis was written over a long period of time. He declares that “it may be the oldest part of Scripture, but it is not, by far, the oldest literature from the ancient Near East.”¹⁴⁷² He continues by noting that “when Genesis was written, the world was already broken by sin.”¹⁴⁷³ Thus he asserts that:

“While it [Genesis] may have been written using earlier sources, it was not written at the time of the events it describes, but rather, at the earliest, in the period after the exodus, and it was written very much as a prehistory providing the base of the story of exodus and wilderness wandering that follows.”¹⁴⁷⁴

Longman comes to the strange conclusion that Genesis 1 to 11 is a “primeval” history which does

1469 Tremper Longman III. How to read Genesis. P123.

1470 Tremper Longman III. How to read Genesis. P101.

1471 Tremper Longman III. How to read Genesis. P26,27.

1472 Tremper Longman III. How to read Genesis. P71.

1473 Tremper Longman III. How to read Genesis. P109.

1474 Tremper Longman III. How to read Genesis. P14.

not share the same historical character as the rest of the book of Genesis. Although Longman credits Moses as the main compiler, he adds that there have also been many later editors adding their corrections.¹⁴⁷⁵ Having established the date of compilation for Genesis, Longman is then able to make further assertions. For example, Longman asserts that Genesis was not written to counter modern science: *“but it was written in the light of rival descriptions of creation.”*¹⁴⁷⁶ Further, he writes:

*“... we will criticize those who read Genesis 1-2 as if it was an apologetic against modern scientific understanding of the origins of the world (Darwin), when in actuality it was an apologetic against rival ancient understandings of creation (Enuma Elish).”*¹⁴⁷⁷

Thus the intention of the human author was to write a creation story to rival the Mesopotamian Enuma Elish! According to Longman: *“the biblical accounts of creation were shaped in such a way as to provide a clear distinction from those of other nations,”* and for us to understand Genesis, *“the most interesting and the richest reading of the biblical creation accounts takes place in the light of the rival accounts of the ancient Near East.”*¹⁴⁷⁸ In other words Genesis is just an alternative view of creation written by Israelites simply to rival other views. It is not divine revelation but a human construct.

The Mesopotamian accounts are prior to the Biblical one according to Longman, and this means that because the human author of Genesis lived in such an environment, *“we should read the account of the creation of humanity in the light of Mesopotamian conceptions.”*¹⁴⁷⁹ On the creation of Adam, Longman asserts that the human author of the text has used and altered an ancient tradition to make it more palatable for the Israelite taste. He writes: *“Genesis has taken the Near Eastern tradition and then substituted God's breath for either divine spit or blood.”*¹⁴⁸⁰ Is such a suggestion serious? Are we to simply view the account as a man-made attempt at improving the pagan versions? Such suggestions are preposterous.

On the flood Longman asserts that the story was probably handed down by word of mouth through many generations, and that the Biblical account is much later than the Mesopotamian original.¹⁴⁸¹ So much for God's intentions!

1475 Tremper Longman III. How to read Genesis. P45,46,48,55,56.

1476 Tremper Longman III. How to read Genesis. P72.

1477 Tremper Longman III. How to read Genesis. P22.

1478 Tremper Longman III. How to read Genesis. P72.

1479 Tremper Longman III. How to read Genesis. P72.

1480 Tremper Longman III. How to read Genesis. P78.

1481 Tremper Longman III. How to read Genesis. P87.

Genesis – a theological history.

Although Longman acknowledges that Genesis is presented to us as narrative history, and that this was, in fact, the intention of the human author, nevertheless it is not history as a modern mind may understand the term.¹⁴⁸² He writes:

“... of course, even though the book is intended to be read as representing what actually took place in the past, it is possible that it fails. In other words, it is possible for a book that intends to be historical to fail to accurately represent what took place.”¹⁴⁸³

Longman asserts that ancient writing cannot be equated with modern history because it doesn't stand up to scrutiny. In fact he argues that many scholars discount the Bible because it is inherently biased:

“However, even if a book intends to be historical, this does not assure us that it does so accurately. Not all ancient historical writing has stood up to critical analysis. Indeed, there is a school of thought (minimalism) that suggests that all ancient writings, particularly the Bible, is ideologically biased and should not be trusted to give us a window on actual events.”¹⁴⁸⁴

In making such statements we see a human (carnal) attitude to study. It is man that arbitrates over truth rather than man humbly receiving from God. Longman then muddies the whole issue by describing such categories as “*theological history*,” and “*saga*.” By the former we are lead into a dichotomy: the separation of theological thoughts from any historical representation. Often the claim is made that an author is being ***theological*** and not historically accurate. In response we note that it is impossible to be theological without being historical. As the supreme example we point to the incarnation, the death and the resurrection of our Lord Jesus Christ. These involve deep theology, but if they are not historically true where is our faith?¹⁴⁸⁵ Saga is a form of writing or story-telling which may have an historical nucleus, but around which are all sorts of unhistorical accretions and additions.¹⁴⁸⁶ Thus, for Longman, “*the book of Genesis is not a history-like story but rather a story-like history.*”¹⁴⁸⁷ Longman continues with his discussion of history by saying that the Bible is not a videotaped record. Such an assertion is vacuous. Since when does a videotaped record

1482 Tremper Longman III. How to read Genesis. P60.

1483 Tremper Longman III. How to read Genesis. P60.

1484 Tremper Longman III. How to read Genesis. P26.

1485 1Corinthians 15:12-19.

1486 Tremper Longman III. How to read Genesis. P61.

1487 Tremper Longman III. How to read Genesis. P28.

capture all the events perfectly? Longman states:

*“However, it is impossible for a human being to present the past as a mere collection of uninterpreted facts, nor would this be desirable even if it were possible. History is different from a videotaped representation of the past in that involves a historian, one who must interpret these events for a contemporary audience.”*¹⁴⁸⁸

Notice here that Longman is talking about the human author of Scripture. It is not possible for the human author to write without adding his interpretation. Therefore what we have in Scripture is simply a human interpretation of events. This is not what the Biblical doctrine of inspiration teaches, which asserts that even though Scripture was written by human hands, all that is written comes from the very mouth of God. Thus for Longman the details in the texts are not really that important. The purpose was merely *“to assert the truth about who was responsible,”* for creation.¹⁴⁸⁹

Finally Longman declares that since the Bible is largely composed of stories and poems, it is not philosophical or an abstract treatise and so, therefore, cannot be dissected as such writings are. By implication the Bible does not speak to the modern mind.¹⁴⁹⁰ But again such assertions are fruitless. If the Bible does not answer our deepest questions as to meaning and so on, what on earth was God doing when He revealed His will to us? If when God speaks it is not clear, to whom may we turn?

1488 Tremper Longman III. How to read Genesis. P28.

1489 Tremper Longman III. How to read Genesis. P79.

1490 Tremper Longman III. How to read Genesis. IVP Academic. 2005. P61.

Chapter 21: Francis Collins.

Theistic evolution and Genesis as poetry.

Francis Collins, famous for leading the Human Genome Project, has described his position on Genesis and origins in his book: *The Language of God*.¹⁴⁹¹ In this work he takes the view that God has used evolution as the process to create all things, and so would be happy to be referred to as a 'theistic evolutionist.' After the publication of his book, in 2007 Collins became founder and first president of the BioLogos foundation which seeks to promote theistic evolution as the explanation for origins.

*“Since its birth in 2007, BioLogos has become a leading science and faith organization. Our enduring mission is to invite the church and the world to see the harmony between science and biblical faith as we present an evolutionary understanding of God’s creation.”*¹⁴⁹²

Collins describes his conversion to Christianity from being an atheist at the age of 27 in the opening chapter of his book.¹⁴⁹³ However His conversion did not stop him holding to evolution. He argues that there is no conflict between what modern science believes and what the Biblical declares.¹⁴⁹⁴ He states, for example, that *“the principles of faith are, in fact, complimentary with the principles of science.”*¹⁴⁹⁵

Science comes first.

For Collins science is supreme when it comes to examining the natural world. He believes (naively) that science is self-correcting and advances closer and closer to the truth.¹⁴⁹⁶ In a rather telling statement he operates under the false notion that newer findings which contradict a theory will knock it out as a contender for the truth. This is how he states his case:

1491 **Francis Collins.** The Language of God: A Scientist Presents Evidence for Belief. 2007. Pocket Books.
<https://www.genome.gov/12011238/an-overview-of-the-human-genome-project/>

1492 <https://biologos.org/about-us/our-history/>

1493 **Francis Collins.** The Language of God. P11. **Karl W. Giberson.** Evolution, the Bible, and the Book of Nature. A conversation with Francis Collins. Christianity Today. July/August 2009.

Online: <http://www.ctlibrary.com/bc/2009/julaug/evolutionthebibleandthebookofnature.html>

1494 **Francis Collins.** The Language of God. P3,81,201.

1495 **Francis Collins.** The Language of God. P3.

1496 **Francis Collins.** The Language of God. P228.

*“Science is progressive and self-correcting: no significantly erroneous conclusions or false hypotheses can be sustained for long, as newer observations will ultimately knock down incorrect constructs.”*¹⁴⁹⁷

It would be laborious to show that the above statement is hopelessly flawed. The history of science is strewn with theories which were held to tenaciously in spite of opposing evidence. In actual fact, the theory of evolution itself is one case in point. The evidence of the fossils, of DNA and genetics and the (much more important) evidence from Scripture are more than enough to discredit the whole notion of evolution. However Collins asserts that science is *“the only reliable way to understand the natural world,”* and he adds later on in the book, that it is *“the only legitimate way to investigate the natural world.”*¹⁴⁹⁸

Science is not just supreme for Collins, it is identical to general revelation. When scientists discover things they are simply reading God's book of nature. Collins makes such a position a matter of faith. He states that:

*“Science reveals that the universe, our own planet, and life itself are engaged in an evolutionary process.”*¹⁴⁹⁹

There is no room for manoeuvre here. Furthermore, he believes strongly in the integrity and the reliability of the human mind when it comes to reading the book of nature, and he attributes the one-to-one correspondence between science and general revelation to God:

*“I do not believe that the God who created all the universe, and who communes with His people through prayer and spiritual insight, would expect us to deny the obvious truths of the natural world that science has revealed to us, in order to prove our love to Him.”*¹⁵⁰⁰

The truths from the natural world that science has revealed to us are *“obvious”*! When it comes to the Bible, Collins takes a very different approach. He has such a firm view that science is true (at least overall), that Scripture must therefore be interpreted in the light of these truths. Collins asserts that *“evolution by descent from a common ancestor is clearly true.”*¹⁵⁰¹ Since evolution must be true, the Bible must accommodate this fact.¹⁵⁰² As a consequence of such a position, Collins asserts

1497 **Francis Collins.** The Language of God. P58.

1498 **Francis Collins.** The Language of God. P6,228.

1499 **Francis Collins.** The Language of God. P45.

1500 **Francis Collins.** The Language of God. P210.

1501 In a CNN US special on **Frances Collins.** <http://www.cnn.com/2007/US/04/03/collins.commentary/index.html>

1502 **Francis Collins.** The Language of God. P88,107,133.

that the language of Genesis is “*unquestionably ... poetic.*”¹⁵⁰³ In fact he argues that whilst some parts of the Bible are historical and record eye witness accounts, “*others, such as the stories of Job and Jonah, and of Adam and Eve, frankly do not carry that same historical ring.*”¹⁵⁰⁴ How does he come to such a view? In essence what governs his approach to the text is whether it passes muster on scientific grounds.

The two separate realms?

Given these twin presuppositions, that science is supreme when it comes to the physical world, and that the Bible is not always to be taken literally or as an historical document, Collins opts for a complimentary view of the two disciplines. In the early part of his book he puts it like this:

*“Science's domain is to explore nature. God's domain is in the spiritual world, a realm not possible to explore with the tools and language of science. It must be examined with the heart, the mind, and the soul.”*¹⁵⁰⁵

These two areas or realms are distinct for Collins but, “*the mind must find a way to embrace both realms.*”¹⁵⁰⁶ But we must be under no illusions about Collins' position. We cannot take Genesis literally because science has discovered the “truth” of evolution. Collins is then forced into a dual approach so that science is actually likened to a form of worship!

*“So attaching oneself to such literal interpretations in the face of compelling scientific evidence pointing to the ancient age of Earth and the relatedness of living things by evolution seems neither wise nor necessary for the believer. I have found there is a wonderful harmony in the complementary truths of science and faith. The God of the Bible is also the God of the genome. God can be found in the cathedral or in the laboratory. By investigating God's majestic and awesome creation, science can actually be a means of worship.”*¹⁵⁰⁷

Theistic evolution is the only option for the scientist who wants to be both intellectually fulfilled and spiritually alive. It is only the scientist-believer who can truly worship!

“This perspective [theistic evolution] makes it possible for the scientist-believer to be intellectually fulfilled and spiritually alive, both worshipping God and using the

1503 **Francis Collins.** The Language of God. P83.

1504 **Francis Collins.** The Language of God. P209.

1505 **Francis Collins.** The Language of God. P6.

1506 **Francis Collins.** The Language of God. P6.

1507 In a CNN US special on **Frances Collins.** <http://www.cnn.com/2007/US/04/03/collins.commentary/index.html>

tools of science to uncover some of the awesome mysteries of His creation."¹⁵⁰⁸

What then of those who hold to 6,000 years and a 6-day creation?¹⁵⁰⁹ Collins is dismissive. If the Young Earth Creationists' claims were true, Collins suggests that:¹⁵¹⁰

*"... it would lead to a complete and irreversible collapse of the sciences of physics, chemistry, cosmology, geology, and biology."*¹⁵¹¹

Of course this statement is true but only because modern science has charted a course in denial of God and supernatural things. How wonderful it would be if we could start again and pursue investigation of the world on godly, Biblical principles! In a scathing conclusion Collins decides that:

*"the YEC perspective is the equivalent of insisting that two plus two is really not equal to four."*¹⁵¹²

Such assertions are made only because of the prior commitment to evolution and all that science has discovered. They are scurrilous and wholly fallacious. If we start with the assumption that science, evolution and all that science says is true, we are left in the position of interpreting the Bible from the ground and foundation of what science has determined. Is this fair? Well that all depends on what you really believe about God, faith and the Bible. The Bible itself is rather more demanding than Collins and those like him suggest. We are not to fall into line with whatever this world states or asserts, whether they be religious fanatics, spiritualist mediums, authoritarian leaders or the philosophers and scientists of this age. We ought always to begin with what God has revealed and interpret the "natural" world in light of what God says.

Personal testimony.

It is important to end this piece with Collins' own words on why he opted for theistic evolution. In an interview with Karl Giberson reported in *Christianity Today* in 2009 Collins confesses:

"But I couldn't take Genesis literally because I had come to the scientific world view

1508 **Francis Collins.** The Language of God. P201.

1509 Collins terms those who hold this position: "Young Earth Creationism."

1510 Hereafter referred to as YEC.

1511 **Francis Collins.** The Language of God. P209.P174.

1512 **Francis Collins.** The Language of God. P209.P174.

before I came to the spiritual. I felt that, once I arrived at the sense that God was real and that God was the source of all truth, then, just by definition, there could not be a conflict."¹⁵¹³

Since Collins believes that science is always true, this governs his views of the Bible. We cannot attach ourselves to a "*literal interpretation*" of Genesis because the "*scientific evidence*" for evolution is "*compelling*" and to do so would be "*neither wise nor necessary*."¹⁵¹⁴ Thus Collins has failed to allow Scripture to challenge his world view. He has not come to the word of God as the Lord would have him do.

1513 **Karl W. Giberson.** Evolution, the Bible, and the Book of Nature. A conversation with Francis Collins.

1514 **Francis Collins.** Why this scientist believes in God. CNN.com international. POSTED: 1337 GMT (2137 HKT), April 6, 2007. Online: <http://edition.cnn.com/2007/US/04/03/collins.commentary/index.html>

Chapter 22: Tim Keller.

Theistic evolution with strings.

Tim Keller is one of the recent breed of Christians referred to as the “New Calvinists.” His fame and popularity is widespread across the western Christian world. I will not discuss Keller's views at length, but they are mentioned in this work because of the esteem with which he is held by many. I have accessed just two articles for this work, one published on the BioLogos website, and another taken from the Gospel Coalition website.¹⁵¹⁵

Keller presents to the world as a great Christian leader whose preaching and teaching have appealed to the great and the good. As such he must show that his gospel is none other than the gospel of God, the gospel that Paul proclaimed in his writings.¹⁵¹⁶ To honour this he needs to accept Paul's connection between Christ and Adam as expressed in Romans and 1Corinthians. However, without explaining himself Keller simply asserts that:

“Belief in evolution can be compatible with a belief in a historical fall and a literal Adam and Eve.”¹⁵¹⁷

Recently Peter Enns has shown that a theistic evolutionary view demands that the connection between Adam and Christ be re-interpreted, if not jettisoned.¹⁵¹⁸ Keller does not state how an evolutionary view can accommodate a *real* Adam and a *real* fall. He thus wants to be in both camps, the evangelical world where a literal Adam is required because of what Paul states, and an evolutionary world so as not to be seen as the odd-man out.

To begin with we discover that Keller does not accept Genesis 1 as literal history because he claims that the author did not expect his readers to take it that way.¹⁵¹⁹ One wonders immediately how Keller can make such a claim? Does he have access to the original writer's audience? In stark contrast, other theistic evolutionists such John Lennox have noted that people the world over, and

1515 **Tim Keller.** Creation, Evolution, and Christian Laypeople. <https://biologos.org/articles/creation-evolution-and-christian-laypeople/> PDF version: https://wp.biollogos.org/wp-content/uploads/2019/02/Keller_white_paper_compressed.pdf. **Tim Keller.** Sinned in a Literal Adam, Raised in a Literal Christ. <https://www.thegospelcoalition.org/article/sinned-in-a-literal-adam-raised-in-a-literal-christ/>

1516 Romans 1:1,9,16; 2:16.

1517 **Tim Keller.** Sinned in a Literal Adam, Raised in a Literal Christ.

1518 See chapter 27.

1519 **Tim Keller.** Creation, Evolution, and Christian Laypeople.

throughout time, have always taken it as historical because that is how it reads.¹⁵²⁰

Since Genesis 1 is not historical in Keller's view but a form of poetry, it comes as little surprise to read that he denies a literal 6-day creation.

“Genesis 1 does not teach that God made the world in six twenty-four hour days.”¹⁵²¹

Although he claims to be moved by the text alone, it is abundantly clear that he is influenced by his prior commitment to evolution.¹⁵²² Since we cannot deny what science says concerning origins, Keller believes, we are duty bound to interpret the text with such 'scientific truth' as foundation. Keller is keen as a pastor to guide the layperson through the morass of views, but he has naïvely accepted that the scientists and other professionals are the experts.

“In short, if I as a pastor want to help both believers and inquirers to relate science and faith coherently, I must read the works of scientists, exegetes, philosophers, and theologians ... distilling and understanding the writings of scholars in various disciplines ... to be a bridge between the world of scholarship and the world of the street and the pew.”¹⁵²³

Herein lies the great flaw. Of course a pastor must be aware of what the world teaches and this is an onerous task, but his remit is not just to *distil* this worldly wisdom and pass it on. His task is to preach the Scriptures and bring what God has to say about the world's views to his flock. This is a very different task. Keller argues that his job is simply to draw from a variety of sources (“*scientists, exegetes, philosophers, and theologians*”) and teach his flock out of these. Rather his job is to draw from the single true source (God “*the fountain of living waters*”) and allow that to redirect, counter and respond to all the so-called experts. Keller has made the classic mistake of assuming that what the experts of the world bring is truth, or at least neutral.¹⁵²⁴

Keller also asserts that the two creation accounts of Genesis 1 and 2 are wholly incompatible. For some strange reason he seems to believe that the two are conflicting if taken historically. His preference appears to be to accept the second creation account as being a literal record of events, but by taking such a view it means that you are forced to deny that Genesis 1 is

1520 **John C. Lennox.** Seven Days that Divide the World. P139. He writes: “*It is surely fair to say that most people throughout the ages have understood Genesis 1:1 to be referring to the creation of the physical universe, and therefore making a cosmological statement that is understandable to all ages and cultures.*”

1521 **Tim Keller.** Creation, Evolution, and Christian Laypeople.

1522 **Tim Keller.** Creation, Evolution, and Christian Laypeople.

1523 **Tim Keller.** Creation, Evolution, and Christian Laypeople.

1524 Jeremiah 2:13. Why go to the polluted waters of Egypt (the world)? Jeremiah 2:18.

historically true.

*“The conclusion—we may read the order of events as literal in Genesis 2 but not in Genesis 1, or (much, much more unlikely) we may read them as literal in Genesis 1 but not in Genesis 2. But in any case, you can’t read them both as straightforward accounts of historical events. Indeed, if they are both to be read literalistically, why would the author have combined the accounts, since they are (on that reading) incompatible?”*¹⁵²⁵

Such assertions are astonishing. I have absolutely no problem understanding that Genesis 1:1-2:4a is an account of initial creation (probably penned by the Lord Himself and given to Adam), whilst Genesis 2:4b-25 gives us (in the main) the details of what happened on day 6 when God created mankind. This account was most probably written by Adam (under the inspiration of the Holy Spirit – see Genesis 5:1a). The two accounts are perfectly compatible and show wonderfully how the structure of Genesis is truly an historical document. It is quite natural for those who report events to begin with an account and give an overview, and then to retrace their steps (back-track a little) to fill in the details. The same type of thing occurs in other places in Genesis. For example Genesis 6:1-9a is the account probably penned by Noah (under God's inspiration), whilst Genesis 6:9b-f is the account probably penned by Noah's sons (see Genesis 10:1a). The two accounts overlap in details but this is probably because Noah was responsible for the earlier part and Noah's sons for the later part of chapter 6. In support of this the reader should consider how Noah is described. In Genesis 6:8 Noah is described as one who “*found grace in the eyes of the Lord,*” whilst in Genesis 6:9b he is described as being “*a just man, perfect in his generations*” and that he “*walked with God.*” The former assessment is one we could imagine Noah making concerning himself. The latter is one we might expect his sons to have made.

Keller's position is weak and not cogently developed. His acceptance of the modern scientific view of origins has forced him to adopt theistic evolution and a poetic view of Genesis. This not only contradicts the plain facts of the case, for Genesis must be taken as history, but also leads him to some very difficult questions, (Why is there suffering and death? Were Adam and Eve literal? Is the human race one or many?). In attempting to address these he has destroyed the one foundation (Scripture) from which true answers may be found.

1525 Tim Keller. Creation, Evolution, and Christian Laypeople.

Chapter 23: Denis Alexander.

Theistic evolution. Genesis is figurative.

Denis Alexander claims to be an evangelical Christian who believes “*that the Bible is the inspired Word of God from cover to cover.*”¹⁵²⁶ Later in discussing Genesis he states: “*I personally take Scripture as my final authority in all matters of faith and conduct.*”¹⁵²⁷ With this last statement we note that his view of inspiration is qualified. Later when we analyse Alexander's view of hermeneutics we shall see that his stated view on Scripture is very different to a Biblical view. A Christian since the age of 13, Alexander describes an experience that many seem to have gone through, namely, that his upbringing as a Christian was not sufficient for the onslaught of secular science. Here is how he describes his upbringing in the faith:

*“In the evangelical circles in which I was raised it was common to believe that there was no pain, disease or suffering of any kind before the Fall, but that all these came into being following Adam and Eve's disobedience. ... As I grew in the Christian faith, the position I had unthinkingly adopted seemed increasingly untenable. I started studying biology and learned incontrovertible evidence, which we have already surveyed in this book, that death has been present on the earth since the beginning of life, and that indeed the two go together, we cannot have one without the other. I also learnt about fossils and visited the Natural History Museum to see the thousands of fossil specimens of blood-containing animals that had died millions of years ago.”*¹⁵²⁸

Notice from this quote that he adopted the Christian position (which he does not detail), “*unthinkingly.*” That is rather telling. He then began studying the science of biology and became a firm believer in the concept of evolution because of its “*incontrovertible evidence.*”¹⁵²⁹

The book which we shall examine as representing Alexander's view has the title: ***Creation or Evolution do we have to choose?*** In a sense this tells you all you need to know! Such a title gives the clear signal both that we can stand as arbiter and judge over the matter, and also that we ought not to eliminate one or the other but have both! When you come to examine the book it is

1526 Denis Alexander. Creation or Evolution. Do we have to choose? 2008. Monarch Books. P11.
<https://biologos.org/people/denis-alexander>.

1527 Denis Alexander. Creation or Evolution. Do we have to choose? P151.

1528 Denis Alexander. Creation or Evolution. Do we have to choose? P270,271.

1529 Denis Alexander. Creation or Evolution. Do we have to choose? P270,271.

very clear that evolution takes priority, so the real answer to his question, as far as he is concerned, is that you must choose evolution. He defines evolution as follows:

“If we put the generation of genetic diversity together with natural selection, then the overall process of evolution can be succinctly summarised in three short phrases:

- *Genes mutate*
- *Individuals are selected*
- *Populations evolve.*”¹⁵³⁰

Alexander then describes how evolution would look if the entire span of so-called evolutionary history were squeezed into a single day. According to this scheme “*hominids*” (supposed precursors to humans), appeared two minutes before the end of the day, and humans appear only “*three seconds before midnight,*” within the entire span of human history “*being compressed into less than one fifth of the second before midnight.*”¹⁵³¹ Such a view makes a mockery of the Lord's word through Isaiah:

Have you not known? Have you not heard? Has it not been told you from the beginning? Have you not understood from the foundations of the earth? ¹⁵³²

Come near to Me, hear this: I have not spoken in secret from the beginning; from the time that it was, I was there. And now the Lord God and His Spirit have sent Me.¹⁵³³

For since the beginning of the world *men* have not heard nor perceived by the ear, nor has the eye seen any God besides You, who acts for the one who waits for Him.
¹⁵³⁴

Or what of these words preached by Peter when the lame man was healed in Acts 3?

... whom heaven must receive until the times of restoration of all things, which God has spoken by the mouth of all His holy prophets since the world began. ¹⁵³⁵

If God spoke “*from the beginning,*” “*from the foundation of the earth,*” and “*since the world began,*” does this not indicate that man was created and extant from that very time?

1530 **Denis Alexander.** Creation or Evolution. Do we have to choose? P84,85.

1531 **Denis Alexander.** Creation or Evolution. Do we have to choose? P86-88.

1532 Isaiah 40:21.

1533 Isaiah 48:16.

1534 Isaiah 64:4.

1535 Acts 3:21.

Evolution – an assumed truth.

It comes as no surprise to find that Alexander starts his discussion from the view point of modern science, and, in particular, the science of evolutionary biology. Alexander attempts to defend the idea that historical science is a legitimate form of scientific endeavour. He writes:

*“Biologists are in a very similar position with respect to the theory of evolution. They were not there to observe the millions of years of gradual evolution, nor all those incremental steps leading to speciation, but they can make an 'inference to the best explanation' whereby firm conclusions can be drawn based on the wealth of evidence available. The reason that evolutionary theory is so powerful is that it explains so much so well ...”*¹⁵³⁶

However what this amounts to is viewing the various strands of evidence as though evolution had happened. His evolutionary view is very evident in the way he writes, but he glosses over any assumptions made with statements of fact. For example, he repeatedly informs us that the genome is merely a record of evolutionary history.¹⁵³⁷ In several statements he makes what amounts to the most stupendous of claims, all based on the assumption that the genetic code in man and animals are derived from a common ancestor. He writes:

*“For example our own genomes are loaded with 'pseudogenes,' stretches of DNA that are so similar to functional genes that there is no doubt where they came from, yet so full of mutations that they are functionally incapable of making protein, as can be shown experimentally in the laboratory. Just taking chromosome 7 alone as an example, this stretch of DNA contain 1,150 protein-coding genes, but also has 941 pseudogenes, sitting there like genetic fossils of our evolutionary past.”*¹⁵³⁸

Now such assertions about the nature of the genetic code in DNA, that there are “pseudogenes,” and that these are the remnants of our evolutionary passed, are simply assertions and nothing else. Alexander claims that we are most certainly related to the apes because of genetic data:

“First it should be emphasised that our shared inheritance with the apes is one of the most certain conclusions of contemporary biology. The reason for being so sure is because of the kind of comparative genomics that we introduced in Chapter Three. The record of our evolutionary past is indelibly inscribed within the DNA of every cell of our bodies. We are all walking genetic fossil museums! I find it ironic that people who deny our shared inheritance with the apes are carrying around in their

1536 **Denis Alexander.** Creation or Evolution. Do we have to choose? P136,137.

1537 **Denis Alexander.** Creation or Evolution. Do we have to choose? P108,109,112,119,138,200.

1538 **Denis Alexander.** Creation or Evolution. Do we have to choose? P112.

own bodies about 10 million million (10^{13}) copies (the DNA content of each cell) of their evolutionary history."¹⁵³⁹

The idea that we are related to apes because we share similar genetic information is an assumption. Why not assume that whomever designed apes and humans (i.e. the Creator, God) used the same basic templates to construct their similar but differing body plans? The various car manufacturers often use very similar components and design features to produce widely differing vehicles and yet no one would dream of saying that a Robin Reliant evolved into a Bugatti Veyron!

A little later in his work he discusses the fossil record, which he accepts has many gaps. But, according to Alexander, even if we had no fossils at all we would still be able to reconstruct evolutionary history from genomic studies. In the following rather candid statement he seems to make an assertion which he then has to recall.

*"In fact if there were no fossils at all, we would still be able to construct much of evolutionary history just from genetics. Also, unlike the fossil record, there are no gaps in the genetic record. By that I do not mean that we have a complete record of all the genome sequences of every species that ever lived – of course we do not and never will have because 99% of them are no longer around to get DNA samples. Nevertheless, in the 1% that remains we have a DNA record, including disused genetic fossils, that take us back to the dawn of life."*¹⁵⁴⁰

There are no gaps in the historical record from genetics even though we only have 1% of all the available data! Again Alexander resorts to assertion, for he then assumes that the 1% data available contains all we need to know! These are remarkable statements of faith. There is no proof for such assertions, but they are believed because so many eminent biologists have stated and restated them. It amounts really to viewing the genetic data with the spectacles of evolution assumed. The data cannot speak or inform us of what is true. This is the great problem of many scientists. They are so taken in by the propaganda of science that they think they are being lead by the evidence.

In this next quote we find biologists have always looked with envy at the data drawn from the heavens, even though the idea that looking deep into space means looking back into time is itself an assumption:

"And just as astronomers can stare with their telescopes at light that left stars on the other side of the universe millions of light years away, so biologists can stare into

1539 **Denis Alexander.** Creation or Evolution. Do we have to choose? P200.

1540 **Denis Alexander.** Creation or Evolution. Do we have to choose? P119.

our own genomes and there read the ancient language of the genes stretching back billions of years into our evolutionary past."¹⁵⁴¹

Creation is not finished.

Now because of his commitment to evolution, Alexander works hard to show that the Bible refers to God's creative acts as "*an on-going activity*," rather than something that occurred in the past.¹⁵⁴² Such a view would, of course, suit a belief in evolution. According to Alexander, evolution has been, effectively, baptised into the Christian faith.¹⁵⁴³ On the subject of miracles he appears to take a believing approach except where the subject is creation. Thus he states, for example, that:

*"When Jesus intervenes to turn water into wine, or calm a rough sea, or raise Lazarus from the dead, these miraculous signs stand out as such because they are so different from God's normal way of working in creation."*¹⁵⁴⁴

However whereas miraculous language is used frequently in the Exodus and at other especial times, according to Alexander, no such language is used when creation is mentioned. He states:

*"So it is striking in this context, in which miraculous language was used quite frequently, that the writers of neither the Old nor the New Testament generally view God's creative work as 'miraculous.' Instead God's normal work in creation provides the backcloth against which his unusual workings, as in the plagues in Egypt and the crossing of the Red or Reed) Sea. Can more readily be appreciated as miracles."*¹⁵⁴⁵

Is such an assertion true? Well Alexander contradicts himself once again because he acknowledges that such language is, in point of fact, used by Job:

9 He made the Bear, Orion, and the Pleiades, and the chambers of the south; **10** He does great things past finding out, yes, wonders without number.¹⁵⁴⁶

It is significant, I believe, that the word "sign," which is very often indicative of miracles, is found in the first chapter of Genesis. Thus the sun and the moon were given as "*signs*" by the Lord.¹⁵⁴⁷ Of course many would suggest that the intention is merely as a signpost, but then that is what a miracle

1541 **Denis Alexander.** Creation or Evolution. Do we have to choose? P138.

1542 **Denis Alexander.** Creation or Evolution. Do we have to choose? P35. See also P25.

1543 **Denis Alexander.** Creation or Evolution. Do we have to choose? P173,181.

1544 **Denis Alexander.** Creation or Evolution. Do we have to choose? P38.

1545 **Denis Alexander.** Creation or Evolution. Do we have to choose? P37.

1546 Job 9:9,10.

1547 Genesis 1:14.

is meant to be.¹⁵⁴⁸ But apart from these considerations, it is often suggested that the Lord's work of miracles at the Exodus were pointers back to creation. John L. Mackay in his commentary on Exodus makes the following connection:

*“The ultimate background against which the plagues have to be understood is ... The battle ... between Yahweh and the gods of Egypt. Who is the true God? Who is the sovereign ruler of Egypt and of the universe?”*¹⁵⁴⁹

Creation as revealed in Genesis 1 has always been considered as a miraculous work of God. This comes, of course, from the fact that before Genesis 1:1 there was nothing at all. All things were made by the Word of God and nothing was made without Him.¹⁵⁵⁰ As such, creation clearly constitutes a miraculous event. But to demonstrate the idea of creation being a work of miracle we need look no further than Psalm 33:

6 By the word of the Lord the heavens were made, and all the host of them by the breath of His mouth. **7** He gathers the waters of the sea together as a heap; He lays up the deep in storehouses. **8** Let all the earth fear the Lord; let all the inhabitants of the world stand in awe of Him. **9** For He spoke, and it was *done*; He commanded, and it stood fast.¹⁵⁵¹

The Psalmist must have had Genesis 1 in view here. Creation has come about by “*the word of the Lord*” as Genesis declares ten times, and when the Lord speaks, the result is an immediate response “*He spoke, and it was done; He commanded, and it stood fast.*” Can anything be more clear? Then further, in Nehemiah we have a statement which refers to both God's creation and also His preservation, or upholding of all things:

You alone *are* the Lord; You have made heaven, the heaven of heavens, with all their host, the earth and everything on it, the seas and all that is in them, and You preserve them all. The host of heaven worships You.¹⁵⁵²

In this text we have a distinction between initial creation and the Lord's on-going work of preservation. Making such a distinction means that any concept of progressive creation is ruled out of court. We could also look to the Lord's words to Job:

1548 In Isaiah 8:18, the prophet speaks of himself and his children as signs in Israel. Presuming that they were true believers (i.e. regenerated) would indicate them to be true and real miracles of God's grace.

1549 **John L. Mackay.** Exodus. A Mentor Commentary. Christian Focus Publications. 2001. P142.

1550 John 1:1-3.

1551 Psalm 33:6-9.

1552 Nehemiah 9:6.

Where were you when I laid the foundations of the earth? Tell *Me*, if you have understanding.¹⁵⁵³

Or what of our own individual creation? David in Psalm 139 declares that we are “*fearfully and wonderfully made*,” so that God's works can be described as “*marvellous*.”¹⁵⁵⁴ Finally, what shall we say concerning Christ and His miracles? What was their purpose if not to demonstrate clearly that He was God who created all things miraculously?

On Scripture.

Now Alexander so favours evolution that those who oppose him are viewed as being an embarrassment:

*“Christians who make it their mission to attack evolution, in the mistaken assumption that it is anti-God, are embarrassing and bring the gospel into disrepute.”*¹⁵⁵⁵

Thus Alexander begins his work: ***Creation or Evolution, do we have to choose?*** by assuming that evolution is a given. How then does he view the Scriptures? We have already noted that he lays claim to being an evangelical who believes in the doctrine of inspiration, but he has limited his view of inspiration to covering only “*matters of faith and conduct*.”¹⁵⁵⁶ Earlier in the book he quotes John Wilkins of the seventeenth century, an early member of the Royal Society, who sought to limit Scripture in a similar way:

*“If we could be content to let it be perfect for that end unto which it was intended, for a Rule of our Faith and Obedience, and not to stretch it also to be a Judge of such Natural Truths as are to be found out by our own Industry and Experience.”*¹⁵⁵⁷

Later he suggests:

*“It is indeed a tempting thought, that everything we really need to know is included in the pages of the Bible, and of course that is certainly the case for our salvation and growth in Christ.”*¹⁵⁵⁸

1553 Job 38:4.

1554 Psalm 139:14.

1555 **Denis Alexander.** Creation or Evolution. Do we have to choose? P352.

1556 **Denis Alexander.** Creation or Evolution. Do we have to choose? P151.

1557 **Denis Alexander.** Creation or Evolution. Do we have to choose? P45.

1558 **Denis Alexander.** Creation or Evolution. Do we have to choose? P147,148.

At once we are presented with a truncated Scriptures! How do the above ideas fare with statements in Scripture which indicate a very wide scope?¹⁵⁵⁹ Why would God limit Himself in His revelation?

Now Alexander's view of how to interpret the Bible (hermeneutics) is essentially that of secular science. He begins the discussion by pouring scorn on the idea that much of the Bible is easily grasped by believers. We are all involved in interpretation.¹⁵⁶⁰ Now whilst this is true Alexander forgets that Scripture is (in the main) quite plain. We have already had cause to mention how the Lord rebuked the Sadducees for not believing in the resurrection when we looked at Tremper Longman's view point earlier, but it is worth repeating here. The Lord said to the Sadducees:

But concerning the resurrection of the dead, have you not read what was spoken to you by God, saying ...¹⁵⁶¹

Our Lord then points the Sadducees to the book of Exodus and claims that any who read that account was, in fact, hearing God speak. In other words the Bible, when read or proclaimed, is God speaking. But then also we must note that Alexander fails to discuss the fact that evolutionary biology is an interpretation of the evidence (be it genetics, fossils or whatever).

Alexander gives us his key hermeneutical principles, and in none of these can we find any reference to Scripture. His five principles are as follows:

*“What kind of language is used?
What kind of literature is it?
What is the expected audience?
What is the purpose of the text?
What relevant extra-textual knowledge is there?”*¹⁵⁶²

We do not deny that four of these are useful, (the last is to be rejected), but that he does not reference the many hermeneutical tools that God reveals to us in His word is striking. According to Alexander we cannot come to Genesis except through the culture and documents of the ANE.¹⁵⁶³ Such a view leads us to consider the Bible as a very human book, which requires the “*extra-textual knowledge*” he refers to in his fifth hermeneutical principle. When Alexander speaks of the human

1559 Psalm 119:96; Jeremiah 33:3; Colossians 2:2,3; 2Peter 1:2-4;

1560 **Denis Alexander.** Creation or Evolution. Do we have to choose? P16.

1561 Matthew 22:31.

1562 **Denis Alexander.** Creation or Evolution. Do we have to choose? P18.

1563 **Denis Alexander.** Creation or Evolution. Do we have to choose? P151,152.

authors, he demands that these are not robotic nor are they given a message automatically. Alexander makes an interesting (common) mistake when discussing inspiration. He states:

*“Christians believe God inspired the authors of the 66 books of the Bible to write texts over a period of up to 1500 years ...”*¹⁵⁶⁴

The fact of the matter is that it is the Scriptures which are inspired and not the authors. We do not accept any mechanical dictation theory of inspiration, nor any robotic one. But neither do we accept that the Lord merely took hold of various writers and authors and baptised their efforts as worthy of being read by God's people. There is something rather wonderful about how the Lord inspired His word and moved men to speak as He willed. The Lord never subverted the personalities of the prophets, but the words He brought find their origin not in men but in the Lord Himself. Peter puts it like this:

For no prophecy was ever produced by the will of man, but men spoke from God as they were carried along by the Holy Spirit.¹⁵⁶⁵

Alexander's view of inspiration is not the Biblical one and leans heavily on a secular mindset.

Science and theology.

With a commitment to evolution and a faith in an on-going creation by God, Alexander argues that theology and science are two distinct disciplines.¹⁵⁶⁶ This idea is not worked out in any detail but he does insist that “*science*,” and “*theology*,” ought not to be mixed nor confused.¹⁵⁶⁷ With reference to the Genesis text, this is not science and must therefore be deemed as “*theology*.”¹⁵⁶⁸ We have here, then, the classic liberal view of categorising things into distinct niches. The idea that something can be theological but not scientific or true is problematic, to say the least. Alexander then goes on to demand that Genesis is “*figurative*,” by which he wants us to understand that it isn't literal.¹⁵⁶⁹ The “*days*” of Genesis 1 are not real days but must be “*interpreted figuratively*.”¹⁵⁷⁰ Since Genesis 1 and Genesis 2 are incompatible we cannot push chronology.¹⁵⁷¹ Thus Alexander argues that even though we cannot come to a satisfactory conclusion on the

1564 **Denis Alexander.** Creation or Evolution. Do we have to choose? P19.

1565 2Peter 1:21, ESV.

1566 **Denis Alexander.** Creation or Evolution. Do we have to choose? P42.

1567 **Denis Alexander.** Creation or Evolution. Do we have to choose? P181. See also P351,352.

1568 **Denis Alexander.** Creation or Evolution. Do we have to choose? P160,166.

1569 **Denis Alexander.** Creation or Evolution. Do we have to choose? P157,160,197,257.

1570 **Denis Alexander.** Creation or Evolution. Do we have to choose? P155.

1571 **Denis Alexander.** Creation or Evolution. Do we have to choose? P164.

relationship between Genesis 1 and Genesis 2, nevertheless the early chapters of Genesis have “no interest in providing us with chronology.”¹⁵⁷²

Eve, surgery and death.

On the creation of Eve we are not to understand the text as describing a literal operation, for ancient man had no concept of surgical procedures. In saying this Alexander demonstrates his reliance on evolution. Primitive (less evolved) man could not possibly have carried out such an operation. Alexander writes:

*“Now if we take this obviously figurative and literary passage, with all its linguistic plays on words, as referring to some early Near Eastern operation during which God both provides the anaesthetic and does the surgical manipulation of a male rib to generate a woman, then we will have missed the point of the text by reading it through modernist spectacles.”*¹⁵⁷³

The only way, then, to view the early chapters of Genesis is to view them as a literary production in which the writer describes the forming of order from an original chaos.¹⁵⁷⁴ Much further on in his book he writes:

*“In what follows we shall continue to interpret the first few chapters of Genesis as a text expressed in figurative language written for the purpose of conveying theological truths accessible to all people in whatever era or culture. As already emphasised, the figurative interpretation of Genesis 2 is not in response to evolution, but an expository tradition with deep roots in church history.”*¹⁵⁷⁵

Because evolution requires death, and further, because it does not pinpoint any distinct time in history for an individual like Adam to be the focus of attention, Alexander has to work hard to address the issues of death, the fall, and the first human pair (Adam and Eve). By deciding that Genesis 1 and Genesis 2 are incompatible, Alexander makes the unusual assertion that the “man” of Genesis 1:27 is mankind, (a group of humans) whilst Genesis 2 refers to personal man (an individual). Such a division is conveniently made simply to accommodate evolution.

On death Alexander attempts to hold that physical death is a natural thing which has always been with us since creation.¹⁵⁷⁶ Having denied that the true context of the early chapters of Genesis

1572 **Denis Alexander.** Creation or Evolution. Do we have to choose? P165,234.

1573 **Denis Alexander.** Creation or Evolution. Do we have to choose? P197.

1574 **Denis Alexander.** Creation or Evolution. Do we have to choose? P154.

1575 **Denis Alexander.** Creation or Evolution. Do we have to choose? P257,

1576 **Denis Alexander.** Creation or Evolution. Do we have to choose? P244,246,247.

is that they were written under God's guide from the very beginning of time, Alexander is free to speculate and extrapolate within the Genesis narrative.

“If one takes the Genesis story within its context, then God mandates the eating of plants by animals and humans, so biological death is implicit in this passage (Genesis 1:29-30). it is unlikely that this text refers to vegetarianism, more likely that it is highlighting the theological point that animal sacrifice was necessary only for those who had sinned. The use of animals for food and for sacrifice is closely linked as the Genesis text progresses. It was God who provided Adam and Eve with garments made from animal skin after the Fall (3:21). Abel kept and sacrificed sheep (4:2-4) and Noah distinguished clean and unclean animals (7:2). the first thing Noah does when he finally leaves the Ark is to sacrifice some of the rescued clean animals and birds (8:20), and this is followed by the renewal of God's covenant to Noah in which he expressly mandates the eating of all animals, except for their blood (9:3-4). but in all these accounts, and indeed in the rest of Scripture, there is never any indication that there was no physical death or eating of meat before the Fall.”¹⁵⁷⁷

He argues that the Old Testament considers a normal life to be long lived followed by physical death:

“Nowhere in the Old Testament is there the slightest suggestion that the physical death of either animals or humans, after a reasonable span of years, is anything other than the normal patterned by God for this earth.”¹⁵⁷⁸

Since he has committed to evolution he can then argue that biological (physical) death was a normal part of life so that God's mention of eating vegetation in Genesis 1:29-30 is:

“... highlighting the theological point that animal sacrifice was necessary only for those who had sinned.”¹⁵⁷⁹

In such a way Alexander abandons normal exegesis. In fact he has violated one of his own principles, where he stated:

“If we read the early chapters of Genesis and end up discussing evolution, then we've definitely lost the plot! These key passages are nothing to do with evolution.”¹⁵⁸⁰

1577 **Denis Alexander.** Creation or Evolution. Do we have to choose? P271,272.

1578 **Denis Alexander.** Creation or Evolution. Do we have to choose? P246,247.

1579 **Denis Alexander.** Creation or Evolution. Do we have to choose? P271.

1580 **Denis Alexander.** Creation or Evolution. Do we have to choose? P167.

However, if he can extend Genesis 1 to include death and even sacrifice, he must have done this for the purpose of accommodating evolution. Alexander states, from his scientific perspective that:

“... carbon-based life ... is impossible without death.”¹⁵⁸¹

In fact he argues that:

“... without mutations we wouldn't be here because there would have been no diversity upon which natural selection could have acted.”¹⁵⁸²

Rather infuriatingly, because of his belief in evolution that death is part of life, Alexander makes death a pre-requisite for life:

“Physical death is intrinsic to the purposes of God for human life on this earth, and we cannot inherit the kingdom of God without going through its portal.”¹⁵⁸³

It is hard to treat such subterfuge with any degree of seriousness. How can something that is clearly pictured as an enemy in Scripture (and death is surely that) be that through which God enacts His perfect (“good”) creation? Alexander attempts to divide death into two parts, normal physical death and spiritual death which came through sin. But the Scriptures do not support this view point. When Adam was warned about disobeying the Lord's commandment not to eat of the tree of the knowledge of good and evil, He said:

... for in the day that you eat of it you shall surely die.¹⁵⁸⁴

Now literally the Hebrew reads: מוֹת תָּמוּת, or “dying you shall die.”¹⁵⁸⁵ The moment Adam and Eve sinned they were cut off from God and so died spiritually all at once. However physical death would also come because of this spiritual break with God, and so in Genesis 5 we read the repeated phrase “and he died” which points us back to the statement in Genesis 2:17 as a final fulfilment.¹⁵⁸⁶ All through the Scriptures death is spoken of in both physical and spiritual terms. Alexander's

1581 **Denis Alexander.** Creation or Evolution. Do we have to choose? P279.

1582 **Denis Alexander.** Creation or Evolution. Do we have to choose? P280.

1583 **Denis Alexander.** Creation or Evolution. Do we have to choose? P267.

1584 Genesis 2:17.

1585 Young's Literal Translation reads: “dying thou dost die.”

1586 Genesis 5:5,8,11 etc.

attempt to separate them is futile. Take, for example, the fact that the Lord condemned the ancient world because of the hearts of men being continually evil. We read there that

And behold, I Myself am bringing floodwaters on the earth, to destroy from under heaven all flesh in which *is* the breath of life; everything that *is* on the earth shall die.¹⁵⁸⁷

And all flesh died that moved on the earth: birds and cattle and beasts and every creeping thing that creeps on the earth, and every man. All in whose nostrils *was* the breath of the spirit of life, all that *was* on the dry *land*, died.¹⁵⁸⁸

Such statements undoubtedly refer to physical death because of the fact of the judgement and because of the reference to “*flesh*” being destroyed. Alexander may reply that these are unnatural deaths not the natural physical death that comes about through old age. However note the close connection between the “*breath of life*” (i.e. spirit) and death. The connection is unmistakable. Now this connection is made plain elsewhere. For example, consider Psalm 104 where the Psalmist notes that when the Lord removes the breath of life then creatures die.

You hide Your face, they are troubled; You take away their breath, they die and return to their dust.¹⁵⁸⁹

Paul's statements about death in 1Corinthians 15 are clearly speaking about physical death. In verse 21 the apostle contrasts the “*resurrection of the dead*” through Christ, with the “*death*” that came by means of Adam:

21 For since by man *came* death, by Man also *came* the resurrection of the dead. **22**
For as in Adam all die, even so in Christ all shall be made alive.¹⁵⁹⁰

The resurrection of Christ was a bodily physical resurrection. Therefore the death that Paul links to Adam must have been a bodily physical death. That a spiritual or new life is brought in by means of Christ's resurrection is certain and wonderful, but this does not deny, nor obscure the connection – in Adam man dies physically because of sin and in Christ all will be made alive because of His victorious life and atonement.

In Romans 5 the teaching is the same.

1587 Genesis 6:17.

1588 Genesis 7:21,22.

1589 Psalm 104:29.

1590 1Corinthians 15:21,22.

Therefore, just as through one man sin entered the world, and death through sin, and thus death spread to all men, because all sinned—¹⁵⁹¹

In the context of Romans 5 Paul is discussing Christ's physical death on the cross as the means by which we are saved. So again the emphasis is on the physical aspect, (even though the spiritual part is no less important).

The systematic theologian Louis Berkhoff presents a range of views concerning death but makes it clear that the Bible presents death as an *unnatural* part of human experience.

“Physical death is not represented in Scripture as the natural result of the continuation of the original condition of man, due to his failure to rise to the height of immortality by the path of obedience; but as the result of his spiritual death, Rom. 6:23; 5:21; I Cor. 15:56; Jas. 1:15. ... Death is not represented as something natural in the life of man, a mere falling short of an ideal, but very decidedly as something foreign and hostile to human life: it is an expression of divine anger, Ps. 90:7,11, a judgment, Rom. 1:32, a condemnation, Rom. 5:16, and a curse, Gal. 3:13, and fills the hearts of the children of men with dread and fear; just because it is felt to be something unnatural.”¹⁵⁹²

Or what of Paul's exclamations in Romans 7?

O wretched man that I am! Who will deliver me from this body of death? ¹⁵⁹³

But perhaps the most convincing proof that death is an unnatural terror comes from the fact that Christ suffered physical death as our substitute. If sin merely brought about spiritual death, then what need would there be for Christ's physical death? Death could not hold Christ for He was wholly innocent.¹⁵⁹⁴ Such a truth is brought out forcefully by the writer of the letter to the Hebrews:

14 Inasmuch then as the children have partaken of flesh and blood, He Himself likewise shared in the same, that through death He might destroy him who had the power of death, that is, the devil, **15** and release those who through fear of death were all their lifetime subject to bondage.¹⁵⁹⁵

People do not fear spiritual death – they are already dead in that sense because of original sin. But they do fear physical death. But Christ became flesh and dwelt amongst us in order that He through

1591 Romans 5:12.

1592 **Louis Berkhoff**. Systematic Theology. P741.

<http://www.apuritansmind.com/wp-content/uploads/2018/03/Systematic-Theology-by-Louis-Berkhof.pdf>

1593 Romans 7:24.

1594 Acts 2:24.

1595 Hebrews 2:14,15.

physical death would thereby destroy the Devil's work.

Creation's fall.

Finally, on the fall, he argues that this was a limited affair and did not involve any effects upon creation or the universe.¹⁵⁹⁶ Startlingly, he argues that the material that makes up the universe has within it the potential to create life:

“But to confidently proclaim that the precious materials God has so carefully brought into being in the dying moments of exploding stars do not have the potentiality to bring about life, seems to me equally insulting.”¹⁵⁹⁷

Others have noted that such a view point flies in the face of any true notion of God's creation.¹⁵⁹⁸ But for Alexander the curse resulting from the fall did not involve creation except in relation to Adam. Bear in mind that Alexander does not accept that Adam was the first created man, but that he was the first 'hominid' to be endowed with spiritual life. He confidently asserts that:

“Nowhere in this tightly narrated theological text is there any suggestion that the earth itself was cursed in isolation from Adam, or that anything physically changed in either the earth or the heavens as a consequence of the Fall. Such dramatic apocalyptic language is frequently used elsewhere to denote God's judgement (e.g. Isaiah 13:10; 24:19-20) but is completely absent from the austere language of Genesis 3. Amazing suggestions are sometimes put forward about how the 'laws of nature' changed at the Fall, but there is no evidence for such speculations from the biblical text, nor indeed from science. Those really are 'castles in the air': not only that, but they seem to directly contradict Scriptures indicating that it is God who gives the young lions their prey and the ravens their carrion, and it is this present earth that he created – not some earth so amazingly different that it hardly resembles it.”¹⁵⁹⁹

speaking on Romans 8:19f:

“... the fact of the matter is that we cannot be too dogmatic about the interpretation of what follows because Paul's language is ambiguous in places ...”¹⁶⁰⁰

1596 **Denis Alexander.** Creation or Evolution. Do we have to choose? P262,263,270.

1597 **Denis Alexander.** Creation or Evolution. Do we have to choose? P333.

1598 **Wayne Grudem's** contribution to Theistic Evolution: A Scientific, Philosophical, and Theological Critique. Edited by J. P. Moreland, Stephen C. Meyer, Christopher Shaw, Wayne Grudem, Ann K. Gauger. Crossway Books. 2017.

1599 **Denis Alexander.** Creation or Evolution. Do we have to choose? P262,263.

1600 **Denis Alexander.** Creation or Evolution. Do we have to choose? P268.

Such a treatment of Scripture is hardly a help! What Paul describes in Romans 8:19f is surely clear to one and all? Alexander is unconvinced. He writes:

“It is possible that Paul has in mind the consequences of the Fall in this section, although that allusion is not that obvious and there is no direct citation. In this interpretation Paul has in mind God's curse upon the earth through Adam in Genesis: 'Cursed is the ground because of you; through painful toil you will eat of it all the days of your life ...' (Genesis 3:17). The disruption to the created order that came about through Adam's sin then becomes the 'frustration' to which the earth has been subjected because it is not being looked after properly by humankind as God had intended. Its 'groaning' arises from this failure of good stewardship, and from the waiting involved. Just as the expectant mother has to wait for the joyful occasion of the birth, painful as that is, and just as we personally experience suffering as we wait for the redemption of our bodies in future resurrection, so the creation waits and groans until it is once again looked after properly by redeemed humanity, the 'children of God'.”¹⁶⁰¹

How Alexander can limit the statements in Genesis 3 (and in Isaiah 24) to the idea that mankind has not looked after creation as good stewards, and that the earth groans because of such poor management is beyond belief. Here are Paul's actual words:

20 For the creation was subjected to futility, not willingly, but because of Him who subjected *it* in hope; **21** because the creation itself also will be delivered from the bondage of corruption into the glorious liberty of the children of God. **22** For we know that the whole creation groans and labours with birth pangs together until now.¹⁶⁰²

First, it is impossible not to see a direct connection from the words above to Genesis 3. The phrase “*creation was subjected to futility*” is a direct allusion to Genesis 3:17b-19:

... Cursed *is* the ground for your sake; in toil you shall eat *of* it all the days of your life. **18** Both thorns and thistles it shall bring forth for you, and you shall eat the herb of the field. **19** In the sweat of your face you shall eat bread till you return to the ground, for out of it you were taken; for dust you *are*, and to dust you shall return.¹⁶⁰³

But second, the words used are unmistakably comprehensive. It is “*creation*” that is under God's curse, not simply Adam. The Greek word has the sense of that which was originally founded or formed – hence creation. The term “*futility*” has three essential meanings. First it suggests, that

1601 **Denis Alexander.** Creation or Evolution. Do we have to choose? P269.

1602 Romans 8:20-22.

1603 Genesis 3:17b-19.

which is *devoid of truth*, or *without that which is appropriate*. Second it indicates perverseness or depravity. Third, it signifies frailty and lack of vigour. All three senses are implied in this term as is clear from the statements in Genesis 3:17b-19. The ground is “*cursed*” and so empty of the blessing of God – it does not have truth or appropriateness. Consequently what results is perverse as signified by the abnormal growth and the struggle to exist. Finally the curse brings about the shortness of life because of physical death so that there is frailty. This last point is highlighted by Adam and Eve's second son, for his name is “*Abel*,” which means “breath” or “fleeting.” Then also Seth's first son was called “*Enos*,” which name means “mortal man.”

Now Alexander concludes his treatment of Romans 8 with the following words:

*“What is clear from this discussion is that there is no scope from Romans 8:9-22 for building a castle in the air in which dramatic physical changes occur in the earth at the Fall, affecting the measurement of time and the laws of nature. But the passage does highlight the role played by redeemed humanity in the purposes of God for the earth both now and in the future.”*¹⁶⁰⁴

The ground was cursed. Creation was subjected to futility. How are these statements not to be taken as effecting *fundamental* changes to the very structure of the universe? The prophecy of Isaiah 24 is even more dramatic with regard to the changes effected by the fall as the following statements show:

... the Lord makes the earth empty and makes it waste, distorts its surface ...¹⁶⁰⁵

The earth mourns *and* fades away, the world languishes *and* fades away ...¹⁶⁰⁶

The earth is also defiled ...¹⁶⁰⁷

... the curse has devoured the earth ...¹⁶⁰⁸

... the foundations of the earth are shaken.¹⁶⁰⁹

The earth is violently broken, the earth is split open, the earth is shaken exceedingly.¹⁶¹⁰

1604 Denis Alexander. Creation or Evolution. Do we have to choose? Monarch Books. 2008. 270.

1605 Isaiah 24:1.

1606 Isaiah 24:4.

1607 Isaiah 24:5.

1608 Isaiah 24:6.

1609 Isaiah 24:18.

1610 Isaiah 24:19.

The earth shall reel to and fro like a drunkard, and shall totter like a hut; its transgression shall be heavy upon it, and it will fall, and not rise again.¹⁶¹¹

These statements are comprehensive and cannot be simply taken as figurative or metaphorical. But not only is the earth considered a waste and a devastation, for we also read throughout Scripture that the heavens are worn out and fading too.¹⁶¹² What further should we say when we read the apostle Peter's words?

10 But the day of the Lord will come as a thief in the night, in which the heavens will pass away with a great noise, and the elements will melt with fervent heat; both the earth and the works that are in it will be burned up. **11** Therefore, since all these things will be dissolved, what manner *of persons* ought you to be in holy conduct and godliness, **12** looking for and hastening the coming of the day of God, because of which the heavens will be dissolved, being on fire, and the elements will melt with fervent heat? **13** Nevertheless we, according to His promise, look for new heavens and a new earth in which righteousness dwells.¹⁶¹³

Creation is thus pictured as a very dry and dishevelled piece of wood that is not merely fit for burning, but reserved for a burning that will reach to the very *fabric* of the universe. We have to ask the question here: if death and disease were a normal part of God's good creation as Alexander believes, why would there be any need for such a deep destruction? The only answer is that it is needed to make all things new. The old is worn out and fit for nothing because it has decayed so much. The trouble with holding to a theistic evolution stance is the unintended consequences. The final judgement on the universe (not just the earth note) is required to bring about the full purpose of God in the new creation. Just as the world wide flood (a baptism in water) drastically altered the entire surface of the earth forming the continents and mountain ranges we see today, the conflagration to come (a baptism with fire) will discover the essential components of all created things. However Alexander suggests that passages in Scripture which prophecy a new age where the animal kingdom will be restored to its former harmonious ways are not to be taken literally.

“... Isaiah envisages the messianic kingdom as being where the 'wolf and the lamb will feed together, and the lion will eat straw like the ox, but dust will be the serpent's food' (Isaiah 65:25), but this is a 'highly symbolic and poetic description of the complete harmony and peace which is to prevail with the coming of the messianic

1611 Isaiah 24:20.

1612 Psalm 102:25,26; Isaiah 34:4; 51:6

1613 2Peter 3:10-13.

age.'[172] Such passages are not intended to provide us with the natural history of the fulfilled kingdom of God.'¹⁶¹⁴

[172: The Broadman Bible Commentary. Nashville, Tennessee: Broadman Press. 1971. P232.]

This last quote highlights one of the great problems of modern interpretation, i.e. the problem of monocular vision. Scripture is incredible and this is not surprising because it is God's word. Whilst much in Isaiah is indeed metaphorical this does not preclude what is contained there as being literally true too. The most apocalyptic Old Testament passages occur in Daniel with the dreams and visions of Nebuchadnezzar and Daniel, where we see composite statues crushed by stone and fantastic beasts and so on. Yet these are vehicles for displaying historical truths about to happen. If we assume that the statements concerning the new harmony of Eden-like animals where the lion lays down with the lamb and so on is metaphorical and simply to be interpreted as a picturesque way of saying that everyone will get along, then what do we do with those passages which speak of the new heavens and the new earth? Are these simply illustrations to be understood as literary devices and which have no essential content? I do not think that the apostle Peter thought in this spurious way when he prophesied the burning by fire of the universe!¹⁶¹⁵

Alexander's insistence on the continuity of earth history – the application of the principle of uniformitarianism – extends to a treatment of pain. He states:

“Likewise neither does the Bible teach that there was no pain before the Fall.”¹⁶¹⁶

“Both animal and human pain and physical death have been with us from the beginning, otherwise we wouldn't be here to discuss it. Those who deny the reality of physical pain, disease and death before the Fall are like ostriches with their heads in the sand. The reality will not go away.”¹⁶¹⁷

This issue is problematic because pain, we are told, is an essential defence mechanism for danger. When you touch an hot object there is an automatic reflex action to prevent serious harm. However the difference between sensitivity and pain is not clear. What may be useful to prevent damage (heightened sensitivity and awareness) is not necessarily pain.

1614 **Denis Alexander.** Creation or Evolution. Do we have to choose? P286,287.

1615 2Peter 3:10f.

1616 **Denis Alexander.** Creation or Evolution. Do we have to choose? P271,272.

1617 **Denis Alexander.** Creation or Evolution. Do we have to choose? P273,274.

Model C – his best guess!

Alexander does not give us a definitive answer concerning the origin of Adam and the entrance of sin into the world. He presents a number of models from which his best guess is the third model he proposes, model C. This model, is not without its problems but it does tell us how Alexander views what may have happened:

“Model C will not answer every question ... For example ... what does the Fall imply in practice for the local aboriginal population of Australia whose ancestors had been living there for tens of thousands of years prior to the lives of Adam and Eve in the Near East? The short answer, of course, is that we don't know. Thankfully, as already emphasised, God is the just judge of the world, not us, a fact which personally makes me very relieved. But model C does suggest that if we were looking down on planet earth from the moon with our 'spiritual life detection glasses' on, thousands of years ago, then suddenly we would have noticed a bright light appear in the Near East, shedding its light round the world, only to be dimmed, but not extinguished, as sin and spiritual death entered the world. Something happened there with eternal consequences for the spiritual status of all humankind.”¹⁶¹⁸

Somehow a light shone into the Middle East (the bringing forth of Adam from other hominids) but this light was dimmed because of the fall. The problem of evolution elsewhere and what that does for a united human race and the gospel is carefully ignored as a problem to be left with God!

Alexander is dismissive of any problems associated with his position. The fact that earth history has supposedly gone through countless ages of wasteful death and destruction to get to the current state which involves man and the gospel is simply waved away.

“The objection that evolution is a very 'wasteful' process is, I think, not a very weighty objection from a theological perspective.”¹⁶¹⁹

It is extremely hard, if not impossible, to imagine a more wasteful system of generating creatures with which the Lord may have communion. How can such a history be described as “good” and attributed to God who is utterly pure and holy? Alexander also considers the concept of cruelty in the imagined earth history that evolution has invented. One animal eating another is not a cruel thing because animals are amoral.¹⁶²⁰ Cats play with mice as they hunt them because that is in their nature and it is simply *what cats do*.¹⁶²¹ But if this is so, and we are evolved from animals, are we not thereby amoral too? When does moral behaviour start? I realise this is where Alexander wants

1618 **Denis Alexander.** Creation or Evolution. Do we have to choose? P275.

1619 **Denis Alexander.** Creation or Evolution. Do we have to choose? P280.

1620 **Denis Alexander.** Creation or Evolution. Do we have to choose? P282,283.

1621 **Denis Alexander.** Creation or Evolution. Do we have to choose? P283.

to simply bolt on the gospel and bits from the Bible, but there seems to be no logic, rhyme, nor reason to do this.

Alexander borders on a version of pantheism or, perhaps more correctly, deism in his description of God's interaction with His created world:

*“My own view reflects a somewhat more robust expression of God's omnipotence that highlights God's faithfulness in both creating and sustaining the properties of matter; properties which as a matter of fact do perfectly fulfil his intentions and purposes. The idea here is not of the divine puppet-master, but of the God who actively endows the universe with all those properties and potentialities that bring about his will.”*¹⁶²²

In this last quote note how in an attempt at avoiding a fatalistic description for the universe, (matter is not ruled by a “divine puppet-master”), Alexander falls into the opposite heresy of attributing autonomy and creativity to creation. This is not how the Bible speaks of God's interaction with His created order.

BF - a case in point.

Alexander has no time for the idea of 'irreducible complexity' spoken of by creationists and Intelligent Design advocates. He picks holes in the flagship example proposed by Michael Behe in his book ***Darwin's Black Box***, namely, the bacterial flagellum. Alexander suggests that far from being a novel machine which must have been constructed all-at-once from nothing in the supposed evolutionary course, there are in fact precursors which would act as intermediary stages. He writes:

*“If the idea of 'irreducible complexity' is correct, then none of the components or modules within the flagellum should have other independent functions, because in that case the flagellum would no longer be 'irreducible' – it would then be possible to break the system down to other components, upon which Darwinian natural selection could operate quite independently of the flagellum itself. As it happens the flagellum does have many components and modules which are used independently in other bacterial contexts.”*¹⁶²³

Alexander then goes on to discuss what he suggests is an intermediary, namely, the 'Type 3 Secretory System,' (TTSS), used by many bacteria to deliver poisons to other cells. However Alexander's hope of destroying the concept of irreducible complexity is a forlorn one. If we look at the mousetrap as our simple example, it is quite clear that it will not function if just one of its five

1622 Denis Alexander. Creation or Evolution. Do we have to choose? P284.

1623 Denis Alexander. Creation or Evolution. Do we have to choose? P299.

component parts is missing. But this does not mean to say that each component may not also have other uses in other machines. Thus the baseplate can operate as a platform for any other device, and the spring could be used for similar purposes in a locking mechanism. The problem that Alexander (and others who argue like him), has, is that to go from a mousetrap to any other device (a locking mechanism, for example) requires the input of energy, information and material. It is no good simply lining up a series of similar machines like the TTSS and the bacterial flagellum (BF) and hope that because there are similar structures in both, one must be the ancestor of the other. This still does not address the problem of how you get from one to the next.

When we come to look at the detail of the the TTSS and the BF this problem becomes heightened. According to Alexander the BF requires the use of between 40 and 50 genes to construct the apparatus which is made up of about 30 proteins.¹⁶²⁴ The TTSS is smaller and, again according to Alexander,

“...it consists of around ten proteins that are all very similar to the basal body of the flagellum.”¹⁶²⁵

So to get from the TTSS to a BF requires the input of 20 more specific proteins and several other key structural features, such as the hook and the flagellar filament apart from the motor structures themselves. Now in actual fact the proteins that are described by Alexander as being “*similar*” show a great deal more dissimilarity.¹⁶²⁶ But even if these similar proteins were in fact identical, this does not help the evolutionary cause. Car manufacturer handbooks for various models of car may have been written by the same person or team and show some similarity in their formation. They may have the same sentences, paragraphs and illustrations. However no one would suggest that each new model handbook had progressed by itself from a previous version. These all required further writing and, perhaps, some editing. But another more serious problem for the suggestion that the TTSS acted as a precursor to the BF is that, according to evolutionary theory, the BF predates the TTSS by (supposedly) a billion years – which is a very large amount of time!¹⁶²⁷ Thus in an evolutionary world view the flagellum predates the TTSS.

But Alexander wants his reader simply to accept that because there are some similarities in a few of the proteins in the TTSS and BF this is sufficient to prove that the one gave rise to the other. He writes:

1624 **Denis Alexander.** Creation or Evolution. Do we have to choose? P299.

1625 **Denis Alexander.** Creation or Evolution. Do we have to choose? P299.

1626 https://evolutionnews.org/2015/07/why_the_type_ii/

1627 https://evolutionnews.org/2015/07/why_the_type_ii/

*“These insights into the molecular structure of flagella make it easier to see how individual components of the system could have evolved separately by bestowing advantages on their host bugs quite independently of any role that they might have in flagella.”*¹⁶²⁸

But once again there is no process or schema showing how one machine could actually have transformed into the next more sophisticated one. Merely identifying similarities between organisms is nowhere near enough to prove or demonstrate the notion of descent with modification. And yet Alexander persists in proffering the same vacuous notions on his readers. He writes:

*“... by considering the 24 'core' proteins considered to be ancestral for all bacteria with flagella, a detailed suggestion describing the evolutionary history of the flagellum has been published.”*¹⁶²⁹

So, if two organisms share similar proteins, these proteins are thereby assumed to be ancient, or “ancestral”!

Blood clotting cascade.

Alexander then moves on to discuss the blood clotting cascade. He argues that rather than look at it as a wonderfully complex system which can have had no chance to form through evolution, instead he believes that parts from other systems may simply have been snapped up for a new use:

*“... it turns out that numerous components of the system have several different functions, so can simply be co-opted into the blood clotting system as required.”*¹⁶³⁰

Alexander's use of language is highly significant. We more often speak of *people* being “co-opted,” such as a member in a society being asked to serve as secretary, for example, rather than components in a chemical cascade. In such cases another person, perhaps the president or the ruling council, ask the member to take on the new responsibility. But how does this translate into the chemical world? What other system or chemical can co-opt components from one system to another?

1628 **Denis Alexander.** Creation or Evolution. Do we have to choose? P300.

1629 **Denis Alexander.** Creation or Evolution. Do we have to choose? P300.

1630 **Denis Alexander.** Creation or Evolution. Do we have to choose? P300.

The blood clotting cascade contains “more than 20 components” which act to amplify the effect.¹⁶³¹ Alexander then asks how this came to be and provides us with an affirmative assertion rather than an answer:

“Could an evolutionary mechanism explain how this system came into being? As it happens, quite easily. It turns out that genes encoding proteases comprise as much as 3% of the whole human genome, so our bodies contain hundreds of different proteases. It is clear that many of them have arisen during our evolutionary history by gene duplication. The proteases that comprise the cascade of factors involved in blood clotting are all related to each other – they are all members of the same protein ‘family.’”¹⁶³²

And so we are asked to accept that since the protein enzymes look the same, then it is easy to believe that they all came about in some simple fashion. Furthermore, simply because of close “relationship” it is assumed that one gave rise to another! The statement that many of these have come about over a long period of time by “gene duplication,” is merely an idea and has no proof nor evidence to back it up because no one has seen such effects occur. After discussing one other requirement – that simpler organisms have simpler versions of blood clotting – Alexander concludes:

“It is therefore quite easy to envisage how the vertebrate clotting system may have evolved. Since fibrinogen-like molecules were already present, most likely in the blood plasma and initially for other functions such as maintaining the correct osmotic pressure, all that was then necessary was for a protease such as thrombin to be mis-targeted to the blood as a result of a mutation, a not unlikely scenario. Together with thrombin activation by a further protease this would then give a simple three-component system sufficient to cause blood clotting. This simple mechanism alone would have given the first vertebrates using it an immense selective advantage, and the system would have therefore been passed on to many progeny. Other steps in the cascade may have been added later as incremental components, most likely because of gene duplication as discussed above, gradually building up to the multi-component speedy system that is used in our bodies today.

So, far from being a ‘black box,’ blood clotting mechanisms actually provide rather striking illustrations of the way in which multi-component systems can assemble by Darwinian mechanisms. The key point to remember is that such systems do not assemble all at once in a single organism (which really would be remarkable), but rather that each component is already present in order to carry out a different task altogether.”¹⁶³³

1631 **Denis Alexander.** Creation or Evolution. Do we have to choose? P301.

1632 **Denis Alexander.** Creation or Evolution. Do we have to choose? P301.

1633 **Denis Alexander.** Creation or Evolution. Do we have to choose? P302.

Alexander simply assumes that the presence of components in a system is enough for them to assemble (over incredible ages) into the required machines and processes we observe today. However he has failed to establish how such self-assembly would come about! It is also clear that in many cases the right components are not in fact present as much as required, and those that may be 'waiting to fulfil different functions' are not in fact precisely the proteins required but only “*similar*” ones. When we realise that an alteration of just a single amino acid along the chain of a protein is sufficient to render the protein inactive or significantly different in shape and therefore functionality, this whole blessed story-telling is a monstrous joke. Both the requirement for various components and the assembly of each component and the final construction of the overall system simply cannot come about without precise energy, new material, and intelligent organisation. Observing and then arranging similar proteins that may have been the precursors to the blood clotting system is just like tipping the puzzle pieces onto the table, it isn't piecing them together to form the picture.

Alexander believes that assuming connections or relationships between components or molecules is enough to prove that evolution has occurred and he continues on in this fanciful fashion by stating that:

*“Later on in evolution, further components can be added to the system incrementally to make it more sophisticated.”*¹⁶³⁴

But simply bolting on of added components to make a more “*sophisticated*” system requires energy, material and information, but nowhere does Alexander suggest where these may come from or how they may come about!

The advance of science.

Alexander invokes the myth of filling the gaps as science advances. However the stories invented by evolutionists which sound plausible to those duped by the paradigm are simply that, stories. They are myths. Even if these stories make sense to some degree, that doesn't make them true. Modern science is frequently having to re-tell its stories. The view we get from Biblical revelation is not like the way science progresses. What we find in Scripture is true whatever era we may care to consider. Science is tentative, approximate and subject to change continually, but Biblical revelation is pure, purposeful and perfect. Yet Alexander, who claims to be an evangelical Christian, can state the following:

¹⁶³⁴ **Denis Alexander.** Creation or Evolution. Do we have to choose? P303.

“Of course as science continues to advance, the supposed mystery then disappears and the notion of 'god' gradually shrinks.”¹⁶³⁵

Such an un-Biblical view of modern science is astounding in one claiming to be a Christian. He compounds the problem with the following:

“If God is the author of the whole created order, as the Bible teaches, bringing about its origin and daily sustaining creation in all its myriad details, then all we scientists can do is to describe what God does, to the best of our ability.”¹⁶³⁶

In these words we have the classic naïve view of how modern science works. There is no appreciation of the need for a particular ground or world view nor of a set of principles for interpreting the data received from general revelation. Later on Alexander acknowledges that there are other types of explanation but these *“are complimentary, not rivals to each other.”¹⁶³⁷* Alexander then attempts to dismiss the idea that science can work with a design basis. He suggests that using design as a paradigm would not allow one to *“generate a set of experiments to test the hypothesis.”¹⁶³⁸* He argues:

“Unless ideas in the biological sciences field are testable, leading on to a fruitful research programme, then they are sterile and in fact form no part of the scientific enterprise.”¹⁶³⁹

But this way of viewing truth is secular and stifling. What is required is an appreciation of the Bible as the foundation, and an application of a common-sense science guided by the principles that Scripture reveals. Instead Alexander insists on an essentially evolutionary-based scheme for modern science:

“In reality, however, the 'design inference' forms no part of the practice of science for the two basic reasons surveyed. First, simply saying that something is 'designed' in biology leads to no increase in our understanding of the relationships between the various material components that make up living matter. Second, labelling a biological entity as 'designed' leads to no experimental programme that could be utilised to test the hypothesis.”¹⁶⁴⁰

1635 **Denis Alexander.** Creation or Evolution. Do we have to choose? P305.

1636 **Denis Alexander.** Creation or Evolution. Do we have to choose? P305.

1637 **Denis Alexander.** Creation or Evolution. Do we have to choose? P306.

1638 **Denis Alexander.** Creation or Evolution. Do we have to choose? P307.

1639 **Denis Alexander.** Creation or Evolution. Do we have to choose? P307.

1640 **Denis Alexander.** Creation or Evolution. Do we have to choose? P309.

But why should the evolutionary idea of “*relationships between the various material components*” be accepted? Since everything is undoubtedly designed (as Scripture declares) then this concept of connections and relationships which undergirds evolution is, in fact, bankrupt.

The origin of life.

On the vexed question of the origin of life, from simple chemicals to living cells, Alexander admits that we currently “*have very little idea as to where the DNA*” has come from, (although he does not want to admit the case is hopeless), and he states further that “*we certainly don't have as yet a convincing set of steps*” leading from chemicals to life.¹⁶⁴¹ However, most surprisingly, he declares that ultimately from a theological stand point:

“... it doesn't matter two hoots whether we ever manage to understand the origin of life scientifically or not.”¹⁶⁴²

One wonders what Bible Alexander has been reading! His view point is that modern science in seeking an answer for this problem of life's origin, is nothing more nor less than “*finding out how God did it.*”¹⁶⁴³ When scientists do come up with an answer, if they ever do, it will simply be “*a detailed step-by-step description as to how God did it.*”¹⁶⁴⁴ Again, we note a naïve view of how science works.

One of the great problems for evolutionists is that they cannot actually define what life is (“*no one can actually agree what life is*”).¹⁶⁴⁵ Alexander accepts this but then states:

“Everyone is agreed that life is an 'emergent' phenomenon, meaning that at some stage a collection of chemicals and molecules began to display properties that were quite distinct from simply the sum of their parts, and could not have been predicted by looking at the individual components.”¹⁶⁴⁶

How can everyone agree that life is an **emergent** property if no one knows what life is? From a theological point of view life cannot be defined as an emergent property, for there are (at least) two essential components for meaningful life as far as humans are concerned. These are: material or physical form, and, spiritual life. All humans are composed of these two parts (at the least). The fact

1641 **Denis Alexander.** Creation or Evolution. Do we have to choose? P332,335.

1642 **Denis Alexander.** Creation or Evolution. Do we have to choose? P332.

1643 **Denis Alexander.** Creation or Evolution. Do we have to choose? P333.

1644 **Denis Alexander.** Creation or Evolution. Do we have to choose? P336.

1645 **Denis Alexander.** Creation or Evolution. Do we have to choose? P336.

1646 **Denis Alexander.** Creation or Evolution. Do we have to choose? P336.

that many have spirits and souls separated from God does not diminish the fact that they are still spiritual entities as well as physical. We may use the term “spiritual” in a number of ways. We may thus use the term to delineate someone who is properly given to God and made alive by the spirit. But equally we may use it to denote the constitution of all men, even though their spiritual part is dead to God and often suppressed.

In attempting to document the various approaches to the origin of life, Alexander talks about carbon using the analogy of lego bricks.¹⁶⁴⁷ Alexander cannot escape the fact that these toys were in fact “*designed*.”¹⁶⁴⁸ By implication the thing they illustrate (carbon) must also have been designed, and Alexander even admits this truth:

*“Likewise the chemicals of the periodic table ... are designed to combine together in only some ways, and not others, to form all the matter of the world ... the design of life is built into the periodic table.”*¹⁶⁴⁹

If the elements were designed then life too must, by implication, be designed. However Alexander has already objected to the whole concept of design so it is curious that he would mention such at this point. It seems to me that the only explanation for such a slip-up is that the concept of design is impossible to ignore, because God definitely designed all things.¹⁶⁵⁰

Alexander also discusses possible locations on earth for the origin of life. He describes what needs to be present:

*“The essential ingredients are an energy source, such as heat or lightning, together with simple carbon compounds and, for some putative locations, an atmosphere simulating that of the early earth.”*¹⁶⁵¹

One problem with this list is that “*the precise early atmosphere remains a topic of active discussion*.”¹⁶⁵² Undaunted by mere detail Alexander continues with a list of required gases and chemicals. There are a number of other problems with these speculative statements (apart from their speculative nature). First Alexander does not seem to realise that “*an energy source*” is not requirement enough. It needs to be a precise or directed energy source. Throwing heat or lightning willy nilly at a bunch of chemicals is simply not going to work. Next, Alexander has to assume both

1647 **Denis Alexander.** Creation or Evolution. Do we have to choose? P337.

1648 **Denis Alexander.** Creation or Evolution. Do we have to choose? P337.

1649 **Denis Alexander.** Creation or Evolution. Do we have to choose? P337.

1650 Why else call God “Creator,” or “Master Craftsman”? See: Proverbs 8:30.

1651 **Denis Alexander.** Creation or Evolution. Do we have to choose? P339.

1652 **Denis Alexander.** Creation or Evolution. Do we have to choose? P339.

the nature of these “*simple carbon compounds*,” (by which is meant their precise form and structure), and that they will combine as required for life to form (without any side-reactions or other difficulties ensuing). These statements are not just the beginning of possible suggestions, they are the nonsense that comes from a lack of thought. Binging simple carbon compounds together in some location and throwing energy at them will never, I repeat never, produce life. How can I say this? Well ask any chemist how difficult it is to make an organic compound in the laboratory and you will see why I can be so confident. The conditions for each reaction are specific and tailor-made. Some will only work if the correct catalyst is used with the required temperature. The product so formed may need to be distilled off to prevent it from being destroyed in the reaction chamber. After the reaction the product may need to be purified and kept at a specific temperature or kept free from gases like oxygen. These are just a few of the problems. Undaunted Alexander continues:

*“In any event, making the 'small carbon molecules' of life is not that problematic. But making the bigger molecules – the so-called 'macromolecules' required for life – not to speak of assembling them into a self-replicating system, is a different matter altogether.”*¹⁶⁵³

Only a non-chemist could make such statements! Alexander then touches on other problems but does not really provide us with answers. There is the problem of requiring “*a sufficient concentration of interacting reagents in the same location.*”¹⁶⁵⁴ This is a massive problem. How do we get a place where different molecules requiring different environments come together to form components of living things? In living cells these environments are created by the intact inbuilt machines. But Alexander's response to all of this is to assert that clays could be a source for a scaffold whereby these reagents could interact and build the necessary molecules. But no evidence is forthcoming – only assertion. Then another problem is to ask how macromolecules required for life could be made use of without enzymes? Enzymes are the catalysts that enable different stages in the various cycles to operate but “*how did it get going before there were any enzymes?*” asks Alexander.¹⁶⁵⁵ In response he suggests that the transition metal ions, iron and nickel, and sulphur atoms which are often found within such enzymes may have acted as the catalysts for primitive examples! Again there is no evidence or demonstration of such, just supposition and suggestion.

Alexander's treatment of Scripture is not that which we would expect from a true

1653 **Denis Alexander.** Creation or Evolution. Do we have to choose? P340.

1654 **Denis Alexander.** Creation or Evolution. Do we have to choose? P343.

1655 **Denis Alexander.** Creation or Evolution. Do we have to choose? P345.

evangelical. I am beginning to wonder whether this term “evangelical” has any value given that so many who are promoted as such treat Scripture in such an awful way. But Alexander is also extremely naïve when it comes to modern science. His faith in evolution and the progress of science smacks of idolatry.

Chapter 24: Bernard Ramm.

“The relationship between science and Scripture?”

Bernard L. Ramm's major work, *The Christian View of Science and Scripture* published in 1954, sought to stem what he perceived as acrimony and bitterness between science and evangelicalism. In the end his book actually fuelled the rise of modern creationism, for whether for good or evil, Ramm was one of the most influential neo-evangelicals of the twentieth century, having taught on science and Scripture for some time.¹⁶⁵⁶ He argued that his particular view of creation (progressive creationism) was distinct and separate from the general idea entailed in theistic evolution. However, in that he accepted evolution as the *modus operandi* of God, it is included here after the other theistic evolutionists we have discussed.

Ramm opens his work by asking why the conflict between a Biblical perspective on reality and the secular one has gone so badly – why in fact society has become so secularised. Why does no one refer to the Bible when discussing any academic or intellectual issues?¹⁶⁵⁷ Ramm expresses a number of ideas, but it seems to me that at least part of the issue is a reluctance to be side-lined and marginalised. Academics like Ramm have always sought to be accepted by mainstream academia. When they are not accepted, or when what they study and advocate is ridiculed, they are embarrassed and seek to adjust to gain acceptance.

Science first.

Although Ramm does not have a scientific background and does not claim to speak for science, as with many academics in his position, he ends up leaning heavily towards science which he defines in a naïve way. For example, he does not see any distinction between what used to be called “pure” science – the science of exploration and discovery to seek knowledge – and what used to be called “applied” science – the application of knowledge, or technology.¹⁶⁵⁸ Ramm charges evangelicalism with a naïve approach to the complex issue of creation and the problem of the rapid advance of modern science. Developments within science are advancing so fast that simply

1656 **Warren H. Johns.** Revelation and Creation in the Thought of Bernard L. Ramm and Carl F.H. Henry: the Creation "Days" as a Case Study. PhD thesis. Andrews University. 2005. P63,64. B. Ramm. *The Christian View of Science and Scripture*. Wm. B. Eerdmans Publishing. 1954. P30.

1657 **B. Ramm.** *The Christian View of Science and Scripture*. Wm. B. Eerdmans Publishing. 1954. P15,16.

1658 **B. Ramm.** *The Christian View of Science and Scripture*. P16,17.

advocating “*fiat instantaneous creationism*” or “*atheistic developmentalism*” as the only two options to adopt, has resulted in evangelicals defending “*a position that violently countermanded the findings of science.*”¹⁶⁵⁹ To Ramm, such a situation whereby the Bible is only for the weak and sentimental, whilst true intellectuals have abandoned it with gusto, is nothing short of an “*embarrassment.*”¹⁶⁶⁰ Science, according to Ramm, has embarrassed the Christian faith. Now I wonder what leads an academic to such an assessment? The gospel has never been accepted in an intellectual or academic sense – ever. Pretenders to the gospel, or compromisers who dress up the gospel may have held court and centre stage at one time or another, but the gospel and the way of Christ is always at enmity with the world. Scripture is very clear on this point. The world “*hates*” Christ and “*hates*” His disciples because they follow Christ.¹⁶⁶¹ The carnal or worldly mind is at war with God, (it is “*enmity against God*”), and “*friendship with the world is enmity with God,*” so that anyone who wants to be accepted by the world and become its “*friend,*” will make “*himself an enemy of God.*”¹⁶⁶² We could discuss the nature of man's mind and thoughts which are vain, futile and dark, and we could recount the many times where we are exhorted to reject worldly wisdom and ways and be renewed.¹⁶⁶³ The whole tenor of Scripture is that there are two ways and the one which leads towards God will always be opposed tooth and nail by the alternative which paves the way to perdition. Of course the issues of creation are complex, but the presentation of what Scripture reveals will always counter what the world wants to espouse, and I think Ramm has forgotten this.

Hyper-orthodoxy.

Ramm observes (correctly) that we must accept that modern science has had a dramatic influence on modern thought:

*“science has ... made a cleavage all the way through modern mentality and culture ... In fact, the so-called modern mind is the scientific mind.”*¹⁶⁶⁴

One of the features often found amongst those who attempt some form of compromise is to expose those who are considered to be in clear opposition. The neatest way to do this is to attach a label to

1659 **B. Ramm.** The Christian View of Science and Scripture. P19.

1660 **B. Ramm.** The Christian View of Science and Scripture. P20.

1661 John 7:7; 15:18; 17:14; 1John 3:13.

1662 Romans 8:7; James 4:4.

1663 See, for example, Psalm 94:11; 1Corinthians 1:18-30; 3:20; Romans 1:21; Ephesians 4:18,23; 5:8,11; Colossians 2:8f; Romans 12:1,2.

1664 **B. Ramm.** The Christian View of Science and Scripture. P21.

them. In Ramm's case his main opponents, it would seem, were the fundamentalist evangelicals who opted for instantaneous creation. Ramm refers to such folk who oppose science as “*hyper-orthodox*.”¹⁶⁶⁵ He views such as being overly loyal to the Bible and writes:

*“If evangelicalism continues to have a strong, outspoken group within it with such a negative approach to science, the prospects of making clear the scientific respectability of Scripture are not good. If this “pedantic hyper-orthodoxy” continues to be the representative voice in evangelical apologetics, the great cleavage between science and evangelicalism which occurred in the nineteenth century will not only be perpetuated through the twentieth, but it will be widened.”*¹⁶⁶⁶

Why should evangelicalism seek “*scientific respectability*”? Do not get me wrong here. Christians must never reject reality, nor what is plainly true, but **science** is more than a body of disconnected facts and data. It encompasses ideas, theories and concepts, some of which run counter to those we observe in Scripture.

Ramm's main argument, it appears, is that to oppose science is to be foolish and unthinking. However Ramm's understanding of science leaves a lot to be desired. For example, he accuses the hyper-orthodox of inconsistency when they oppose science but still make use of the “*practical achievements of modern science, e.g. radio, television ...*”¹⁶⁶⁷ Such a statement is borne from a failure to make a distinction between theory and data, or between science pursued to gain pure knowledge, and the application of knowledge to do useful things. An understanding of the empirical mathematical basis for a particular branch of science and its attendant data is enough to derive practical benefits. You do not have to subscribe to the details of the current theory. This is seen, for example, in chemistry. The model for atomic structure has changed dramatically through both the nineteenth and twentieth centuries from when Dalton re-introduced it, and yet the practical applications of chemistry have continued despite these various changes. Manufacture of new materials from ores and chemical production is all brought about from an understanding of the practical bases despite the changes in fundamental theory.

This monocular view of science adopted by Ramm (whether it be pure, applied, historical or empirical) is shown forth by his second objection to hyper-orthodoxy. He writes:

“Such a position makes the words of God and the work of God clash. Certainly, the pragmatic truthfulness of science is witnessed by a modern industrialized society,

1665 **B. Ramm.** The Christian View of Science and Scripture. P22.

1666 **B. Ramm.** The Christian View of Science and Scripture. P22.

1667 **B. Ramm.** The Christian View of Science and Scripture. P23.

modern rapid transportation and communications, modern medicine, and modern warfare, cannot be denied. This is incontrovertible data that in many regards science is on the right track. To this extent science has opened up the secrets and meanings of Nature, the creation of God. To set theology against science is simply to oppose Creation to Revelation, and Nature to Redemption."¹⁶⁶⁸

From this statement it is clear that Ramm accepts what science says as **truth**. In other words science is effectively general revelation. The whole range of benefits derived (supposedly) from science are proof positive that it is "*on the right track*."¹⁶⁶⁹ Elsewhere he claims that "*geological science is on the right track*," and that "*the great time periods must be granted to the geologists*."¹⁶⁷⁰ He shows an uncritical attitude to science when he makes statements like the following: "*We also have reliable knowledge of millions of years of geological history*."¹⁶⁷¹ One of the great problems in all of this discussion is the fact that **science** (the discipline engaged in by scientists) has usurped the means of accessing data from reality to itself. It is not often realised that there isn't really anything called **science**. There are, in fact, only scientists – human beings – using their God-given creative talents to experiment and create things. The so-called "method of science" is simply the method of "intelligence" or the application of reason to in-coming sense data. In other words, scientists are simply using normal common sense human processing. They may be doing it rigorously and in detail compared to the average man in the street, but all they are doing is exercising their God-given creative talents. At this point we need to recall the fact that unregenerate man is dark in his thinking and opposed to God. So it is no wonder that much of **science** is opposed to the Christian faith.

Science and theology.

What should we make of the relationship between science and theology (or Scripture)? Ramm argues that science and theology must be harmonious.

"If we believe that the God of creation is the God of redemption, and that the God of redemption is the God of creation, then we are committed to some very positive theory of harmonization between science and evangelicalism. God cannot contradict His speech in Nature by His speech in Scripture. If the Author of Nature and Scripture are the same God, then the two books of God must eventually recite the same story. ... We are pay due respect to both science and Scripture. ... We must be ready to hear the voice of science and the voice of Scripture on common matters. ... we defend a position which asserts that a positive relationship must exist between

1668 **B. Ramm.** The Christian View of Science and Scripture. P23,24.

1669 **B. Ramm.** The Christian View of Science and Scripture. P23.

1670 **B. Ramm.** The Christian View of Science and Scripture. P143,153.

1671 **B. Ramm.** The Christian View of Science and Scripture. P26.

science and Christianity.”¹⁶⁷²

*“The truth must be a conjunction of the two [science and Scripture].”*¹⁶⁷³

At first glance such an assessment is probably one many would agree with. The problem is, however, that whilst God certainly cannot contradict Himself whether He speak by means of creation or through His revealed word, neither general revelation (creation) nor special revelation (the Bible) are grasped without human participation. This means that the way in which we grasp each form of revelation is vitally important. The way we interpret Scripture and the theories formed to collate data gleaned from creation are vitally significant. To suggest that God's creative revelation is equivalent to all that science dictates is simply untrue. Equally to suggest that whatever many who call themselves “Christian” states as being Biblical is also open to question.

To examine this relationship Ramm asserts with abundant clarity that science is a means of gathering truth, whether we think of origins, technology or pure scientific discovery. The scientist must be listened to, and the pronouncements of science must be taken at face value.¹⁶⁷⁴ Now even though Ramm accepts that to define science is extremely difficult, he nevertheless demands that Christians accept (what he claims to be) the assured results of science.¹⁶⁷⁵ In other words to believe in a recent creation is simplistic and naïve because science has demonstrated a vast age for the universe (billions of years), and an antiquity much greater than the Biblical data show for the appearance of man.¹⁶⁷⁶ On the age of the earth he states:

*“According to the best available data that is of the order of four to five billion years ago.”*¹⁶⁷⁷

Theology, on the other hand, must also be listened to, but theology is severely limited. It cannot deny the scientist his 'truth,' culled from “*Nature*,” and its remit is to “*understand God*” from His “*speech ... in the Bible, nature, and History.*”¹⁶⁷⁸ When it comes to understanding the Bible, for example, it is necessary for the Christian to begin with science, for

1672 **B. Ramm.** The Christian View of Science and Scripture. P25.

1673 **B. Ramm.** The Christian View of Science and Scripture. P26.

1674 **B. Ramm.** The Christian View of Science and Scripture. P153,220.

1675 **B. Ramm.** The Christian View of Science and Scripture. P34,35.

1676 **B. Ramm.** The Christian View of Science and Scripture. P120,121.

1677 **B. Ramm.** The Christian View of Science and Scripture. P106.

1678 **B. Ramm.** The Christian View of Science and Scripture. P34-36.

“Scientific knowledge is invaluable for a knowledge of the Bible – at least to know it fully and completely.”¹⁶⁷⁹

Thus the relationship between science and theology (or Scripture) may be one of harmony, but there is a definite pecking order. In order to understand the Bible we need science first. Thus whilst Ramm is fond of stating that

“The details of creation can be told only by the co-operative efforts of the theologian and the scientist.”¹⁶⁸⁰

We need to grasp the fact that science has priority of place. Now, to his credit, Ramm notes that the Bible intertwines creation with the theological truths it promotes. He writes that:

“It is not possible to separate the theological and ethical teachings of the Bible from the references to Nature. ... The theological, the ethical, and the practical are so conjoined in the Bible with the statements about Nature or creation that it is impossible to separate them, and to impugn one is to impugn the other.”¹⁶⁸¹

Such a connection between theological truths and historical detail or creation reference is clear in Scripture. However rather than conclude that because the theology must be true (for God does not lie), this must mean in turn that the history or 'science' of the Bible must be equally true, Ramm comes to quite a different assessment:

“It is therefore suicidal for the hyper-orthodox to pass by the findings of science which cannot but have a most important bearing on the Biblical references to Nature and matters of fact; and it is inconsistent for the neo-orthodox to try to separate neatly the theological elements of the Bible from the statements about Nature and fact.”¹⁶⁸²

Such a view point, making modern science determinative for all references to creation and history, means that Scripture is not a divine revelation but a human production which has all the faults and errors prevalent in ancient cultures. Although Ramm does not use the more modern phrase “ancient Near East” when referring to ancient cultures and language, he certainly identifies such as the source for our Scriptural accounts. According to Ramm, our Scripture “*employs the culture of the*

1679 **B. Ramm.** The Christian View of Science and Scripture. P49. Ramm quotes: **C. W. Shields.** The Scientific Evidences of Revealed religion. 1900. P35-36.

1680 **B. Ramm.** The Christian View of Science and Scripture. P120.

1681 **B. Ramm.** The Christian View of Science and Scripture. P26.

1682 **B. Ramm.** The Christian View of Science and Scripture. P26.

times in which it was written as the medium of revelation."¹⁶⁸³ The Genesis account uses language that is "popular," and "restricted to the apparent," for it is "the classification of the unsophisticated common man."¹⁶⁸⁴ According to Ramm it is not possible to derive any 'scientific' truth whatsoever from the Biblical records because the Bible is "prescientific."¹⁶⁸⁵ Thus, for example, "the psychology of the Bible," or, in other words, the understanding of the mind of man, "is not capable of rational defence."¹⁶⁸⁶ When the Hebrews used numbers they did so in a vague way and not with the precision as required in modern science.¹⁶⁸⁷ The Biblical writers did not write to establish postulations or certainties, but wrote in such a way that utilised "the culture terms and expressions of their time."¹⁶⁸⁸ Such assumptions are, of course, loaded with the notion that because they were primitive and ancient their reckoning and understanding lacked the modern sophistications of precision, definiteness and exactitude.

Theology apart from history and science.

We cannot help but note in passing that Ramm advocates a Bible which may be true theologically speaking but not scientifically or with regard to history. He puts it like this:

*"But the theological truths expressed in these outmoded scientific notions are inspired and part of the Biblical witness."*¹⁶⁸⁹

*"In conclusion, we note that the language of the Bible with reference to natural things is popular, prescientific, and non-postulational. It is the terminology of the culture prevailing at the time the various books were written, it is a matter of the Spirit of God speaking through these terms so that (i) the terms are not themselves thereby made infallible science, and (ii) the theological content is in no wise endangered."*¹⁶⁹⁰

But is this tenable? Is it possible that the Spirit would use mythological and false notions to convey theological truth? The repeated statement that God does not lie would seem to counter such an assertion. Of course the great problem of describing a Bible which has theological truths embedded in cultural baggage which is untrue, pre-scientific and culturally primitive, is: how do we discern what is true theology and what is the baggage of culture? Ramm asks this question himself but the

1683 **B. Ramm.** The Christian View of Science and Scripture. P48.

1684 **B. Ramm.** The Christian View of Science and Scripture. P46,47.

1685 **B. Ramm.** The Christian View of Science and Scripture. P51.

1686 **B. Ramm.** The Christian View of Science and Scripture. P50.

1687 **B. Ramm.** The Christian View of Science and Scripture. P51.

1688 **B. Ramm.** The Christian View of Science and Scripture. P51.

1689 **B. Ramm.** The Christian View of Science and Scripture. P52.

1690 **B. Ramm.** The Christian View of Science and Scripture. P52.

answer he provides is weak, to say the least. He states that whilst the liberals would write off all the theology (such as sacrificial atonement) as culture, and others enforce all as binding on the Christian, the truth lies in the middle ground, but “*no simple rule can be devised to divide one from the other.*”¹⁶⁹¹ His suggestion is that whatever purports to refer to creation (“*Nature*”) must be deemed as ancient culture and can be dismissed, and whatever is clearly theological or didactic must be transcultural. By use of these two principles it will then be possible to dissect other Scriptures which may be more difficult, to remove the cultural elements and so reveal the timeless truth! But such a process smacks of the old liberal idea that the Bible isn't the word of God in its entirety, it merely *contains* the word of God.

When we come to Genesis and creation, Ramm argues that because the Bible is popular and pre-scientific it must speak to all ages, so to see modern science within its pages is to look amiss.¹⁶⁹² What Ramm has failed to understand is that when God speaks He does so perfectly. God cannot lie so the vehicles He uses to bring His words must also be true to the message He brings. Ramm wants us to modify what is revealed in Scripture by the 'truth' gleaned from modern science. However such a method is doomed to failure. What happens when the modern scientific view point about our origins changes? According to Ramm, Genesis 1 does not record a literal history of how God created all things, for he has rejected a literal view.¹⁶⁹³ Rather Ramm argues that it is a “*pictorial*” account, and that the six days are “*revelatory*,” that is, periods of God's revelation.¹⁶⁹⁴

*“We believe, in agreement with the authorities which we have listed, that creation was revealed in six days, not performed in six days. We believe that the six days are pictorial-revelatory days, not literal days nor age-days. The days are means of communicating to man the great fact that God is Creator, and that He is Creator of all.”*¹⁶⁹⁵

Taking such a view means that the modern scientist is free to hold to billions of years and some form of evolution.

The problems of goodness and death.

Ramm's view of a six-day revelation raises a whole host of difficulties of which we shall consider two that Ramm mentions. First we have the issue of the perfection of creation at the start of time. Ramm tries to make a distinction between the word “*good*” as recorded in Genesis 1 and

1691 **B. Ramm.** The Christian View of Science and Scripture. P53.

1692 **B. Ramm.** The Christian View of Science and Scripture. P46,47.

1693 **B. Ramm.** The Christian View of Science and Scripture. P150.

1694 **B. Ramm.** The Christian View of Science and Scripture. P149,151.

1695 **B. Ramm.** The Christian View of Science and Scripture. P151.

the word “perfection.” Creation may have been “good,” but it was by no means “perfect.”

*“God did not say that creation was perfect, but that it was good.”*¹⁶⁹⁶

The second issue is the problem of natural death prior to Genesis 3. To circumvent this thorny issue Ramm argues that the conditions within Paradise (the Garden of Eden) were not the same as those that prevailed throughout the rest of the earth. Ramm argues that it is a presumption to suggest that death and destruction were *not* a part of the ordinary existence prevailing all over the earth (with the single exception of the Garden of Eden).¹⁶⁹⁷ Commenting on Romans 5:12 Ramm suggests that the word “world” ought not to be taken as suggesting all of creation. He states:

*“But this is all imposition on the record. Ideal conditions existed only in the Garden. There was disease and death and bloodshed in Nature long before man sinned. ... Outside of the Garden of Eden were death, disease, weeds, thistles, thorns, carnivores, deadly serpents, and intemperate weather. To think otherwise is to run counter to an immense avalanche of fact. Part of the blessedness of man was that he was spared all of these things in his Paradise, and part of the judgement of man was that he had to forsake such a Paradise and enter the world as it was outside of the Garden, where thistles grew and weeds were abundant and where wild animals roamed and where life was possible only by the sweat of man's brow.”*¹⁶⁹⁸

When it comes to describing how creation came to be, Ramm concludes that our data comes from both “*Scripture and Nature*,” but it comes to us from these sources “*indirectly and analogically*.” We have already seen how Ramm favours the scientific view when it comes to “*Nature*,” but where Scripture is concerned (i.e. Genesis 1), he decides that the information we have must be seen metaphorically. The days in Genesis 1 are not literal but “*pictorial*,” and can therefore stand for long ages of time. However rather than simply accept evolution wholeheartedly as many theistic evolutionists have done, Ramm suggests the idea of “*progressive creationism*.”¹⁶⁹⁹

Ramm demands that revelation does not entail understanding, or, in his words, “*revelation is not interpretation*.”¹⁷⁰⁰ To grasp the truth and meaning of revelation we need to interpret it, and our interpretation does not share in the infallible nature of revelation. Consequently Ramm states that: “*all the interpretations*” he wants to “*defend in subsequent pages are tentative, exploratory and not given in a dogmatic spirit*.”¹⁷⁰¹ The problem here is that a wedge is driven between what

1696 **B. Ramm.** The Christian View of Science and Scripture. P63.

1697 **B. Ramm.** The Christian View of Science and Scripture. P232,233.

1698 **B. Ramm.** The Christian View of Science and Scripture. P232,233.

1699 **B. Ramm.** The Christian View of Science and Scripture. P76.

1700 **B. Ramm.** The Christian View of Science and Scripture. P31.

1701 **B. Ramm.** The Christian View of Science and Scripture. P31.

God has revealed and what we can comprehend. Whilst interpretation is a very important topic, we need to affirm unequivocally the notion that when God speaks, He does so with clarity. Ramm's expression of 'humility' is the classic expression of the scientist who states that his ideas are *"tentative, exploratory"* and subject to change, but in the end we know that more often than not the scientist is very dogmatic about many things. Ramm tells us that to deny aspects of science such as geology and evolution is an embarrassment and a hopeless path to follow. He writes:

*"Conservative Christianity is caught between the embarrassments of simple fiat creationism which is indigestible to modern science, and evolutionism which is indigestible to much of hyper-orthodoxy. It is the conviction of at least this one evangelical that the only way out if the impasse is through some form of progressive creationism."*¹⁷⁰²

That science comes first in Ramm's estimation is clear from several angles in his work. Ramm asserts that *"modern science has demonstrated a great antiquity"* for man, and further that *"... the geologist is to be given his vast period of time ... geological science is on the right track."*¹⁷⁰³ Curiously Ramm makes it clear that Christians have accepted the literal view of Genesis 1 and a universal flood for most of history.¹⁷⁰⁴ However now we have modern scholarship to thank putting us right on this issue, for despite the fact that most *"Christians still believe in the universal flood,"* in stark contrast, *"most of the recent conservative scholarship of the church defends a local flood."*¹⁷⁰⁵ Furthermore for the majority of Christians to believe *"that the world was created about 4000 B.C., in six literal days,"* can only have been *"prompted by the simplicity of the record coupled with a complete ignorance of the data of science."*¹⁷⁰⁶

1702 **B. Ramm.** The Christian View of Science and Scripture. P79.

1703 **B. Ramm.** The Christian View of Science and Scripture. P153,220.

1704 **B. Ramm.** The Christian View of Science and Scripture. P120,121,160,162.

1705 **B. Ramm.** The Christian View of Science and Scripture. P162.

1706 **B. Ramm.** The Christian View of Science and Scripture. P120,121.

Chapter 25: John Walton.

Its not about matter!

John Walton's main focus for studies centred on the ANE cultures. Walton has produced two works: *The Lost World of Genesis*, and, *The Lost World of Adam*, both of which deal with the Genesis text. In these he advocates a very novel approach to the problem of how science should be related to Scripture.

First impression.

Perhaps the most striking impression gained from Walton's works is the idea that creation in Genesis does not concern the material world, but instead depicts creation of new function. The following quotes come from both of Walton's books and they show clearly his main thesis:

*"... Genesis 1 is not an account of material origins but an account of functional origins, specifically focusing on the functioning of the cosmos as God's temple."*¹⁷⁰⁷

*"... Genesis 1-2 is an account of the origins of sacred space rather than an account of the origins of the material cosmos, and Genesis 1-3 forms an inclusio with the last chapter of Exodus."*¹⁷⁰⁸

*"When we understand the garden as sacred space and see that the presence of God (and all that he has to offer) is the main point, we can begin to comprehend that the account in Genesis 2 is not essentially about material human origins."*¹⁷⁰⁹

In fact, Walton frequently denies that Genesis 1 and 2 speak of material creation throughout both books.¹⁷¹⁰ In response to the question when and how God made the physical world he states that:

*"According to the interpretation offered in this book, the Bible does not tell us, so we are left to figure it out as best we can with the intellectual capacity and other tools that God gave us."*¹⁷¹¹

1707 **John H. Walton.** *The Lost World of Genesis One.* 2009. IVP Academic. P92.

1708 **John H. Walton.** *The Lost World of Adam and Eve.* 2015. IVP Academic. P51.

1709 **John H. Walton.** *The Lost World of Adam and Eve.* P105.

1710 **John H. Walton.** *The Lost World of Genesis One.* P69,91,112,131,162. **John H. Walton.** *The Lost World of Adam and Eve.* P 34,37,76,80,181.

1711 **John H. Walton.** *The Lost World of Genesis One.* P168.

Such a claim is staggering! What appears to be a text telling us how God made all things is nothing of the sort! Now the main concern that arises immediately from Walton's statements made above is to ask, can function be divorced from the functionary? In other words, is it possible to talk of creation of function without speaking, at one and the same time, of the creation of the one who is tasked with such function? Walton can only assume that the opening text of the Bible speaks of function alone, *if* material creation is either a much more distant event, or if creation is on-going in some way.

Now Walton does in fact claim to believe that God is responsible for the material universe, for he states:

*"I firmly believe that God is fully responsible for material origins, and that, in fact, material origins do involve at some point creation out of nothing."*¹⁷¹²

The phrase creation "out of nothing" is often written as creation "ex nihilo" and elsewhere Walton tells us that he holds to this doctrine, but, curiously, *only from the New Testament statements*:

*"Ex nihilo doctrine comes from John 1:3 and Colossians 1:16, not Genesis 1. ... ex nihilo creation is still theologically sound (indeed essential, since God is non-contingent), but literarily it is not under discussion in Genesis 1. The story of material origins is not the story the text is telling here."*¹⁷¹³

Walton's pronouncements need careful consideration, and it is pertinent for us to ask several questions, but for now three come immediately to mind. First how does Walton come to believe that Genesis 1 and 2 do not tell us about the creation of the material world? Second, what motivated Walton to opt for a functional view which excludes the material? And third, how can Walton decide that the New Testament teaches creation ex nihilo but Genesis does not? We shall consider these questions by looking at how Walton interprets the Biblical text, how he views science and its relation to theology, and, finally, his view of Scripture.

A question of interpretation.

For Walton to reach the conclusion that Genesis does not teach the material origin of the universe, he must have begun with some principles of interpretation. Now, in a moment of candour Walton agrees that a straightforward reading of the Genesis text is the one which has been held for centuries, and it is one which accepts that Adam and Eve were created and made from nothing:

1712 John H. Walton. The Lost World of Genesis One. P42.

1713 John H. Walton. The Lost World of Adam and Eve. P33,34.

“The easiest, casual reading of the text (and one that has been believed for millennia), or one that did not have access to ancient Near Eastern texts, would suggest a de novo creation of human beings.”¹⁷¹⁴

Elsewhere he contends that the creation week of Genesis 1 must be taken as a literal week, so that a day-age approach beloved of many theistic evolutionists is untenable:

“These are seven twenty-four-hour days. This has always been the best reading of the Hebrew text. Those who have tried to alleviate the tension for the age of the earth commonly suggested that the days should be understood as long eras (the day-age view). This has never convincing.”¹⁷¹⁵

However, even though he accepts a literal week in Genesis 1, Walton does not believe that this describes the creation of a *material* universe, and, furthermore, he is unable to accept that the first human pair were created in any *material* sense as the two accounts appear to a “casual” reader.

What, then, are the principles that Walton advocates for us? We want to understand the Bible so how do we begin?

Start with a blank slate!

Walton suggests that the first thing we must do is to divest ourselves of our own cultural assumptions:

“Our procedure, then, is first to set aside our own cultural assumptions as much as we are able and then to try to read the text for what it is saying.”¹⁷¹⁶

Being aware of our own assumptions is, in fact, a healthy attitude, but as believers the process of reading and the study of Scripture is iterative. We ought to be transformed by the renewing of our minds by exchanging our unhealthy, world-based beliefs for godly, Scripture-based ones. This is a process which ought to be a daily exercise. As we build up these Biblical ideas and thoughts which challenge our fallen ideas, we are being transformed and renewed. However when we do this we are not to divest ourselves of the godly belief systems and ideas that we have gained from our reading and study of Scripture. We are to take these godly ideas and use these as we re-read and re-examine the Scriptures. Such a procedure is borne from a conviction that Scripture is primarily God-given. Walton's proposal is radically different. At the heart of his scheme is a belief that the Bible is

1714 **John H. Walton.** The Lost World of Adam and Eve. P192.

1715 **John H. Walton.** The Lost World of Genesis One. P90.

1716 **John H. Walton.** The Lost World of Adam and Eve. P25.

primarily a human book and that ancient cultures are radically different from modern ones. Whilst both of these points are (partially) true, I believe that Walton makes far too much of them. It is necessary that the Bible be a human book because otherwise none would understand it. However unless it is also divine we have no advantage in Scripture over any other human work. The humanity and divinity of Scripture is akin in measure to the humanity and divinity of Christ. Now since Christ took on *sinless* human flesh, so in like manner the Scriptures have a human dimension but with no error or fault.

Know your text.

Next Walton makes the simple observation that Genesis (and all of Scripture) is “*ancient literature*.”¹⁷¹⁷ Why make such an obvious statement? Well the reason is because Walton wants us to understand a number of propositions he derives from such an observation. First, because Genesis is ancient literature, its world view is also ancient and bears all the marks of an ancient world holding ideas and concepts which are very different to our modern conceptual frameworks.¹⁷¹⁸ Walton recognises that there are differences between the separate ancient cultures but suggests that such differences are minimal when compared to the difference between ancient and modern. He states that:

*“Despite all the distinctions that existed across the ancient world, any given ancient culture was more similar to other ancient cultures than any of them are to Western American or European culture.”*¹⁷¹⁹

Given the great distance between ancient and modern cultural frameworks, it follows that the ancient Israelites responsible for Genesis thought in ways similar to their contemporaries and not in ways similar to us today.

*“... thought about the cosmos in much the same way that anyone in the ancient world thought, and not at all like anyone thinks today.”*¹⁷²⁰

Then second, thinking of Genesis as ancient literature means that we must understand it as depicting an ancient cosmology, and we cannot, therefore, understand it in modern scientific

1717 **John H. Walton.** The Lost World of Genesis One. P14,15,161.

1718 **John H. Walton.** The Lost World of Genesis One. P11,12,78,103. **John H. Walton.** The Lost World of Adam and Eve. P25.

1719 **John H. Walton.** The Lost World of Genesis One. P10.

1720 **John H. Walton.** The Lost World of Genesis One. P14.

terms.¹⁷²¹ If we are going to understand Genesis we must use the ancient ways of thinking, that is, we must view it through the ancient cosmology shared by all the ancient cultures of the time:

*“That means that when we read Genesis, we are reading an ancient document and should begin by using only the assumptions that would be appropriate for the ancient world. We must understand how the ancients thought and what ideas underlay their communication.”*¹⁷²²

Now, according to Walton, ancient cultures did not think in modern ways. They did not, for example, conceive of creation as material, but rather they thought of it in functional terms.¹⁷²³ Apart from the question of how Walton has come to such a view, this line of thinking causes problems. If the ancient cultures of which Israel were a part thought in such vitally different ways to us, what does that say about the essential message of the Bible?

Walton adds a third proposition to effect a rescue mission for the message of Scripture. In some undefined way, he contends that *“the message transcends the culture in which it originated.”*¹⁷²⁴ The message is pure and true, *“but the form in which the message was embedded was fully permeated by the ancient culture.”* In fact Walton is so certain of this dichotomy between message and the form in which the message is conveyed that he can declare that *“this was God's design and we ignore it at our peril.”*¹⁷²⁵ Such a view of Scripture is nothing more nor less than the old liberal view that Scripture is not the word of God, it only contains the word of God.

It is impossible to deny that Genesis and all of Scripture is ancient writing. However the **implications** of Genesis being an ancient document are open to scrutiny. First we ought to recognise the unity of spirit and experience of mankind both throughout the ages and across the world. There is only one human race, and all are born from Adam and Eve. Even though there are many different cultures both in the world today and also through time, the same essential questions and conundrums seem to be posed by all. Does Genesis depict an ancient cosmology? Or is it possible that the true cosmology depicted by God in Genesis is distorted and altered by the surrounding nations in an effort to gain one-upmanship? The question here is: which has priority? It is inconceivable that the God of the universe would not be early in showing forth the truth, and it is equally inconceivable that He would not be clear. The Scriptures give us clear warrant to believe that God takes the initiative both with regard to salvation, and in connection with revelation. If God

1721 **John H. Walton.** The Lost World of Genesis One. P15,161.

1722 **John H. Walton.** The Lost World of Adam and Eve. P15.

1723 **John H. Walton.** The Lost World of Genesis One. P26,33.

1724 **John H. Walton.** The Lost World of Genesis One. P19.

1725 **John H. Walton.** The Lost World of Genesis One. P19.

so loved the world that He gave His only Son, why would He be so reticent in showing us the truth, and why would He be so unclear?¹⁷²⁶ Walton's dichotomous view that the message is true even when the vehicle used to convey the message is culturally time-bound (and therefore wrong), is hopeless. Who would believe in such a message? Furthermore, how can we dissect the message from the vehicle? By what standard do we attempt this? This type of reasoning is simply the old liberal ideas dressed up in modern clothes. Are we not clear that both the message and the medium of the message are from God? Does not the incarnation itself teach us this? Christ came to declare the truth (among many other purposes), and He came in both divine form, and sinless human form unified in the person of the Lord Jesus. Does not this teach us clearly that the speech and very word of God came both in divine form and equally in error-free human form too?

Time for a time machine!

As a third principle of interpretation Walton suggests we enter the world of the ancients. In Walton's words:

*"I believe that if we are going to interpret the text according to its face value, we need to read it as the ancient author would have intended and as the ancient audience would have heard it."*¹⁷²⁷

Recognising Scripture as a set of ancient texts which have cultures drastically different to the one we inhabit, means that we must not only translate the language, but we must translate the **culture** as well.¹⁷²⁸ Now Walton recognises that such a task is in fact "*infinitely more difficult*," and so instead he proposes that "*we need to try to enter the culture*."¹⁷²⁹ How can we do this? How is it possible for us to grasp how an ancient culture thought and how it formulated its ideas? Walton suggests that we can start this process "*by becoming familiar with its literature*."¹⁷³⁰ The only way to recognise the differences "*between ancient and modern thinking*" is through "*immersion in the literature of the ancient world*," and this would then become "*a tool for understanding Scripture*."¹⁷³¹ In short, then, we must first immerse ourselves in the ANE texts, for:

"When we read the text in the context of the ancient world we discover that what the author truly intended to communicate, and what his audience would have clearly

1726 John 3:16.

1727 **John H. Walton.** The Lost World of Genesis One. P102.

1728 **John H. Walton.** The Lost World of Genesis One. P7.

1729 **John H. Walton.** The Lost World of Genesis One. P8,9.

1730 **John H. Walton.** The Lost World of Genesis One. P10.

1731 **John H. Walton.** The Lost World of Adam and Eve. P22.

understood, is far different from what has been traditionally understood about the passage."¹⁷³²

These ANE texts are, for Walton, "*the interpretive key*" through which "*we will discover many insights into ancient categories, concepts and perspectives*" and by which we shall also discover "*many ... linkages that enhance our understanding of the Bible.*"¹⁷³³

Walton's third interpretive principle raises a number of problems. First there is the problem of circular reasoning. How do we grasp an ancient culture's thoughts and ideas? We must read their literature. But how do we interpret their literature unless we have some understanding of the culture? Amazingly Walton suggests that this is only circular reasoning when applied to the Bible because we are guilty of being overly familiar with it!¹⁷³⁴ He does not see that the same problem arises if we seek to understand any culture's literature. How can we understand Babylonian literature without first grasping Babylonian culture? How do we get a hold of Babylonian culture without reading Babylonian literature? The problem is undoubtedly one of circular reasoning and it applies to whatever culture and literature you may consider. Walton wants to understand Genesis 1 as it was written and understood by the original audience. He suggests we can only approach this by looking first at the contemporary literature of the ANE. But how are to understand the ANE cultures? What text or interpretive spectacles should we use to understand these? For the true Christian the Scriptures are the final authority because these (and these alone) give us objective God-given revelation. For Walton the standard is a scholarly appraisal of the ANE cultures, but this clearly leads to a circularity impossible to escape. What is the way out of this? The only solution to this is if someone from outside of all creation steps in with an objective view. This is where Biblical revelation comes in. God alone is able to direct us and give us a sure footing because He is not bound within creation. Whereas man is caught in the infinite loop when he rests on his own reasoning, the cycle is broken when God steps in and offers to direct our thoughts in the ways He demands.

But a second problem arises if we assume Walton's interpretive key of using ANE texts to understand Scripture. Before we can truly understand Genesis 1 we must first understand the culture, thought patterns, ideas and customs of the ancient world, and, in particular, the world within which Genesis 1 was written. Thus before a modern reader can read and hear what is contained within Genesis 1 they must first study and come to an appreciation of the ancient culture of Genesis 1 as depicted by ANE texts. Such a position flies in the face of the Scriptures which

1732 **John H. Walton.** The Lost World of Genesis One. P161.

1733 **John H. Walton.** The Lost World of Genesis One. P10,76.

1734 **John H. Walton.** The Lost World of Genesis One. P10.

teach us that the faithful believer will be able to read the text and will come to understand what God has spoken. Moreover Walton recognises that such a task is beyond most Christians so that these poor folk must rely on the “*expertise*” of the scholars who make it their business to study the ANE literature.¹⁷³⁵ Such a conclusion means that we have another mediator for us in the shape of human scholarship.

The role of science.

Walton's particular view of modern science and its place in understanding is similar to that held by John Polkinghorne and others who argue strongly for separate domains for each discipline.¹⁷³⁶ Thus science, in Walton's view, is the means by which we know all about the physical world:

*“Science provides what is generally viewed as the consensus concerning what the world is, how it works and how it came to be.”*¹⁷³⁷

Walton states clearly that he is not a scientist.¹⁷³⁸ For those who are interested in modern science Walton directs attention to three theistic evolutionists. First in his list is the British molecular biologist and director of the Faraday Institute, Denis Alexander. Alexander claims to be a believer in God and a “*devout Darwinian*.”¹⁷³⁹ Second is Francis Collins, the American geneticist who lead the Human Genome Project and served as director of the National Institute of Health. Collins instituted the website BioLogos which aims to promote theistic evolution.¹⁷⁴⁰ Finally he references Graeme Finlay a cell biologist and theistic evolutionist who lectures at Auckland University. This is hardly an unbiased representation! Walton may not feel that he is able to write on the nature of science, but he is pretty clear in his intention that to consider science you had better look at these three guys – and follow theistic evolution!

The realm of science.

To describe the place of science in the scheme of human thought, Walton uses the analogy of a layer cake. The lower layer “*represents the whole realm of materialistic or naturalistic causation*

1735 **John H. Walton.** The Lost World of Adam and Eve. P22.

1736 **John Polkinghorne.** From Physicist to Priest, an Autobiography. 2007. SPCK, London. P vii, 134. **John Polkinghorne.** Theology in the Context of Science. 2008. SPCK, London. P67.

1737 **John H. Walton.** The Lost World of Genesis One. P13.

1738 **John H. Walton.** The Lost World of Genesis One. P181.

1739 **Denis Alexander.** The Theology of Evolution.

<https://www.theguardian.com/commentisfree/2008/sep/12/religion.evolution>

1740 <https://biologos.org/>

or processes,” and this is where modern science and its quest for discovery operates.¹⁷⁴¹ In this realm all that science uncovers must be considered to be true, or as Walton describes it:

*“... everything that science discovers is another step in understanding how God has worked or continues to work through the material world and its naturalistic processes.”*¹⁷⁴²

The equating of scientific discovery with general revelation is problematic. Whilst creation can indeed be understood, we need the correct interpretive tools to read its cues. Apply a materialistic world view, and the information gathered from the physical universe will not show us the God who created it.¹⁷⁴³ In order to truly understand the world I contend that we need a view of God and His salvation, for creation was built by Christ, through Christ and for Christ.¹⁷⁴⁴

Now Walton recognises that science changes throughout the ages, for he states that *“by its very nature science is in a constant state of flux.”*¹⁷⁴⁵ He continues by describing the current viewpoint about the very nature of science. He claims that science is the *“best explanation of the data at the time,”* which is *“accepted by consensus,”* with only *“a few detractors,”* and it advances as ideas are tested so that *“new ones replace old ones.”*¹⁷⁴⁶ Without doubt this description of science is confused. Walton's presentation indicates an awareness of the human side of science, but the oft quoted idea that science advances to ever new heights and vistas of truth is naïve.

But Walton's purpose in highlighting the changing nature of science is very different. He suggests that since science changes and develops, there would be no point in God bringing revelation fixed to one era's science. He comments:

*“So if God aligned revelation with one particular science, it would have been unintelligible to people who lived prior to the time of that science, and it would be obsolete to those who live after that time.”*¹⁷⁴⁷

Walton then carries on by asserting that:

*“In contrast, it makes perfect sense that God communicated his revelation to his immediate audience in terms they understood.”*¹⁷⁴⁸

1741 **John H. Walton.** The Lost World of Genesis One. P114.

1742 Bk 1, p114.

1743 Despite secular science 's ground in atheism, discoveries do sometimes show forth the greatness of God.

1744 Colossians 1:15-17.

1745 **John H. Walton.** The Lost World of Genesis One. P15.

1746 **John H. Walton.** The Lost World of Genesis One. P15.

1747 **John H. Walton.** The Lost World of Genesis One. P15.

1748 **John H. Walton.** The Lost World of Genesis One. P15.

Now this is problematic because, according to Walton here, (not to mention other writers), the book of Genesis has been revealed with the cosmology of the ANE!¹⁷⁴⁹ In other words Genesis is given to us with a science that is now obsolete.¹⁷⁵⁰ Walton recognises the dilemma but believes that this is not really a problem. He believes we ought not to be concerned with “*the question of “truth” with regard to the Bible's use of Old World science,*” because “*some scientific framework needs to be adopted,*” and accepting “*the framework of the target audience is most logical.*”¹⁷⁵¹ Thus we are forced to rely on human reasoning and logic, despite the difficulties his assumptions have raised.

Science and theology are distinct.

The upper layer of Walton's layer cake “*represents the work of God.*”¹⁷⁵² Now Walton presents his view of science with a definite aim in view. He wants the reader to view both science and theology as two separate **human** disciplines. Walton demands that we separate science from theology as two distinct disciplines, so that “*conflict between the claims of science and the claims of Scripture is minimized.*”¹⁷⁵³ But this is naïve because the gospel is inimical to the systems of this world. Furthermore, such a separation between theology and science results in some curious outcomes. For instance, Walton argues that by restricting science to the realm of the physical world, “*science is removed from the realm of divine activity.*”¹⁷⁵⁴ Such a statement is highly problematic to say the least. How can the realm and world of science be outside the action and involvement of God? All things are in God's hand and charge, even the world which science has been assigned by modern thinkers. As another example, Walton demands that any beliefs a scientist may have “*must be seen as distinct from their scientific work.*”¹⁷⁵⁵ He states that belief in God will “*not change their approach to their scientific study ... nor does it affect their methods for studying ...*”¹⁷⁵⁶ Now this dichotomy between belief and action is extremely problematic for a Christian. The way we think must be expressed in the way we act. To suggest we can think one way (from Scripture) and act another (with regard to science) is hopelessly wrong. Our beliefs and our actions ought not to be at odds, but this is exactly what Walton states should be the case for a believing scientist! Essentially Walton reaffirms the secular view that science is neutral with regard to religious belief, but this is also hopelessly wrong. As a final example, Walton asserts that: “*it is unconvincing for a scientist to*

1749 I do not accept this position.

1750 I do not accept the idea that Genesis depicts an ancient cosmology.

1751 **John H. Walton.** The Lost World of Genesis One. P60.

1752 **John H. Walton.** The Lost World of Genesis One. P114.

1753 **John H. Walton.** The Lost World of Adam and Eve. P103.

1754 **John H. Walton.** The Lost World of Genesis One. P114,115.

1755 **John H. Walton.** The Lost World of Genesis One. P114,115.

1756 **John H. Walton.** The Lost World of Genesis One. P114,115.

claim that he or she finds no empirical evidence for God,” and this he asserts is because “*science ... is ill-equipped to find evidence of God.*”¹⁷⁵⁷ However, what are we to do with such Scriptures as Psalm 19 and Romans 1? Such passages amongst others, record what God wants us to know, and they declare that creation points to the Creator!

Walton's view of modern science and its connection with theology, is one not favoured by modern science itself. The palaeontologist Stephen Jay Gould favoured this kind of view which he called: “NOMA,” or, Non-Overlapping Magisteria, but the vast majority of modern scientists utterly reject this viewpoint.¹⁷⁵⁸ Notice that the top layer of the cake, which is the area where theology operates, rests on the lower layer. This means that, for Walton, theology *requires* the use of science in order to understand how things have come to be in the *material* sense. The two disciplines (modern science and theology) are separate – they are different layers of the cake separated by the cream (or jam!) – but theology rests on science. This is similar to the old idea that theology was “Queen of the sciences.” In the medieval period, before a student could master theology, they must first have learned the other disciplines, (logic, rhetoric, grammar, arithmetic, geometry, music, and astronomy), which acted as handmaidens or helps in understanding the Queen!¹⁷⁵⁹ Consequently Walton can conclude:

*“Therefore whatever explanation scientists may offer in their attempts to explain origins, we could theoretically adopt it as a description of God's handiwork.”*¹⁷⁶⁰

Not surprisingly, Walton expresses an acceptance of evolution, although this generally sits in the background in his writing. For example he can say that:

*“Biological evolution is not the enemy of the Bible and theology.”*¹⁷⁶¹

And he declares that:

*“The fossil record, comparative anatomy and the genome likewise all point to common descent, but they offer no information about what factors drove the changes.”*¹⁷⁶²

1757 **John H. Walton.** The Lost World of Genesis One. P116.

1758 **Stephen Jay Gould.** Rock of Ages: Science and Religion in the Fullness of Life. 1999. Ballantine. P178.

1759 **Alister E. McGrath.** A Scientific Theology: Volume 1: Nature. 2001. T & T Clark, Edinburgh. P20.

1760 **John H. Walton.** The Lost World of Genesis One. P131.

1761 **John H. Walton.** The Lost World of Genesis One. P165.

1762 **John H. Walton.** The Lost World of Adam and Eve. P190.

Because he concludes that Genesis 1 has nothing to say about material origins, this leaves the door open for us to trust modern science:

*“If Genesis 1 is not an account of material origins, then it offers no mechanism for material origins, and we may safely look to science to consider what it suggests for such mechanisms.”*¹⁷⁶³

He writes that “*scientific conclusions ... pose no threat to biblical belief.*”¹⁷⁶⁴ Further, he contends that, “*very little found in evolutionary theory would be objectionable*” to his interpretation of the Genesis text.¹⁷⁶⁵ In accepting the consensus view of origins through evolutionary means he suggests that:

*“... perhaps what Genesis is telling us is that God chose one pair from the rest of early hominids for a special, strange, demanding vocation.”*¹⁷⁶⁶

Where in the world does Walton get such ideas? They certainly are not in the Genesis text.

Scripture – a human book.

On Scripture, Walton claims to believe in divine inspiration, but holds that our interpretation can only connect and interact with the **human** part. The authority of the text is limited, Walton claims, to the human dimension. He states:

*“The authority and inerrancy of the text is, and has traditionally been, attached to what it affirms. Those affirmations are not of a scientific nature.”*¹⁷⁶⁷

Such a view is not the one of evangelical or Biblical Christianity, where every word of God is to be lived by since it is pure.¹⁷⁶⁸

Walton contends that since God has condescended to the human level, and because ancient man was very different to modern man and did not understand science, this means we are duty bound to work hard to come down to the ancients' way of thinking. He writes: “*we must consider what the human author intended to communicate if we want to understand God's message.*”¹⁷⁶⁹ He

1763 **John H. Walton.** The Lost World of Genesis One. P162,163.

1764 **John H. Walton.** The Lost World of Adam and Eve. P13.

1765 **John H. Walton.** The Lost World of Genesis One. P169.

1766 **John H. Walton.** The Lost World of Adam and Eve. P177.

1767 **John H. Walton.** The Lost World of Adam and Eve. P20.

1768 Deuteronomy 8:3; Psalm 12:6.

1769 **John H. Walton.** The Lost World of Adam and Eve. P15.

amplifies this statement by noting that even though “*two voices speak*,” (the human and the divine), nevertheless “*the human author is our doorway into the room of God's meaning and message.*”¹⁷⁷⁰ Walton presses this idea that the human writer is paramount by claiming that all “*authority is tied to the message*” of the human author, since “*God accommodated himself to the world of ancient Israel.*”¹⁷⁷¹ He continues by contending that it is only what the human “*author meant and what the audience understood*” which come authoritatively.¹⁷⁷² These comments by Walton are disturbing. They amount, in effect, to a reiteration of the old liberal viewpoint, not an evangelical one. For Walton, God has not merely accommodated to the human reference point, He has **limited** Himself to it. There is a large difference between the idea of accommodation (ensuring that what is revealed is understood, largely, by mankind), and the ideas expressed by Walton. By making the human author the vehicle for revelation Walton effectively eliminates any concept of the divine. Further, by limiting the content of the information to that which the ancient peoples knew, he again limits God's revelation.¹⁷⁷³ These ideas fly in the face of the overall Biblical ideas that what we have is God's very words, which have their origin in Him. Peter observed that the holy men through whom revelation came were actually unsure what their own message related.¹⁷⁷⁴ The words we find in Scripture, we believe, were authored directly by God, but were communicated through people without any ruination, loss, or diminishing of the human spokes-person's personality, nor did they suffer any diminishing of God's perfect intentions for all people who would care to read them.

Walton expresses a number of other views which are equally unhelpful. So, for example, the creation of Eve was not historical but was a vision experienced by Adam!

*“From these data it is easy to conclude that Adam's sleep has prepared him for a visionary experience rather than a surgical procedure.”*¹⁷⁷⁵

What makes him come to such a viewpoint? Walton argues that although God can do whatever He wants, he asks: “*would Israelites naturally think in terms of surgery? Would they think that Adam was anaesthetized when God put Adam in a deep sleep?*”¹⁷⁷⁶ The expected answer to these questions is: no because the “*Israelites knew nothing of the use of anaesthesia.*”¹⁷⁷⁷ Such a train of reasoning

1770 **John H. Walton.** The Lost World of Adam and Eve. P15.

1771 **John H. Walton.** The Lost World of Adam and Eve. P19.

1772 **John H. Walton.** The Lost World of Adam and Eve. P19.

1773 There is also an implicit belief that the ancient peoples were inferior in knowledge and experience. A view which is only promoted by a belief in evolution. Reject evolution and we are free to believe that Adam and Eve were as intelligent, if not more intelligent, than modern man is today.

1774 1Peter 1:10-12; 2Peter 1:20,21.

1775 **John H. Walton.** The Lost World of Adam and Eve. P80,109.

1776 **John H. Walton.** The Lost World of Adam and Eve. P79.

1777 **John H. Walton.** The Lost World of Adam and Eve. P79.

offered by Walton is weak, to say the least. He assumes that the ancient Israelites were not as advanced as us – they had not evolved our technology and skill. But, more importantly, he has limited the text to that which the human mind could arrive at, and has no understanding of the fact that Genesis 1 is *divinely* revealed truth. The Lord God Himself takes the initiative in Genesis 2 not man. What is wrong with taking the text at face value? Walton may respond by countering that we can only take it at face value if we read it as an ancient human text, but the evidence from Scripture (what God has to say on all matters) is diametrically opposed to this. As a single example we remind the reader of Christ's response to the conundrum posed by the Sadducees in Matthew 22:23-33. The Lord speaking 2,000 years ago could say to the Sadducees that what they could read – the Pentateuch written 1500 years earlier by Moses – was, in point of fact, that which God was speaking to them in their day. In other words, the word of God, (the Bible), is God *speaking*. This means that the meaning is capable of being grasped through reading! It does not require the convoluted machinations of the scholars.¹⁷⁷⁸

Elsewhere Walton argues that the writer of Hebrews did not derive data from Genesis to describe the characteristics of Melchizedek. Rather the data must have come from inter-testamental literature from the Second Temple Judaism period, i.e. post-exilic.¹⁷⁷⁹ Quite how he arrives at such a conclusion is not clear. He does not seem to think the writer of Hebrews was divinely inspired. He simply assumes that the writer was a human who pieced together ideas from a variety of sources, and the Lord stood idly by! From this assertion concerning Melchizedek, Walton argues:

*“If the author of Hebrews can employ such strands in sophisticated and complex ways, we must inquire whether Paul could do the same with Adam and Eve.”*¹⁷⁸⁰

Thus Adam and Eve were not the first human pair. Rather they were *“the first significant humans.”*¹⁷⁸¹ The Genesis creation accounts were not given to the first pair, Adam and Eve, but were constructed for the Israelites much later on, and depict the story concerning the first significant pair.¹⁷⁸² Again these ideas are borne from a human understanding of the development of the Bible.

Other ideas Walton promotes which stem from a human understanding of Scripture include, the notion that physical death existed before the fall, the concept that sin was not the cause of pain,

1778 I do not discount that fact that there are other Biblical hermeneutical tools that are needed, such as the need to be born again, the need for a humble approach and the need to read so as to obey, but my point here is that we do not need extra-Biblical data to understand Scripture.

1779 **John H. Walton.** The Lost World of Adam and Eve. P97-99.

1780 **John H. Walton.** The Lost World of Adam and Eve. P99.

1781 **John H. Walton.** The Lost World of Adam and Eve. P114.

1782 **John H. Walton.** The Lost World of Adam and Eve. P50,109,128.

suffering and death, and, the idea that Genesis 1:2 describes a chaos similar to that found in ANE texts.¹⁷⁸³ Clearly such ideas sit well with an acceptance of evolution but they are not ones that come from the text alone.

1783 **John H. Walton.** The Lost World of Adam and Eve. P138,151,159.

Chapter 26: John Fesko.

Temple not science nor history.

In his book, *Last Things First*, John Fesko argues that because Genesis is not scientific, and not concerned with history, we must not ask questions of a scientific or historical nature when looking at its text.¹⁷⁸⁴ He is quite adamant on these points and notes that:

*“Genesis 1-11 is not about world history.”*¹⁷⁸⁵

And that, equally importantly:

*“The opening chapters of the Bible are not about science.”*¹⁷⁸⁶

How, then, should we interpret Genesis 1-3? What are the hermeneutical tools we need to unlock the meaning of the Genesis text? For Fesko, the Bible's purpose *“is not to convey scientific information.”*¹⁷⁸⁷ Rather, in his estimation, Scripture must be limited to speaking on *“theological issues.”*¹⁷⁸⁸ The immediate question that arises given the statements he makes, is to ask: is it possible to make a clear demarcation between history, science and theology? That these three themes have different arenas, or that they look at the world in different ways, is not in dispute. Nevertheless protagonists of all three subjects make stringent claims that they are speaking the truth as they understand it. Now nowhere in his work does Fesko give us any definitions of these three themes. But surely something is either true or it is false? If Scripture is true, why not scientifically and historically true? The idea that something can be *theologically* true, but *historically* or *scientifically* false seems to me to be wholly wrong. I wonder if we ought rather to speak of “truth” rather than science or history? As an obvious truism, something can be true or it can be false. Claiming that something is historical, necessarily implies that the thing in question actually

1784 **J. V. Fesko.** *Last Things First: Unlocking Genesis 1-3 with the Christ of Eschatology.* 2007. Mentor, Christian Focus. P27,29,30,38,202,205,206.

1785 **J. V. Fesko.** *Last Things First.* P27.

1786 **J. V. Fesko.** *Last Things First.* P205.

1787 **J. V. Fesko.** *Last Things First.* P26.

1788 **J. V. Fesko.** *Last Things First.* P29.

happened as recorded. If it happened as it was recorded as happening, then how can it not also be scientifically true? I suspect that many have a view of science as distinct and separate from other categories of thinking. However scientific thinking is really nothing more nor less than common sense applied to the physical world. Making a distinction serves only to excuse modern man from dealing with the truth, i.e. Scripture. That theology cannot really be divorced from history (true history) is clearly demonstrated by both the Exodus, and by the death and resurrection of the Lord Jesus, amongst many other events. In opposition to Fesko, we must insist that there can be no “theological” truth which isn't also historical and true to general revelation. Otherwise what are to make of the historical claims for Christ's resurrection as we have already mentioned? Are we to view these in a spiritual/theological sense only, as a former bishop of Durham David Jenkins once claimed?¹⁷⁸⁹

Genesis is hard but it is not history.

At the beginning of his work Fesko attempts to establish the idea that Genesis is a hard text to understand.¹⁷⁹⁰ It is clear, he reports, that there have been many disputes and disagreements over Genesis 1-3. Such a situation, he concludes, indicates that Genesis is not straight forward, and the only way out is to look for a New Testament theological approach, namely to view it in terms of Christ and eschatology, not science or history.¹⁷⁹¹ In response to this idea that Genesis is too difficult we might respond by asking: What doctrine of Scripture is not contended over, even with great vigour and vehemence? Genesis 1 is not hard to read at all. Give the text to a child of reading age and they will tell you exactly what it means! It is only hard to read if you happen to be an academic cursed by the multitude of views pursued purely for the gaining of PhDs and the glory of a great reputation.

There are several reasons why Fesko argues against Genesis 1-11 relaying historical information. One of these is that it does not tell us about the creation of the angels!¹⁷⁹² Another is based on his understanding of what was going on with the patriarch Job. At the end of the book of Job we find that the Lord asks him a series of detailed questions of a rather technical nature, or as Fesko puts it: “*a series of how questions.*”¹⁷⁹³ Now none of these receive any answer from Job and Fesko interprets Job's silence as proof positive that the early chapters of Genesis are not to be taken

1789 David Jenkins was famed for referring to the resurrection merely as “a conjuring trick with bones” because he denied its historicity. See, for example: <https://www.telegraph.co.uk/news/uknews/1403106/One-third-of-clergy-do-not-believe-in-the-Resurrection.html>

1790 J. V. Fesko. Last Things First. P13.

1791 J. V. Fesko. Last Things First. P14.

1792 J. V. Fesko. Last Things First. P27.

1793 J. V. Fesko. Last Things First. P24.

historically or scientifically. He continues by telling us that:

“The answers to many of God's questions to Job, at least scientifically, lie not in Scripture but in the scientific investigation of nature.”¹⁷⁹⁴

But is this really the case? Can modern science answer questions concerning the foundation of the universe and how it was constructed? I think not. The reason? Well it is simply because of the questions that God asks Job! The only answer to the many questions God asks Job is, in point of fact, a big fat blank – we have no idea! Job's silence is the correct response. We cannot answer them because we were not there, but the folly of modern man is to pursue the forlorn dream that all answers will yield to the ingenuity of man (scientific man).

Genesis and science do not mix.

Fesko appears unhappy with both the creation science movement approach, which takes Genesis at face value and challenges the contemporary scientific view, and also, with the older approach that attempts to accommodate the findings of science to the Scriptures. With regard to the creation science approach Fesko suggests that the modern movement's historical origins are dubious to say the least. He begins by suggesting that the founder of the modern creation science movement was the Seventh-Day Adventist and self-taught geologist, George McCready-Price.¹⁷⁹⁵ By pointing to such an origin for creation science Fesko hopes to cast doubt on its validity. Such a person who advocates a false religion and who is an amateur ought not to be relied on! Such a reading of history is heavily prejudiced, but Fesko ends up contradicting himself when he later claims that a person may make a legitimate and truly justified claim despite having erroneous views.¹⁷⁹⁶ If a person's prior belief system does not mean they cannot state the truth, what point is there in stating McCready-Price's religious affiliations?

It is also to be remembered that all the pioneer scientists were effectively self-taught! Often this is a better starting point because then the self-taught are not bent into thinking which is the currently accepted paradigm.

Next he casts doubt on the modern twentieth century revival of creation science instigated by John Whitcomb and Henry Morris. These men are not to be considered or listened to because they are dispensationalists who follow one hermeneutical principle, namely, literalism. Such a reading of the history of the creation science movement is hopelessly wrong and, more importantly,

1794 J. V. Fesko. Last Things First. P25.

1795 J. V. Fesko. Last Things First. P18.

1796 J. V. Fesko. Last Things First. P28.

seriously biased. For example, in the UK there were men who pioneered creation science way before these American folk. Thus the *Creation Science Movement*, formerly known as the *Evolution Protest Movement*, was started in 1932 in London.¹⁷⁹⁷ Other creation organisations have begun across the world and have drawn from many different theological streams. As just one example, *Answers in Genesis* began in Australia with the work of Ken Ham who is certainly not a dispensationalist. But apart from these modern developments, it is scurrilous to suggest that a creation basis for the scientific approach to the world was only begun in the twentieth century. Any reading of the history of science must take into account the clearly creation based approaches of the earliest modern scientists of the seventeenth century, like Johannes Kepler and Robert Boyle, not to mention the many Scriptural geologists of the eighteenth and nineteenth centuries.¹⁷⁹⁸

One of the ways in which a view is often discredited is to argue against its claim to being a view held by the reformers. According to Fesko, the creation science view grew “*out of theological and hermeneutical presuppositions antithetical to Reformed theology*.”¹⁷⁹⁹ It is, of course, a popular game amongst those owning the title “reformed” to claim that their particular view is the reformed one.¹⁸⁰⁰ In this game it is necessary to quote Calvin, Luther and other reformers in preference to the Scriptures! A prime example of this reformed approach is to appeal to the “worthies” who plumped for evolution. Fesko appeals to B. B. Warfield who at one time defended evolution as being compatible with the Scriptures.¹⁸⁰¹ However, there are numerous counter examples of those who rejected evolution, and, what-is-more, it is pertinent to note that there is good evidence to show that Warfield later changed his views and rejected evolution.¹⁸⁰² To cap it all, the idea that “reformed” Christians today reject creationist views is, quite simply, wrong.

Since the creation science approach to Genesis is wrong and must be ruled out as a viable option, according to Fesko, what is the alternative?¹⁸⁰³ He argues that what we must do is to ask the question, what is the *purpose* of Genesis 1-3? It cannot simply be a historical record of how things

1797 Cited 7th April 2015. Online at: <https://www.csm.org.uk/howeare.php>. The first president of the EPM was Sir John Ambrose Fleming, a distinguished physicist and FRS.

1798 Aside from this I discovered recently that the 1771 edition of the Encyclopaedia Britannica outlines Biblical creationism as a scientific position. One writer explains: “*Under the heading ‘Astronomy’ on page 493, the 1771 Encyclopædia Britannica has a table of world events that begins with the creation of the world in the year 0, i.e. at the beginning of creation, which they dated at 4007 years before Christ.*” See: <https://creation.com/encyclopedia-britannica-supporting-a-young-earth> See also T. J. Mortensen. The Great Turning Point. 2004. Master Books.

1799 J. V. Fesko. Last Things First. P18.

1800 J. V. Fesko. Last Things First. P18,21. Like a lot of “labels” they tend to loose their original meaning. It is best to define things clearly at the outset. For the sake of clarity I suggest that the term “reformed” merely means that we accept an approach to the faith which is seeking to be centred solely on Scripture for the glory of God.

1801 J. V. Fesko. Last Things First. P15.

1802 J. V. Fesko. Last Things First. P22. Fred G. Zaspel, B. B. Warfield on creation and evolution. *Themelios* 35:2 (July 2010).

1803 J. V. Fesko. Last Things First. P22.

came to be, for what should we do with the many questions God challenges Job with? If Job cannot answer the questions God proposes, such as how the world was made, by an appeal to Genesis 1-3, then it cannot be that their purpose was to answer the question of how God made the world.¹⁸⁰⁴ To argue in this way is sheer folly. Genesis 1-3 clearly gives us the outline of how God made the world but it does not give us many details. To suggest that it gives us great detail is foolish. To suggest that because it does not give us such details, that it cannot then give us any truth concerning how things came to be is equally wrong. Fesko claims that the questions God asks Job are only to be answered by science.¹⁸⁰⁵ Such reasoning is dangerous. It opens us up to the challenge that modern science is equally authoritative. It is not. Modern science can never be authoritative in the sense that Scripture is authoritative because science is the invention of men, whilst the Scriptures are the revealed will and word of the living God. The Scriptures alone are authoritative and any attempt at allowing other ways of thinking, or other sources of information as being in authority will yield heresy. True science must be done with Scripture as a foundation. Sadly many theologians confuse general revelation with science, and then appeal to the “Two Books” through which God has apparently revealed. General revelation does not lie, but men do! They have darkened minds and interpret creation in accord with their foolish thinking. Such “science” must be rejected at all costs! Yes, of course, it is possible to misinterpret Scripture, but that general revelation has been misinterpreted is surely far more obvious? When men have looked at creation and concluded that it all evolved, isn't this folly in the extreme? After all the Scriptures know nothing of evolution. Since God is the author of Scripture, wouldn't it have been simple to reveal this in some way? It simply isn't sensible to suggest theological categories of thinking in distinction to historical and scientific.

An ancient book.

In order to understand Genesis 1-3, we must come to it in its original historical context, and therefore we “*must enter the world of the original audience.*”¹⁸⁰⁶ Since the ancient audience that heard Genesis had no knowledge of science and history as we know it today, then we cannot bring science into, or out of, the text of Genesis 1-3. The Genesis text was probably written in the fifteenth century BC, so to grasp its meaning we need to examine it using “*a vast array of sources*” which include, rabbinic interpretation, medieval writings, “*documents with the same historical context such as Enuma Elish,*” and modern contemporary views too!¹⁸⁰⁷ Given its historical context,

1804 J. V. Fesko. Last Things First. P25.

1805 J. V. Fesko. Last Things First. P25.

1806 J. V. Fesko. Last Things First. P34.

1807 J. V. Fesko. Last Things First. P37.

Genesis 1-3 does not tell us about the age of the earth but is really a polemic against the prevailing stories of creation. He writes:

*“All of this textual evidence suggests that one should analyse the creation account not with a view to twenty-first-century scientific questions but rather in the theological and religious context of the Israelite exodus and conquest of the promised land.”*¹⁸⁰⁸

Now in response to Fesko's suggestions, we must point out that it is not really possible to “*enter the world of the original audience.*”¹⁸⁰⁹ It is noteworthy that other writers suggest much later dates for the date of Genesis, such as the time of the exile, so which ANE audience is to be considered? Furthermore, suggesting that the Israelites of those days were ignorant of the concept of truth seems, to me at least, to be presumptuous. How do we know what categories of thought these ancient folk entertained? Such thinking assumes that man has evolved and has changed his categories of thinking. It is presumed today that it is only modern man who thinks *scientifically*. However, it is far better to recognise that man is one, (i.e. the same throughout history), and that the category “truth” is universal.

The idea that Genesis 1-11 was written as a polemic and was not concerned with any modern idea of origins, flies in the face of the actual text itself, and also, with how it is treated in the New Testament. We would only have to mention the Lord's appeal to how man was created male and female, and how marriage was first instituted when He was asked about divorce to show this.¹⁸¹⁰ The Lord speaking through Isaiah also makes it abundantly clear that revelation of the truth has been given from the very start, and is not something that came about long after other cultures had thrived.¹⁸¹¹ Surely the pagan myths and cosmogonies are late-comers derived from Scripture and amalgamated with hero-worship and legends handed down over time? It seems to me that this is a far better and more realistic way of viewing things. God is not caught unawares. He is not beholden to man! He took the initiative, as far as salvation was concerned, the very moment that man fell into sin.¹⁸¹² Isn't it obvious that he took the initiative concerning what was important to be revealed too, and that he need not react to the prevailing or contemporary views? Isn't “truth” true? Isn't a description of what God was doing in creation accessible to all of mankind? But perhaps the most startling thing about Fesko's choice of hermeneutic tools is the utter neglect of any of the ones

1808 J. V. Fesko. Last Things First. P36.

1809 J. V. Fesko. Last Things First. P34.

1810 Matthew 19:3-8.

1811 See: Isaiah 41:21-24; 43:9; 45:21. Compare: Isaiah 40:21; 41:4; 46:10; 48:3,16; 64:4.

1812 Genesis 3:15.

supplied by the Bible itself. In other words, he refuses to heed what God Himself says about how we should understand His work. I realise that for academics like Fesko this smacks of circular reasoning and would not stand for a moment among his academic peers, but why go to the broken cisterns cut out by the men of this world, when you have access to the fountain of living waters?¹⁸¹³

The temple view.

The reason for Fesko's book is simply to promote the idea that Genesis 1-3 tells us of a temple setting. Now this view point seems to be reading into the account from the perspective of the tabernacle and the temple, but it ought to be the other way around. Genesis 1-3 details God's original dwelling with man. The setting is given in terms of creation and in terms of knowledge (e.g. naming the animals). It may be that man ought to be considered not just as having dominion, but also in the form of prophet and priest, but these categories would seem to need adjusting. Man walked with God in the garden, whilst prophecy indicates a less fuller knowledge. How Adam operated as a priest is difficult to discern. For whom was he acting in such a way? It would seem much better to see the tabernacle and the temple as the derivative and much more temporal versions of the Eden paradise. The final and fuller dwelling place of man with God as revealed in Revelation does have clear links and connections to Eden, but again there is more there than can be fathomed from Genesis 1-3 alone.

Christ central.

There can be no argument with Fesko's main point that to interpret Genesis 1-3 without reference to Christ and a view to the final goal is sheer folly. However he seems to make the false conclusion that such an interpretation rules out any other ways of interpreting the text. Seeing Christ in Genesis 1-3 does not stop the text from also conveying historical information which ought to inform our view of origins. We all believe that the death of Christ is primarily to be taken in a theological sense, but this does not stop us from seeing it as historical – Christ was actually crucified, died, was buried and then rose again on the third day. To separate out historical and scientific fact from theological is one of the mistakes modern theologians seem to glory in. They cannot be separated. Genesis 1-3 gives us an outline of exactly how all things came to be. The purpose of the text may not be primarily to give a full and detailed account – who could really understand such an account? The purpose is much greater than that, for it shows forth the nature of God and his dealings with mankind. It shows forth Christ and his dominion over all things.

¹⁸¹³ See Jeremiah 2:13. An appeal to the Bible for the means to understand the Bible is not circular reasoning because the Bible comes to us from the Lord God Himself who is the Way, the Truth and the Life (John 14:6).

Chapter 27: Peter Enns.

Maybe Paul was also wrong about Adam?

In his book *The Evolution of Adam*, Peter Enns has a very particular aim and intention which is at one and the same time both staggering and inevitable. Staggering because of the distance the author has strayed from an orthodox belief, and inevitable because, to be fair to him, he is only working out the implications that theistic evolution inevitably leads to. We shall discuss the author's main aim later, but before we get to this it is necessary to understand what this author's views are on the Scriptures and modern science.

What is the Bible?

Having read his work intensively, it seems to me that there are four key statements we can make about Enns' view of Scripture.¹⁸¹⁴

First he describes the Bible as essentially an ancient human book which bears all the hallmarks of human beings with their faults, failings and mistaken views. For example, Enns believes that the Pentateuch was written as a form of Israel's "*self-definition*" rather than a direct revelation from God.¹⁸¹⁵ The Bible is an ancient book and not a modern one. We are constrained to read it through the cultures and times within which it was composed.

Second, following on from this viewpoint, Enns discusses the way in which the authors of the Bible were free and "*creative*" in their use of sources and ways of expressing things.¹⁸¹⁶ He is not beyond using words like "*shoddy*" and "*deception*" when referring to different parts of the Scriptures.¹⁸¹⁷

Third, Enns makes quite plain his view that Scripture is theological and cannot be considered true history, and neither can it be understood as having anything to say with regard to modern science.¹⁸¹⁸ For Enns things can be true theologically even if they are conveyed through error of history or science.¹⁸¹⁹

1814 Also referred to in his work as the "Bible" and the "Word of God."

1815 **Peter Enns**. *The Evolution of Adam*. 2012. Brazos Press. P xviii.

1816 **Peter Enns**. *The Evolution of Adam*. P xi, 6, 79, 80, 81, 96, 102, 103, 113, 135.

1817 "Shoddy" is found in **Peter Enns**. *The Evolution of Adam*. P 113. "Deception" is found in **Peter Enns**. *The Evolution of Adam*. P 21.

1818 **Peter Enns**. *The Evolution of Adam*. P 50.

1819 **Peter Enns**. *The Evolution of Adam*. P 73, 122.

Finally, fourth, Scripture can only really be grasped by taking a scholarly approach. The emphasis on understanding Scripture from the viewpoint of its historical context requires such an approach because it is only through scholarly means that we can recover the context. Furthermore, since our perception of reality is very different to that of the ancients, it is necessary to recast Scripture to make it relevant and acceptable to the modern mind which is steeped in evolution, modern cosmology and so on. We shall consider each of these approaches in turn and offer some initial response.

An ancient human book.

Enns contends that the Bible is primarily a human book, and as such it necessarily bears all the hallmarks of human mistakes and errors. Enns contends that is “*well-known*,” for example, that the book of Esther contains “*numerous historical inaccuracies*.”¹⁸²⁰ The history found in Exodus, Joshua and Judges is not “*a journalistic recounting of freed slaves and the beginnings of an independent nation*,” and neither are they a “*blow-by-blow accounts of historical events*.” Enns makes these contentions because (apparently as is widely known by scholar and student alike), “*the historical evidence for Israel's presence in Egypt, the exodus, and the conquest of Canaan is somewhat sparse*.” It is accepted by such scholars that the narratives contained in these 'historical' books “*greatly embellished the events to serve another purpose*.”¹⁸²¹ When we turn to the stories of the early parts of Genesis, Enns can describe them as: “*inadequate, confusing, inaccurate, or downright bizarre*.”¹⁸²²

Since the Bible was written a long time ago from our perspective, we need to recognise it as an “*ancient*” book first, and not a modern one. It reflects “*ancient ways of thinking*” that need to be unpacked and understood before we can make sense of what we read.¹⁸²³ Enns states that:

*“Genesis is an ancient text designed to address ancient issues within the scope of ancient ways of understanding origins.”*¹⁸²⁴

By saying this he wants to create distance, not merely of time, but supremely of thought, between us today and the characters we meet in Scripture. Since it is an ancient text we need to read it by “*ancient standards*,” and, “*we must hear Genesis in its ancient voice*.”¹⁸²⁵ How this is to be done is

1820 **Peter Enns.** The Evolution of Adam. P31.

1821 **Peter Enns.** The Evolution of Adam. P62.

1822 **Peter Enns.** The Evolution of Adam. P62.

1823 **Peter Enns.** The Evolution of Adam. P53.

1824 **Peter Enns.** The Evolution of Adam. P36.

1825 **Peter Enns.** The Evolution of Adam. P36.

an interesting conundrum!

Thus, Enns describes the Bible as “*a product of its time.*”¹⁸²⁶ In making such a statement Enns does not mean merely that the culture of the times within which it is set are embedded within the sacred pages. Rather he insists that “*the most faithful*” reading of “*sacred Scripture*” recognises that it was “*a product of the times not merely so, but unalterably so.*”¹⁸²⁷ In other words the culture has left its stamp indelibly on the pages of the Bible so that it “*will through and through bear the marks of its historical settings.*”¹⁸²⁸ In an earlier book, *Inspiration and Incarnation*, Enns makes the claim that Scripture ought to be considered as an incarnation.¹⁸²⁹ In the *The Evolution of Adam* he revisits this idea, stating, for example:

“... we should expect of Scripture the same sort of embrace of the human that Jesus himself willingly took on ...”¹⁸³⁰

He makes mention of the divine origin of the Scriptures on only one occasion, but this theme is ultimately ignored in favour of a consideration of the human nature of the Scriptures.¹⁸³¹ For Enns this amounts to recognising faults, failings and errors that fallen human beings are truly, and most certainly, guilty of. What is highly problematic, however is a failure to recognise that in the incarnation of Christ (the Second Person of the Holy Trinity), we have the union in a single person of the divine nature with a *sinless* human nature. The Word truly became flesh partaking of our humanity, but, He took on a *sinless* human nature, not a fallen one. If we accept this truth then we ought therefore, to accept that the human element of Scripture should be without error, fault or mistake.

Now Enns develops his ideas with the conviction that because the Bible is locked into ancient times, we must therefore understand it “*from the vantage point of those historical circumstances in which it was written.*”¹⁸³² Because the Bible is a human book we must therefore consider it simply in human terms. Enns suggests that the Old Testament as we know it was compiled and edited at the time of the exile. Before this, Israel may well have “*documented, recorded, told, and retold its own story*” both “*orally and in writing,*” in the form of “*ancient deeds, court politics, and temple liturgies,*” but it is wholly unlikely in Enns's view that these early

1826 Peter Enns. *The Evolution of Adam*. Pxi.

1827 Peter Enns. *The Evolution of Adam*. Pxi.

1828 Peter Enns. *The Evolution of Adam*. Pxi.

1829 Peter Enns. *Inspiration and Incarnation*. Evangelicals and the Problem of the Old testament. 2005. Baker Academic.

1830 Peter Enns. *The Evolution of Adam*. Pxi.

1831 Peter Enns. *The Evolution of Adam*. Pxi.

1832 Peter Enns. *The Evolution of Adam*. Pxi.

records were ever considered to be “*sacred Scripture at the time.*”¹⁸³³

A “creative” book.

Having declared that the Bible is essentially a human construct, Enns develops the idea that the writers had no real concept of honesty or integrity as we might understand, for they were free to embellish, invent and be creative in their writing and use of sources. Enns suggests, for example, that Paul engaged in a “creative” handling of Scripture such as was normal for his day.¹⁸³⁴ He comments further that Paul was “*not doing “straight exegesis” of the Adam story,*” but instead he subordinated this story to his own purpose in exalting the risen Son of God, and so was “*expressing himself within the hermeneutical conventions of the time.*”¹⁸³⁵ A little further on in the book Enns tells us that “*Paul’s handling of his Scripture is notoriously creative and complex, not simple and straightforward.*”¹⁸³⁶ And then further on Enns tells us that Paul engaged in “*forced reading,*” of the Old Testament, by which he means making the text say something it did not mean. To cap it all, Enns accuses Paul of the “*shoddy use of Scripture.*”¹⁸³⁷ Apparently, according to Enns, such “*creative handling*” was something that was not exclusive to Paul, for it “*also seems to have been part of Israelite and Jewish conviction of how Scripture is to be handled.*”¹⁸³⁸ Paul’s understanding and use of the Old Testament “*in general is creative,*” and, concerning Adam, Enns contends that Paul “*invests Adam with capital he does not have either in the Genesis story, the Old Testament as a whole, or the interpretations of his contemporary Jews.*”¹⁸³⁹

It is worth showing, at this point, just how Enns comes to make such assertions that the writers of the Bible were creative, resorted to embellishing, and ended up with a shoddy result. Concerning Genesis, Enns tells us that we cannot take the book literally for three main reasons.¹⁸⁴⁰ One of these boils down to scholarly opinion concerning the context of Genesis. Prior to the archaeological discovery of ANE texts such as the *Enuma Elish* and the *Atrahasis*, which bore some resemblance to the creation and flood stories of Genesis, it may have been natural to consider Genesis as authoritative history. Enns states:

“In earlier centuries the Old Testament could safely be read in isolation; now archaeological discoveries of the nineteenth century introduced an external control

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- 1833 **Peter Enns.** The Evolution of Adam. P26.
1834 **Peter Enns.** The Evolution of Adam. P81.
1835 **Peter Enns.** The Evolution of Adam. P81.
1836 **Peter Enns.** The Evolution of Adam. P87.
1837 **Peter Enns.** The Evolution of Adam. P113.
1838 **Peter Enns.** The Evolution of Adam. P113.
1839 **Peter Enns.** The Evolution of Adam. P135.
1840 **Peter Enns.** The Evolution of Adam. Pxi.

by which to assess the nature of Genesis, to calibrate its genre.”¹⁸⁴¹

However with the discovery of these and other ANE writings “*which rocked the boat in the nineteenth century,*” it is not now possible to consider Genesis as history.¹⁸⁴² Why? Well because, according to scholarship (and Enns), the Genesis text is a late text which was written at the time of the exile in the 6th century BC, whilst the ANE accounts of Mesopotamia are much older.

“...modern scholarship understands the Old Testament as a whole, and Genesis and the Pentateuch in particular, to be Israel's statement of national self-definition in the wake of Babylonian captivity (586-539 BC). The Old Testament is not aimed at simply providing objective historical information, and certainly not scientific information that conforms to modern expectations. Genesis in particular shows us how Israel thought about itself amid its own troubled history and among the surrounding nations.”¹⁸⁴³

In order to understand Genesis, therefore, we must assume that it was written in the *context* of these earlier and much older Mesopotamian accounts. Enns describes how Genesis came to be:

“Furthermore, biblical scholars commonly accept that Genesis 1 was written in the postexilic period (perhaps with earlier versions) and expresses Israel's faith in Yahweh against the backdrop of the familiar creation-story idioms of the ancient Near East in general and of their recent Babylonian hosts in particular. In other words, the Israelites who first heard Genesis 1 likely had some knowledge of the Babylonian story as reflected in the copy of Enuma Elish known to us from Ashurbanipal's library. Genesis 1 is not the prototype but presumes and interacts with the far older Babylonian theology of the dominant culture.”¹⁸⁴⁴

Enns is most emphatic on the idea that Genesis is not the first account of creation:

“What can be ruled out, however, is any notion of Genesis being the original. The Genesis story we have is written in a dialect of Hebrew that did not exist until the first millennium BC. Hebrew culture is also a later development than Babylonian culture, and it strains credulity to think that Mesopotamian superpowers would bind their national story to that of a tribe of wanderers. There is really little question among scholars of Scripture and the ancient Near East that the Hebrew version is later and owes its existence to its Akkadian predecessors, in terms of shared cultural and literary motifs if not actual retellings of the Akkadian precursors.”¹⁸⁴⁵

1841 **Peter Enns.** The Evolution of Adam. P37.

1842 **Peter Enns.** The Evolution of Adam. P37.

1843 **Peter Enns.** The Evolution of Adam. Pxxviii-xix.

1844 **Peter Enns.** The Evolution of Adam. P38,39.

1845 **Peter Enns.** The Evolution of Adam. P47

When Enns has satisfied himself of the priority of the ANE texts and stories, he then sets about determining the significance of the much later Biblical accounts:

*“Placing Genesis in its ancient Near Eastern setting strongly suggests that it was written as a self-defining document, as a means of declaring the distinctiveness of Israel's own beliefs from those of the surrounding nations. In other words, Genesis is an argument, a polemic, declaring how Israel's God is different from all the other gods, and therefore how Israel is different from all the other nations.”*¹⁸⁴⁶

Once again we are brought to consider the Bible as a human book. The Biblical writers were concerned to honour God and so they engaged in polemics against the ANE cultures and used the already existing themes found in those external cultures to make their claims. The Biblical text of Genesis as we know it is “*ambiguous and inconsistent*,” according to Enns, and it is incumbent on scholars to make some sense of it.¹⁸⁴⁷ And Enns is eager to supply his viewpoint:

*“... the ancient Israelites, in making this polemical case, freely adapted the themes of the much-older stories of the nations around them.”*¹⁸⁴⁸

Thus the Israelites captive in exile engaged in free adaptation of the themes already presented to them by the earlier Mesopotamian accounts. Enns can then state that “*the historical picture the Pentateuch gives is actually a deception*”!¹⁸⁴⁹ To gain a true history of Israel it is necessary for scholars (like Enns) to “*untangle the mess created by the propagandist editor and put the sources into their proper order.*”¹⁸⁵⁰ Enns then concludes that having correctly arranged the Biblical text according to history informed by the ANE cultures, what emerges is a “*picture*” which “*shows a movement of Israel's religion from simple to complex, or better, from free to legalistic ...*”¹⁸⁵¹ This final comment is what may be expected from one who favours evolution.

When we consider some of the details of how Enns reads Genesis 1, we can see how he has viewed the Scriptures through an ANE Mesopotamian pair of spectacles. Enns tells us that “*God is “only” said to have tamed a preexisting chaos,*” and has not, in point of fact, created all things “*out of nothing.*”¹⁸⁵² Thus by placing the ANE accounts as the source of the Genesis stories, any notion of an absolute or cosmic creation is removed. Furthermore, because Genesis is a polemic drawing

1846 **Peter Enns.** The Evolution of Adam. P6.

1847 **Peter Enns.** The Evolution of Adam. P12.

1848 **Peter Enns.** The Evolution of Adam. P6.

1849 **Peter Enns.** The Evolution of Adam. P21.

1850 **Peter Enns.** The Evolution of Adam. P21.

1851 **Peter Enns.** The Evolution of Adam. P21.

1852 **Peter Enns.** The Evolution of Adam. P45

on Mesopotamian themes, the writer of Genesis conceived of “*the entire world was as it appeared, small and flat.*”¹⁸⁵³ Enns asserts that Genesis 1

*“... drew on the thought categories available at the time to create a powerful statement within its own context for the uniqueness of Israel's God and his worthiness to be worshipped.”*¹⁸⁵⁴

Rather than give us the reason or origin for our seven-day week, as Genesis 1 appears to do, the writer of the Genesis account has merely copied the theme from an older Mesopotamian source:

*“The creation story was written with Israel's temple and the Sabbath rhythm in mind. The seven-day pattern of creation in Genesis 1 is not the source of the rhythm of Israel's liturgical week. Rather, as with Adam, Israel's seven-day pattern is brought into primordial time. This is not deception or a failure to be “objective” in writing their story: this is self-definition.”*¹⁸⁵⁵

One feature which Enns feels is a compelling case against Genesis being an historical account is the differences between the two creation stories of Genesis 1 & 2. He claims that:

*“These two stories are clearly significantly different, and they cannot be harmonized by saying that the first gives the overview and the second fills in some of the details. The presence of two different creation accounts is troublesome for readers who assume that Genesis 1 and 2 are historical in nature and that the Bible's first priority is to recount history accurately. Yet the divergence of these stories cannot be reasonably questioned. To stitch them into a seamless whole would dismiss the particular and distinct points of view that the authors were so deliberate in placing there.”*¹⁸⁵⁶

However such a statement is hardly compelling! The four accounts of Christ's life, death and resurrection are hardly identical, and what person in any time or place would be able to recount the facts of a case in exactly the same way as another? Enns objects to the plain understanding that Genesis 1 tells us the creation of all things within the space of creation week, whilst Genesis 2 recounts the details of day 6. What could be more simple to grasp? Well having in his own mind 'proved' that Genesis cannot be historical because the two creation accounts differ so markedly, Enns proceeds to find explanations for why they differ so much. He concludes that Genesis 1 is the much younger story written to counter Mesopotamian myths, whilst Genesis 2 preserves a more

1853 **Peter Enns.** The Evolution of Adam. P50.

1854 **Peter Enns.** The Evolution of Adam. P45

1855 **Peter Enns.** The Evolution of Adam. P73.

1856 **Peter Enns.** The Evolution of Adam. P52.

ancient version of creation whose main purpose was to self-define Israel as a nation under God's rule. But all of this is mere conjecture and does not help the reader in any way at all.

A theological book.

For Enns the Bible is only a theological work and this implies that it has nothing to contribute to the disciplines of history and science. At the start of his book Enns suggests that the Bible is not theologically unified. Instead, because the Bible was written in “*diverse times and places and written for diverse purposes*,” this leads us to the notion that it is characterised by “*significant theological diversity*,” which ought not to “*be a surprise*.”¹⁸⁵⁷ Holding to evolution Enns focuses on a gradual development of Scripture which has undergone several stages (including the oral as well as written and copied), before coming to its final form, or the form that we have today. Consequently he can state, concerning Genesis, that:

*“The final form ... we have in our Bibles today, although surely rooted in much older material, was shaped as a theological response to Israel's national crisis of exile. These stories were not written to speak of “origins” as we might think of them today (in a natural-science sense). They were written to say something of God and Israel's place in the world as God's chosen people.”*¹⁸⁵⁸

Scripture is therefore a “*shaped*” document, crafted, moulded and honed over many centuries, and acts **only** as a theological polemic. Before we can understand Genesis we need to recognise it “*as a theological statement, not as a statement of modern scientific interest*.”¹⁸⁵⁹ To really appreciate Genesis and grasp its theology we need to abandon the notion of it being history or science:

*“The theology of Genesis 1 becomes clearer when we read it in its ancient literary-religious context. ... But in the ancient world of the Israelites ... the theology of a chaos-tamer working solo, commanding the elements to line up, was counter-intuitive and set Israel apart theologically. Genesis 1 is not in any way a modern scientific statement, but an ancient religious one.”*¹⁸⁶⁰

From the above quote it is clear from the terms that he uses that Enns has divested the text of any historical force. Elsewhere Enns reinforces his notion that the Bible is merely “*a theological expression of self-definition*,” so that it presents “*not a picture of history but a picture of how Israel sees itself as God's people amid the surrounding world*.”¹⁸⁶¹

1857 **Peter Enns.** The Evolution of Adam. Pxi.

1858 **Peter Enns.** The Evolution of Adam. P5.

1859 **Peter Enns.** The Evolution of Adam. P36.

1860 **Peter Enns.** The Evolution of Adam. P 45.

1861 **Peter Enns.** The Evolution of Adam. P50.

At points Enns indulges in what may be termed 'dogmatic tentativeness.' Burdened with the academic need to appear humble, which I believe is derived from the scientific mentality of beginning a new idea by offering it as an hypothesis at first blush, he cannot resist making definitive statements.

*“Although there is no absolute scholarly consensus about how to read the creation and flood stories in all their details, the evidence points us clearly in the following direction: the early chapters of Genesis are not a literal or scientific description of historical events but a theological statement in an ancient idiom, a statement about Israel's God and Israel's place in the world as God's people.”*¹⁸⁶²

With no “*scholarly consensus*” about the evidence, nevertheless the “*evidence points us clearly*” to the idea that Genesis is not literal nor historical but theological! So convinced of the divorce and complete separation of theology from any other discipline, Enns makes the charge that:

*“Reading Genesis 1 as a simple description of cosmic events (mislabelled as “literal”) truly devalues the rich theology that the biblical writers put there.”*¹⁸⁶³

In a final reference we can observe that the same view of theology is applied to the New Testament. Because we have such sure and “*overwhelmingly persuasive*” scientific and literary evidence we are not entitled to believe, as Paul did, that there was a real Adam. Enns concludes:

*“The way forward, I believe, is to recognize the profound historical (not simply symbolic) truths in Paul's words that remain despite his view of human origins.”*¹⁸⁶⁴

Note that Enns does want us to hold to “*profound historical truths*” but these apply only to “*Paul's words,*” (his teaching) and not to a belief in a literal Adam. Adam never existed but we can still accept Paul's theological truths “*despite his view of human origins.*”¹⁸⁶⁵

In concluding this section of the Bible being a theological book we discover that for Enns, theology does not really require the theologian to restrict himself to accepting the meaning of a text. In speaking of Paul's use of the Old Testament, Enns declares that Paul could make a grand theological point whilst at the same time dismissing the original meaning of the Old Testament passage he was citing:

1862 **Peter Enns.** The Evolution of Adam. P56.

1863 **Peter Enns.** The Evolution of Adam. P73.

1864 **Peter Enns.** The Evolution of Adam. P122.

1865 **Peter Enns.** The Evolution of Adam. P122.

*“Paul does not feel bound by the original meaning of the Old Testament passage he is citing, especially as he seeks to make a vital theological point about the gospel.”*¹⁸⁶⁶

A scholarly book.

It is difficult not to escape the notion in reading Enns' book that unless you have some scholarly talents, you may as well give up. Throughout his work he speaks about the need to “calibrate” the book of Genesis (or any Biblical book).¹⁸⁶⁷ By this term Enns is suggesting that before we can grasp the meaning a process must be taken in some scholarly way. It is rather like your car mechanic balancing your wheels or tuning the engine. On a personal note when doing my PhD research we used to have to align the electron beam in our electron microscope once a week before gathering any useful data. It involved following a set of instructions and adjusting certain dials and knobs! This was a form of calibration.

According to Enns, the need for calibration has arisen because of new discoveries. Where once our forefathers could read the Old Testament simply and straightforwardly, now because of new archaeological finds (ANE texts), we can no longer do so. Instead these discoveries exercise “an external control by which to assess the nature of Genesis, to calibrate its genre.”¹⁸⁶⁸ To understand Genesis now we are required to view the Biblical text with the aid and help of the ANE texts. Enns states: “*Enuma Elish* helps us calibrate the genre of Genesis 1.”¹⁸⁶⁹ There are several factors which go to make up this calibration. These include “what we know of the past,” the “scientific data,” and “modern biblical scholarship.”¹⁸⁷⁰ Now just as the book of Genesis needs calibration according to Enns before the ordinary Christian can read it, so also do Paul's writings. We not only need to understand Genesis in its historical context, but Paul in his cultural setting as well.¹⁸⁷¹

*“So once again, just as we calibrate the genre of Genesis by looking to the surrounding religious cultures, we can calibrate the interpretative approach of Paul and any New Testament writer by paying close attention to the interpretive culture surrounding them.”*¹⁸⁷²

1866 **Peter Enns.** The Evolution of Adam. P103.

1867 **Peter Enns.** The Evolution of Adam. The word “calibrate” (or cognates) is used, for example, at: P37,41,79,95,98.

1868 **Peter Enns.** The Evolution of Adam. P37.

1869 **Peter Enns.** The Evolution of Adam. P41.

1870 **Peter Enns.** The Evolution of Adam. P79.

1871 **Peter Enns.** The Evolution of Adam. P95.

1872 **Peter Enns.** The Evolution of Adam. P98.

Thus we are indebted to the scholars who have recovered the ANE texts and engaged in a re-calibration of the Bible!

We have modern scholarship to thank for our new calibrated understanding of the Old Testament.¹⁸⁷³ Modern scholarship having detected “*ambiguities and inconsistencies*” in the early stories of the Bible, has now focused its great powers “*on the historical questions raised*” by such errors, and by answering questions such as, who wrote the texts, when did they write them, and “*how did such an ambiguous and inconsistent text come to exist in the first place?*”¹⁸⁷⁴

Scholarship has determined for us “*after one and a half centuries of debate*” in what amounts to “*a virtual scholarly consensus*” that:

*The Pentateuch was not authored out of whole cloth by a second-millennium Moses but is the end product of a complex literary process – written, oral, or both – that did not come to a close until the postexilic period.*¹⁸⁷⁵

With another dash of 'dogmatic tentativeness,' Enns assures us that scholarship is to be trusted even though we are clueless with regard to the essential details! In response to those who argue against the views he proposes, and who do not accept the scholarship Enns endorses, he makes the following incredible statement:

*“It is unlikely, however, that debunking the postexilic setting of the Pentateuch as we know it is likely to succeed. We may not know exactly the mechanisms by which the Pentateuch came about historically – and we may never know. But the evidence from the Pentateuch itself, in the opinion of an overwhelming majority of biblical scholars over the last several generations, is best explained by the hypothesis that the Pentateuch as we know it was shaped in the postexilic period.”*¹⁸⁷⁶

Notice here that scholars are clueless concerning the history of the Pentateuch but they are unified in the belief that it was not written by Moses but “*shaped in the postexilic period.*” It is hard not to laugh at this point! Enns continues with his assertions that scholarship has given us the truth. Concerning the book of Isaiah he claims that there is “*virtually unanimous scholarly consensus*” that the book was “*written over several centuries extending well past the exile.*”¹⁸⁷⁷ Once again I am hard pressed not to laugh out loud!

On Genesis Enns states that scholars no longer seriously doubt the fact that the:

1873 **Peter Enns.** The Evolution of Adam. Pxviii.

1874 **Peter Enns.** The Evolution of Adam. P12.

1875 **Peter Enns.** The Evolution of Adam. P23.

1876 **Peter Enns.** The Evolution of Adam. P26.

1877 **Peter Enns.** The Evolution of Adam. P31.

*“Hebrew version is later and owes its existence to its Akkadian predecessors, in terms of shared cultural and literary motifs if not actual retellings of the Akkadian precursors.”*¹⁸⁷⁸

Since “*biblical scholarship places Genesis in its ancient Near Eastern cultural context,*” we therefore have scholarship to thank for bringing us to understand that the Genesis 1 six-day creation is merely a construct used by the priestly class of the exile and not an original account.¹⁸⁷⁹ In other words, the priests of the exile saw the Mesopotamian accounts and merely used the seven day scheme they found there to cobble together their own Biblical version.¹⁸⁸⁰

In a candid assessment of his own scholarship Enns owns up to it being essentially guesswork and mere belief, or following the crowd. He confesses:

*“I recognize that the following is speculative, but I agree with much of contemporary biblical scholarship that the second creation story (Adam) was Israel's original creation story ... It was likely modelled after the pattern of Atrahasis ...”*¹⁸⁸¹

Elsewhere, on two separate occasions Enns gives us his “*opinion,*” but we are meant to take this as the assured result of Biblical scholarship.¹⁸⁸² Enns expresses his opinion in the following two quotes:

*“... the editors of the Pentateuch subsumed the older story under the newer one so that Genesis 1 became the story of the creation of the cosmos and Genesis 2 became the story of Israel's creation against that universal backdrop.”*¹⁸⁸³

*“... the editor might be signalling that the individual man Adam in chapter 2 is a subset of the humanity 'adam in chapter 1. In other words, the individual Adam is that part of the universal 'adam that God is primarily interested in. There is 'adam in the universal sense outside of Eden, but inside Eden, God's garden, there is no 'adam but one Adam – the one human with whom he has a unique relationship, the progenitor of God's chosen people, Israel.”*¹⁸⁸⁴

It is difficult not to see the bias and forced reading of the text here. Enns' calibration requires him to consider the Genesis 2 story as older than Genesis 1. One wonders why he doesn't publish a new Bible according to his understanding!

1878 **Peter Enns.** The Evolution of Adam. P47.

1879 **Peter Enns.** The Evolution of Adam. P 79.

1880 **Peter Enns.** The Evolution of Adam. P70.

1881 **Peter Enns.** The Evolution of Adam. P68.

1882 **Peter Enns.** The Evolution of Adam. P68,69.

1883 **Peter Enns.** The Evolution of Adam. P68.

1884 **Peter Enns.** The Evolution of Adam. P69.

How then do we understand the Bible?

Throughout Enns' work it is possible to derive certain hermeneutical rules which result from his ideas. By giving to us his view of the Bible he has stated the terms on which it ought to be approached. From my study of his work there appear to be five main principles required to reach a good understanding of the text according to Enns.

The Biblical writers were not concerned with history.

Since the Biblical writers were not shy of embellishments and invention, we cannot demand of Scripture anything of an historical nature. If the ancient Israelites “*freely adapted the themes of the much-older stories of the nations around them*” to make their “*polemical case*” we ought not to take on board their efforts as recounting true history.¹⁸⁸⁵ Taking the Pentateuch as an example, Enns states that “*the historical picture the Pentateuch gives is actually a deception,*” and it is “*only after we untangle the mess created by the propagandist editor and put the sources into their proper order is the true history of Israel revealed.*”¹⁸⁸⁶ Such statements have their own implications which we shall examine later. Suffice it to say that the disconnection between the message and the medium seems unconvincing, especially if we consider Enns' preferred illustration, namely, the incarnation. If Christ became man and took on (sinless) human flesh, and if God has acted in the history of our world in sending His Son, why do we then need to ignore the history that the Bible seems to give us throughout its pages? It seems to me that history (by which I mean real events in real times) is essential to an understanding of the Bible. Now Enns would agree with that last statement, but for him the locus of that history is not in the Bible, but in scholarship which must dig it out, argue over it, and come (at length) to some form of consensus.

Know your history!

If the Bible does not give us any history then we must go elsewhere to establish this. Enns declares frequently that Scripture is time-bound or “*a product of the times in which it was written,*” and because of this it will therefore “*bear the marks of its historical settings.*”¹⁸⁸⁷ It is necessary, therefore, that we view Scripture “*from the vantage point*” of its history.¹⁸⁸⁸ Thus to understand Scripture we must first understand its genre. To do that we need first to grasp its historical setting and the culture within which it was written. This means that before we can even open the Bible, we

1885 **Peter Enns.** The Evolution of Adam. P6.

1886 **Peter Enns.** The Evolution of Adam. P12.

1887 **Peter Enns.** The Evolution of Adam. Pxi.

1888 **Peter Enns.** The Evolution of Adam. Pxii.

ought to be aware of the culture, times and conventions of the relevant time period. Now by considering Scripture within its history this also means that we must accept the ancient writers for the people they were. This means, according to Enns, that “*we are compelled to leave room for the ancient writers to reflect and even incorporate their ancient, mistaken cosmologies into their scriptural reflections.*”¹⁸⁸⁹ In other words, we must equally recognise that the ancient writers were also time-bound and culture-bound.

Such reasoning means that the Bible is not a book for all ages and times. It is a book locked in an ancient setting. Therefore to understand it we need to go through the process of grasping the history and culture that binds it. Herein lie several problems. First, can we be sure that we have the right history? Currently Enns and most Biblical scholars are convinced that the Pentateuch was written about the time of the exile. I do not believe this. But what if the scholarly world had never discovered the ANE texts? Or what if they chance on new finds which lead them in a different direction? Such thoughts lead us to wavering and are unsettling. Scholarship does not bring in definitive truth, but the Scriptures themselves indicate that such truth is what the soul craves and what the Lord brings. Then second, this approach requires us to leave our times and enter into the times that scholarship has decided fits the bill. Such a task is not something an ordinary Christian has the time nor skill to engage in. I do not at all mean to say that normal Christians are less intelligent, but what I do object to is that to read Scripture requires several primers in ancient history, culture and mythology to be mastered first. Such a thought seems preposterous at best and downright wickedness at worst. Effectively a barrier is erected before the Scriptures. You cannot read them unless you have first grasped what the scholarly world deems to be needed.

Diversity of culture means diversity of theology.

Demanding that we read Scripture as an ancient book and attend to its historical setting leads to a second principle that Enns would have us grasp. This one is not stated directly by Enns, but nevertheless it is a clear consequence of what he expects. We noted above that for Enns, theology does not have to sit with an accuracy toward history or science. We learn also from this writer that because the Biblical writers occupied different settings in time, culture and history, it follows that their understanding of God will share their cultural background, or, in other words, will differ one from another. He thus makes clear that there is “*significant theological diversity*” within Scripture and such ought not to surprise us because of the many cultural differences it contains.¹⁸⁹⁰ We are thus not at liberty to assume that the theology of one part of Scripture is equal to another. Enns

1889 **Peter Enns.** The Evolution of Adam. P95.

1890 **Peter Enns.** The Evolution of Adam. Pxi.

demonstrates this diversity when he speaks of monolatry. Monolatry is defined by Enns as the worship of “*only one God, Yahweh, but without denying the existence of other gods.*”¹⁸⁹¹ It is different to monotheism which asserts that there is only one God and all others so-called gods are false and non-existent. Enns even goes so far as to say that the Exodus story, and the plague narrative in particular, was “*a battle between Yahweh and the Egyptian pantheon to see who will claim the right to Israel,*” by which statement he and other scholars hold that the Israelites of that time did not hold to monotheism.¹⁸⁹² Of course the truth of the matter is that the Lord demonstrated the non-existence of the gods the Egyptians worshipped. However Enns makes the unfounded claim that “*Exodus is a story of monolatry, not monotheism,*” and he continues by asserting that “*to miss this is to miss the theological depth of Exodus.*”¹⁸⁹³ Enns sees this theological variation of monolatry versus monotheism throughout the Scriptures. For example, monolatry is evident according to Enns “*in numerous psalms,*” and any suggestion that the psalmist was using “*poetic licence*” is “*unconvincing.*”¹⁸⁹⁴

In response to this principle we begin by accepting that it is wholly consistent with the view that the Bible is only a human book. Whilst Enns claims to accept a divine origin, this is effectively denied throughout by assuming that God is happy to condescend to the level of accepting all our errors, faults and sins. Of course Scripture does not blush at reporting the sins of the people it concerns but in that Scripture is first and foremost of divine origin, we dare not charge the living God with allowing error and falsehood. However we must conclude by affirming that Scripture is one book written and delivered by One Lord, telling us one unified truth.

Don't dis science!

Enns makes abundantly clear throughout his work that science must take priority. Chiefly the science of evolutionary biology is uppermost in this work concerning Adam, but Enns takes the view clearly that all forms of modern science take priority. Enns declares openly that “*natural science simply cannot be squared with a literal reading of the biblical description of human origins any more than with the biblical description of the cosmos.*”¹⁸⁹⁵ Of course this is true. Science and Scripture tell different stories and speak “*different languages.*”¹⁸⁹⁶ You cannot equate a big bang and biological evolution with special creation. So what do you do? In Enns opinion “*... our*

1891 **Peter Enns.** The Evolution of Adam. P43.

1892 **Peter Enns.** The Evolution of Adam. P43.

1893 **Peter Enns.** The Evolution of Adam. P 44.

1894 **Peter Enns.** The Evolution of Adam. P44,45.

1895 **Peter Enns.** The Evolution of Adam. P57.

1896 **Peter Enns.** The Evolution of Adam. Pxix.

understanding ... must now be adjusted in light of the ... scientific evidence supporting evolution.”¹⁸⁹⁷ Further he states that “*unless one simply rejects scientific evidence (as some continue to do), adjustments to the biblical story are always necessary.*”¹⁸⁹⁸ Enns can take such a view because for him the Bible does not have one ounce of scientific merit nor content. Answering the objection that he might be “*putting science over Scripture,*” he contends that such a challenge “*is not the right way to frame the issue,*” since by posing such a question “*it incorrectly assumes that Genesis*” contains and concerns science when “*it does not.*”¹⁸⁹⁹ Enns displays his preference for modern science when he declares that “*the scientific data do not allow*” us to take “*a literal reading of the Genesis creation stories.*”¹⁹⁰⁰ Elsewhere he declares that “*the scientific evidence we have for human origins ... [is] so overwhelmingly persuasive,*” that a “*belief in a first human, such as Paul understood him, is not a viable option.*”¹⁹⁰¹

But when it comes specifically to the science of evolution, which has significant relevance to his main ideas, Enns is much more ebullient and demonstrative. He states that “*evolution is a game changer,*” because it contradicts what the Bible says about us being a special creation, and “*tells us that human beings ... are the end product of a process of trial-and-error adaptation and natural selection.*”¹⁹⁰² Elsewhere he bows to the findings of natural science because “*evolution demands that the special creation of the first Adam as described in the Bible is not literally historical.*”¹⁹⁰³ His aim is to help those who struggle with their faith “*in light of the reality of evolution.*”¹⁹⁰⁴ And the doctrine of evolution “*is a serious challenge*” to the Christian teaching in “*three central issues of the faith: the origin of humanity, of sin, and of death.*”¹⁹⁰⁵

In opposition we need to affirm that we stand before God and are His servants. We dare not alter His word to accommodate what man has come up with. In response to Enns we declare: “don't dis God!”

Theology is the thing!

If we accept that Scripture cannot be taken as being historically accurate and that it has nothing to say concerning science, we then are we left with? For Enns the Biblical writers were only concerned with theology and this is explained frequently as being the art of self-definition. In other

1897 **Peter Enns.** The Evolution of Adam. Pxiii.

1898 **Peter Enns.** The Evolution of Adam. Pxv.

1899 **Peter Enns.** The Evolution of Adam. P57.

1900 **Peter Enns.** The Evolution of Adam. P79.

1901 **Peter Enns.** The Evolution of Adam. P122.

1902 **Peter Enns.** The Evolution of Adam. Pxiv.

1903 **Peter Enns.** The Evolution of Adam. Pxvi.

1904 **Peter Enns.** The Evolution of Adam. P82.

1905 **Peter Enns.** The Evolution of Adam. P147.

words, the Biblical writers were bent on understanding their place in the world by staking claims for God against the world. There is no concept in Enns' work of revelation or inspiration. Instead what we are left with is the human attempt at making statements about God and His actions in a world that is constantly changing. With regard to the stories of Genesis, for example, these were “*shaped as a theological response to Israel's national crisis of exile,*” and were “*not written to speak of “origins” as we might think of them today (in a natural-science sense),*” but were constructed “*to say something of God and Israel's place in the world as God's chosen people.*”¹⁹⁰⁶ Thus to understand Scripture we must understand it theologically and not historically or scientifically. We must therefore sift out what purports to be historical and any reference to phenomenon before we can garner the kernel of theological truth.

Is such a thing possible? Is it possible to reach the theological point that is made and ignore the accoutrements and embellishments? Surely, at the very least, such a task would be wearying and futile?

A brief look at Genesis.

Having considered the book as a whole and how Enns views the Bible and how we should understand it, it is essential that we grasp how this applies to Genesis. Enns has established (in his view) that the ANE texts pre-date by some considerable margin the Bible as we know it. Further, he suggests that the captive Israelites effectively constructed their Bible to answer the theological questions of the day in opposition to the surrounding nations:

*“When we read Genesis 1, therefore, we are not to think simply of a description of cosmic events. The creation story was written with Israel's temple and the Sabbath rhythm in mind. The seven-day pattern of creation in Genesis 1 is not the source of the rhythm of Israel's liturgical week. Rather, as with Adam, Israel's seven-day pattern is brought into primordial time. This is not deception or a failure to be “objective” in writing their story: this is self-definition.”*¹⁹⁰⁷

According to Enns, the Biblical writers were not concerned with history or scientific accuracy. Understanding the cultural setting of Genesis should, in fact, deter us from using it in any scientific debates on origins:

“... there is no question that [Genesis and Atrahasis] share a common way of describing the primordial world. Seeing the similarities between these two stories

1906 Peter Enns. The Evolution of Adam. P5.

1907 Peter Enns. The Evolution of Adam. P73.

*should discourage us from expecting the Adam story to contribute to contemporary scientific debates about human origins (let alone guide those debates). ”*¹⁹⁰⁸

Enns is equally dismissive of the flood story's historical significance. Just because there are many flood stories the world over does not mean that these depict the same event as we find in Genesis:

*“It is true that there are flood stories from around the world, but this does not imply that one global flood was responsible for those stories. It simply reflects the ubiquity of floods and the devastation that massive ones would bring to pre-technological antiquity. ”*¹⁹⁰⁹

Such an assessment that the Genesis flood was local, and that floods are ubiquitous the world over raises serious questions concerning the Lord's promise in Genesis 9:11. Ignoring such trifles Enns asserts that the flood story is merely a theological exercise for Israel's identity

*“Like the story of creation, Israel's flood story is a theological expression of self-definition. Like all of the other Mesopotamian versions, it answers the question, “Why did this massive flood occur?” But the answer it gives is different because it presumes a different idea of who God is as a creator. Together Genesis 1 and the flood story in chapters 6-9 present not a picture of history but a picture of how Israel sees itself as God's people amid the surrounding world. ”*¹⁹¹⁰

When all is said and done.

Having charted the essential details of the book as far as the Bible and Genesis is concerned it is essential that we reach the end game and the purpose for his writing. When we examine his motive and intentions the result is both staggering and inevitable as we stated at the outset. I say that his purpose is staggering and I mean this in a negative way. Enns has one main goal and that is “*synthesis*. ”¹⁹¹¹ The term “*synthesis*” has a very interesting meaning. It is usually used in chemistry to indicate the formation of a new substance from original materials. Thus water, for example, can be made from hydrogen and oxygen. The new substance bears little relation to the starting materials. Now Enns is concerned that because evolution is true and assured, it is therefore necessary to effect a synthesis between modern science and the Christian faith. According to Enns the “*one-two-three punch of biblical criticism, biblical archaeology, and science demanded a fresh synthesis of new and old.* ”¹⁹¹² And in a concluding statement Enns makes it quite clear that those

1908 **Peter Enns.** The Evolution of Adam. P53.

1909 **Peter Enns.** The Evolution of Adam. P50.

1910 **Peter Enns.** The Evolution of Adam. P50.

1911 **Peter Enns.** The Evolution of Adam. Px,119.

1912 **Peter Enns.** The Evolution of Adam. P7.

theistic evolutionists who simply want to accept evolution without it having any effect on their Christianity are in for a surprise:

*“Evolution, therefore, cannot simply be grafted onto evangelical Christian faith. ... Evolution is not an add-on to Christianity: it demands synthesis because it forces serious intellectual engagement with some important issues. Such a synthesis requires a willingness to rethink one's own convictions in light of new data, and that is typically a very hard thing to do ... The cognitive dissonance created by evolution is considerable, and I understand why a piecemeal approach to bringing it and Christianity together might be attractive. But in the long run, the price we pay for not doing the hard and necessary synthetic work is high indeed.”*¹⁹¹³

Once again we see that, for Enns, evolutionary science takes priority, and this “truth” “*demands synthesis*.”¹⁹¹⁴ One wonders how the exclusive statements of Scripture will be taken by Enns?

Now it is equally clear in reading this work by Enns that he has already made some departures from an historic Christianity. For example, by removing Paul's Adam as the first historical man, the outcome is that “*we are leaving behind Paul's understanding of the cause of the universal plight of sin and death*.”¹⁹¹⁵ He concludes that: “*... this is the burden of anyone who wishes to bring evolution and Christianity together*.”¹⁹¹⁶ Towards the end of the book Enns suggests that traditional Christianity is to be challenged by evolution in “*at least three central issues of the faith: the origin of humanity, of sin, and of death*.”¹⁹¹⁷ Evolution, according to Enns, has destroyed any notion that God created Adam and Eve in a special way. We can only view Genesis 1 and 2 through the lens of the ANE mindset, and not as history or science. Further, evolution has also removed the cause of sin “*as Paul understood it*,” and as a consequence this now “*leaves open the question of where sin and death have come from*.”¹⁹¹⁸ But this is not all, for the “truth” of evolution has now altered the very nature of how we conceive of sin, so that “*what sin is and why people die is turned on its head*.”¹⁹¹⁹ Enns explains that:

*“Some characteristics that Christians have thought of as sinful – for example, in an evolutionary scheme the aggression and dominance associated with “survival of the fittest” and sexual promiscuity to perpetuate one's gene pool – are understood as means of ensuring survival.”*¹⁹²⁰

1913 **Peter Enns.** The Evolution of Adam. P147.

1914 **Peter Enns.** The Evolution of Adam. P147.

1915 **Peter Enns.** The Evolution of Adam. P123.

1916 **Peter Enns.** The Evolution of Adam. P123.

1917 **Peter Enns.** The Evolution of Adam. P147.

1918 **Peter Enns.** The Evolution of Adam. P147.

1919 **Peter Enns.** The Evolution of Adam. P147.

1920 **Peter Enns.** The Evolution of Adam. P147.

It is significantly interesting that Enns points to sexual promiscuity here, for a reliance and acceptance of evolution has undoubtedly led society towards sexual perversions which seem to be getting more bizarre with every passing day. However he also suggests that aggression to survive is a trait that cannot now be labelled as sin. Such an assessment sits badly with any understanding of the atrocities experienced during the Nazi regime or in other God-forsaken eras.

With regard to death, we are no longer to see this as an “*enemy to be defeated*,” because in an evolutionary world:

“... death is not the unnatural state introduced by a disobedient couple in a primordial garden ... it is the means that promotes the continued evolution of life on this planet and even ensures workable population numbers.”¹⁹²¹

And so Enns wants us to embark upon a synthesis. I said that such a move was staggering, but we must also acknowledge that it is inevitable. Among much which is erroneous, false and woeful in this work, Enns is to be commended for making the simple point that an acceptance of evolution brings serious consequences which many who espouse a theistic view are reluctant to make. In this regard Enns is not the first to suggest such a move. The biologist and Anglican priest Arthur Peacocke also called for such a synthesis. However Peacocke's work went much further.

Peacocke developed what may be termed an “emergent-naturalistic-panentheism,” by which is meant an acceptance of a purely material universe which is continually evolving and generating new entities in ever higher levels of reality.¹⁹²² For Peacocke, each new level has qualities of new reality that are not reducible to the lower levels.¹⁹²³ New realities emerge.¹⁹²⁴ These are not new in entity for they are still only composed of fundamental particles and forces, but their existence as a system or organisation brings about a new emergent quality.¹⁹²⁵ The world, then is composed of a hierarchy of systems all of which are formed at base by atoms and molecules, but each distinct level of which has its own reality not reducible to any lower level. Although there is nothing else in the universe except fundamental particles and forces, Peacocke believes that the “*hierarchies of complexity*” that make up systems made of these fundamental units themselves

1921 **Peter Enns**. The Evolution of Adam. P147.

1922 The bulk of what follows is taken from chapter 2 of my MA thesis: “An Evangelical Assessment of the Relationship between Science and Theology with particular Reference to the views of three British Scientist-turned-Theologians.” By M. W. Viccary. Submitted to Wales Evangelical School of Theology/University of Chester in partial fulfilment of the requirements for the degree of MA Contemporary Church Leadership. September 2014

1923 **Arthur Peacocke**. All That Is: A Naturalistic Faith for the Twenty-First Century. 2007. Edited by Philip Clayton, Minneapolis: Fortress Press. .P13,14.

1924 **Arthur Peacocke**. God and Science: A Quest for Christian Credibility. 1996. London: SCM press. P54. **Arthur Peacocke**. All That Is: A Naturalistic Faith for the Twenty-First Century. P11.

1925 **Arthur Peacocke**. Creation and the World: The Bampton Lectures. 1978. 1979. Oxford: Clarendon Press. P120,121.

*“display emergent properties that can have causal efficacy on lower levels.”*¹⁹²⁶

It is in this way that Peacocke suggests consciousness emerges in humans.¹⁹²⁷ Human brains are composed in much the same way as other primate brains, but their complexity has enabled the new emergent reality of consciousness.¹⁹²⁸ This is a functionalist approach to the problem of mind.¹⁹²⁹ There is no spirit or soul but the emergence of a new level of natural reality. The mind is not a separate entity or stuff, for dualism is unfashionable today.¹⁹³⁰ Although he never uses the term, he is describing what is known as 'synergy' in which the sum of the parts is much less than the whole. Taking a cue from certain chemical systems in which the 'system as a whole' has a direct influence on the parts of the system, Peacocke suggests that this gives us a clue as to how God interacts with the world.¹⁹³¹ This is referred to as *“top-down causation”* or, as Peacocke prefers, *“whole-part influence.”*¹⁹³²

Now given such a view of reality driven by the concept of evolution, it is not surprising that there would be modifications to Christian theology. The effects of Peacocke's new synthesis are broad and deep but it will serve to simply elucidate just one feature that affects the doctrine of Christ, namely, the incarnation. Peacocke's “emergent-naturalistic-paenanthesisism” approach requires us to conceive of Christ not as the God who descended from heaven to assume human flesh, but as a man who was so open towards the immanence of God in creation (continuously emerging via evolution) that 'divinity' was incarnated in him.¹⁹³³ The doctrine of the incarnation is therefore radically re-written because we must no longer consider it as the “Word made flesh” in the sense of the Second Person of the Holy Trinity stepping into creation from heaven and assuming sinless human form. Instead what Peacocke wants us to understand from the vantage of evolution, is that Christ became a new emerging reality, a new ontology in evolution.¹⁹³⁴ In short Christ was a new

1926 **Arthur Peacocke**. *Paths From Science towards God: The End of all our Exploring*. 2001. Oxford: Oneworld Publications. P93.

1927 **Arthur Peacocke**. *God and Science: A Quest for Christian Credibility*. P51,52. **Arthur Peacocke**. *Creation and the World*:. P120.

1928 **Arthur Peacocke**. *Creation and the World*. P159.

1929 **Arthur Peacocke**. *Creation and the World*. P127,133. See also: **Philip Clayton**. *God and Contemporary Science*. 1997. Edinburgh: Edinburgh University Press, P244.

1930 **Arthur Peacocke**. *Paths From Science towards God*. P57. See also: **Philip Clayton**. *God and Contemporary Science*. P236. **John Turl**. Substance Dualism or Body-Soul Duality? *S&CBelief* 22 (2010). P57f.

1931 **Arthur Peacocke**. *Paths From Science towards God*. P109.

1932 **Arthur Peacocke**. *Paths From Science towards God*. P52,108. See also: **Arthur Peacocke**. *Creation and the World*. P97f.

1933 **Arthur Peacocke**. *Theology for a Scientific Age: Being and Becoming – Natural, Divine, and Human*. 1993. Fortress Press. Minneapolis. P300,301,314. **Arthur Peacocke**. *God and Science: A Quest for Christian Credibility*. P83,242. **Arthur Peacocke**. *Creation and the World*. P223.

1934 **Arthur Peacocke**. *Creation and the World*. P230,231,240-242; **Arthur Peacocke**. *All That Is: A Naturalistic Faith for the Twenty-First Century*. P36-38; **Arthur Peacocke**. *God and Science: A Quest for Christian Credibility*. P81,82.

emerging development in the evolution of this world.¹⁹³⁵ With such devotion to evolution, Peacocke even goes far as to suggest that Christ was a spiritual mutation!¹⁹³⁶ So just as, according to neo-darwinism, mutations give rise to new biological features, the spiritual mutation that allowed Christ to be more open to the immanence of God in creation lead to him achieving a higher level of reality.¹⁹³⁷ Well enough has been outlined here to show that Peacocke's Christianity is anything but! He works out the details of his view of reality into all sorts of realms and, in effect, creates a new religion. It is this process of working out the implications of a belief in evolution that Peter Enns has embarked upon. He is yet to reach the depths to which Arthur Peacocke descended but he is on the way.

1935 **Arthur Peacocke**. From DNA to Dean: Reflections and Explorations of a Priest-Scientist. 1996. The Canterbury Press. Norwich. P29,104.

1936 **Arthur Peacocke**. God and Science: A Quest for Christian Credibility. P88.

1937 **Arthur Peacocke**. Paths From Science towards God. P148.

Chapter 28: Common themes.

Having looked at how seventeen writers have viewed the Genesis creation accounts in a way that is alternative to the natural and normal way of taking them, it is now important that we spend a brief moment to consider some of the common themes that run through their works. This will not be exhaustive, because the scope of attention for the whole group is very wide. Walton's functional approach and Fesko's temple focus are cases in point. That being said it is not surprising to find that there are some common underlying assumptions among many. Our focus will be to look at those features which stand out as significant.

Modern science cannot be denied.

The one feature which is very strongly evident amongst nearly all seventeen writers is their insistence that modern science must be accepted at face value, and that it must take precedence. With some writers there is a naïve acceptance that whatever modern science lays claim to, ought to be viewed as though it has come from the hand of God. If the scientist has read the rocks, his meters, and his computer read-outs correctly, and has found a theory which covers all the data, then we are duty bound to accept whatever they say as true, even if it apparently conflicts with Scripture.

Our first writer, Thomas Chalmers, devised his “gap” theory simply because he was convinced that the geologists were right about the earth being ancient.¹⁹³⁸ Hugh Ross describes his scientific quest and acceptance of the big bang as the way in which he took up faith and refers to the evidence from modern science as “*compelling*,” and “*well established*.”¹⁹³⁹ For Ross to deny the big bang would cast doubt on his “faith.” Henri Blocher expresses a deep respect for modern science which he believes is self-correcting and formulated by a great consensus of research workers which must be taken seriously.¹⁹⁴⁰ John Sailhamer devised his novel view of an extended beginning because it would allow for the accepted view of science that the earth is billions of years old.¹⁹⁴¹ John Lennox accepts the modern scientific view of earth history giving as one proof the fact

1938 **Webster.** Science and the Scottish Evangelical Movement. Abstract, P98. The Works of **Thomas Chalmers**. Book 1 Chapter 1 P18.

1939 **Dr. Hugh Ross.** THE SHELL GAME OF EVOLUTION AND CREATION. **Hugh Ross.** Navigating Genesis. P9,11,89.

1940 **Henri Blocher.** In the Beginning. P22,23,48,50,52.

1941 **John Sailhamer.** Genesis Unbound. P32,33,37,113

that death through predation has always been a natural part of the animal kingdom.¹⁹⁴² His seven-fold gap idea was devised to accommodate the vast ages that modern science demands.¹⁹⁴³

In Van Till we find several statements affirming the idea that modern science provides truth. Following the secular archaeological world for a timeline to grasp the history pertaining to Scripture, Van Till considers modern science as “*a paragon of analytical achievement in the effort to understand ... the world in which we live.*”¹⁹⁴⁴ He suggests that “*the cosmos is permeated with evidence of its own history,*” and he believes that the “*cosmic chronology can be reliably inferred from the physical record.*”¹⁹⁴⁵ According to Van Till, in order to understand the history of the stars “*we must go not to ancient Palestine, but to Palomar,*” because “*the spectacles of Scripture*” only allow us to grasp the “*status, origin, governance, value and purpose of stars,*” whilst “*the telescopes of modern astronomy*” enable us to consider the “*properties, behaviour, and history of stars.*”¹⁹⁴⁶ C. John Collins hardly mentions modern science in his work, but in discussing the world picture of the ancients declared that “*as a modern*” he “*accepts contemporary cosmology as part of my world picture.*”¹⁹⁴⁷

Vern Poythress believes that modern science is a legitimate means of gathering real truth, and that Genesis does not deal with science at all.¹⁹⁴⁸ In fact, with Vern Poythress we find one who is desperate to appease both those who take Genesis as literally true and those who cannot deny modern science. By adopting the analogical view he can assert that whilst “*God really did create the world in six days,*” if we view things anthropologically speaking as God doing a week's work, when it comes to a “*technical*” approach to time, “*we obtain a figure of 14 billion years.*”¹⁹⁴⁹ Longman holds academia in very high regard. Archaeologists are to be thanked for giving us true knowledge of the ancient world.¹⁹⁵⁰ The book of Genesis covers “*an unknown but certainly vast length of time.*”¹⁹⁵¹ To understand Genesis properly readers must approach the text “*in the light of scientific discoveries and theories.*”¹⁹⁵²

Some writers simply assent to modern science and assume that is broadly on the right track. Others like F. Collins cannot resist the chance to promote science as a most glorious endeavour! He declares openly that taking Genesis literally is an impossibility because he “*had come to the*

1942 **John C. Lennox.** Seven Days that Divide the World. P28,79,85,183.

1943 **John C. Lennox.** Seven Days that Divide the World. P55.

1944 **Howard Van Till.** The Fourth Day. P21,113

1945 **Howard Van Till.** The Fourth Day. P107,118.

1946 **Howard Van Till.** The Fourth Day. P93.

1947 **C. John Collins.** Genesis 1-4. P262.

1948 **Vern S. Poythress,** Redeeming Science. P33,73,98,225.

1949 **Vern S. Poythress,** Redeeming Science. P220.

1950 **Tremper Longman III.** How to read Genesis. P72.

1951 **Tremper Longman III.** How to read Genesis. P9,64,99,100.

1952 **Tremper Longman.** Reading Genesis 1–2: An Evangelical Conversation. P121.

*scientific world view before .. the spiritual.*¹⁹⁵³ Thus F. Collins was tied to modern science before he came to “faith.” For F. Collins, science is not just “*the only reliable way to understand the natural world,*” it is also “*the only legitimate way to investigate the natural world.*”¹⁹⁵⁴ According to F. Collins modern science has revealed to us the “*obvious truths*” that all things in the universe “*are engaged in an evolutionary process,*” and further, that “*evolution by descent from a common ancestor is clearly true.*”¹⁹⁵⁵ Tim Keller declared his belief in evolution arguing (unconvincingly) on the BioLogos website that such a view can be harmonised with Genesis.¹⁹⁵⁶ Denis Alexander suggests that as a young believer he had “*unthinkingly*” adopted a Biblical perspective on origins, but when he began his biological studies was faced with “*incontrovertible evidence*” to the contrary.¹⁹⁵⁷ For Alexander “*our shared inheritance with the apes is one of the most certain conclusions of contemporary biology,*” because “*the record of our evolutionary past is indelibly inscribed within the DNA of every cell of our bodies.*”¹⁹⁵⁸ In the same way that an astronomer can peer into the distant past as he looks through his telescopes, the biologists can “*stare into our own genomes and there read the ancient language of the genes stretching back billions of years into our evolutionary past.*”¹⁹⁵⁹

B. Ramm in his work on modern science and Scripture argues that it is not possible to come to the Bible without a knowledge of science.¹⁹⁶⁰ He takes a classic naïve position on modern science as one of the two clear books that God has written.¹⁹⁶¹ John Walton does not lay claim to any expertise in science, so points his readers to those whom he respects in the field. He appeals to Denis Alexander, Francis Collins (whom we have already seen are convinced believers in modern science) and another evolutionary biologist as his representatives of modern science.¹⁹⁶² Walton simply asserts that science tells us “*what the world is, how it works and how it came to be.*”¹⁹⁶³ He contends that “*Biological evolution is not the enemy of the Bible and theology.*”¹⁹⁶⁴ Our last writer, Peter Enns, holds that modern science must be allowed to aid in our interpretation of Scripture because the evidence for evolution is “*overwhelmingly persuasive,*” making it impossible to believe

1953 **Karl W. Giberson.** Evolution, the Bible, and the Book of Nature. A conversation with Francis Collins.

1954 **Francis Collins.** The Language of God. P6,228.

1955 **Francis Collins.** The Language of God. P45,210. In a CNN US special on **Frances Collins.**

<http://www.cnn.com/2007/US/04/03/collins.commentary/index.html>

1956 **Tim Keller.** Sinned in a Literal Adam, Raised in a Literal Christ.

1957 **Denis Alexander.** Creation or Evolution. Do we have to choose? P270,271.

1958 **Denis Alexander.** Creation or Evolution. Do we have to choose? P200.

1959 **Denis Alexander.** Creation or Evolution. Do we have to choose? P138.

1960 **B. Ramm.** The Christian View of Science and Scripture. P24.

1961 **B. Ramm.** The Christian View of Science and Scripture. P25.

1962 Check p13,181 genesis one walton

1963 **John H. Walton.** The Lost World of Genesis One. P13.

1964 **John H. Walton.** The Lost World of Genesis One. P165.

in Adam and Eve as the first human pair.¹⁹⁶⁵ He declares that it is not possible to read Genesis literally because “*the scientific data do not allow*” it.¹⁹⁶⁶

A low (man-centred) view of Scripture.

It comes as no surprise that those who accept modern science at face value holding it as unassailable, must, as a direct consequence, modify their view of Scripture. Most of the writers we have considered hold that the Bible is simply a book written by *ancient man* and must therefore be grasped as an ancient piece of literature, not as some divine deposit from heaven. This man-centred view of Scripture shines through in how many writers view the history of how the Bible came to be. In keeping with an evolutionary paradigm, it is generally thought that the early stories and records were transmitted orally and not written down as received. Hugh Ross, Henri Blocher and Peter Enns have all voiced such a view.¹⁹⁶⁷ To suggest that the patriarchs of Genesis were responsible for the Genesis text is an idea which Blocher considered to be highly “*improbable.*”¹⁹⁶⁸ He asks: “*how much information would survive after thousands of years of oral transmission*” during and through times “*where life itself was precarious?*”¹⁹⁶⁹

Some writers declare that the Genesis text must be considered as a human document in light of the fact that (in their opinion) the two creation accounts differ so much. Thus Hugh Ross suggests that the first account gives the main events of creation in sequence, but the second simply informs us of the “*purpose of creation*” and doesn't relate any history.¹⁹⁷⁰ Tim Keller takes an opposing view arguing that it is more likely that the details of Genesis 2 may be read as “*literal,*” whilst those of Genesis 1 may not be.¹⁹⁷¹ He contends that it is not possible to read “*both as straightforward accounts of historical events,*” because “*they are incompatible.*”¹⁹⁷² Still other writers suggest that a literal view of Genesis one is ruled out because it is not possible to have light on day one, and yet to have sun, moon and stars not made until day four.¹⁹⁷³ John Lennox uses the argument that Genesis is only meant to convey “*figurative,*” or “*theological*” truths not historical.¹⁹⁷⁴ Such a view is common amongst theistic evolution writers. Denis Alexander is another

1965 **Peter Enns.** The Evolution of Adam. P122.

1966 **Peter Enns.** The Evolution of Adam. P79.

1967 **Hugh Ross.** Navigating Genesis. P81. **Henri Blocher.** In the Beginning. P34. **Peter Enns.** The Evolution of Adam. P26.

1968 **Henri Blocher.** In the Beginning. P34.

1969 **Henri Blocher.** In the Beginning. P34.

1970 **Hugh Ross.** Navigating Genesis. P95.

1971 **Tim Keller.** Creation, Evolution, and Christian Laypeople.

1972 **Tim Keller.** Creation, Evolution, and Christian Laypeople.

1973 **Henri Blocher.** In the Beginning. P52. **John C. Lennox.** Seven Days that Divide the World. P58,59 **Howard Van Till.** The Fourth Day. P90. **Tremper Longman III.** How to read Genesis. P104.

1974 **John C. Lennox.** Seven Days that Divide the World. P42,43.

proponent of this idea suggesting that Genesis merely conveys “*theological truths*” in “*figurative language*” so that people of any “*era or culture*” may read and understand.¹⁹⁷⁵ But this divorce of theology from history is problematic. Where should we end such division? At the Passover? At the resurrection of Christ? All of these definitive historical events convey theological truths.

Others argue that Scripture is not sufficient in and of itself and must be supplemented with other sources of truth.¹⁹⁷⁶ Henri Blocher argued that we can only take the human author's intent and we must not derive any divine meaning which the original human author could never have known.¹⁹⁷⁷ In John Sailhamer's account the writer of Genesis is not retelling history, but has selected and arranged material simply to make a claim on the promised land. Effectively the writer of Genesis, according to Sailhamer, constructs the account to show the claim in its best light.¹⁹⁷⁸ In Van Till's writings we see the human aspect of Scripture elevated to such a degree that we would be warranted in suggesting he is presenting an old “liberal” view of Scripture that the Bible is not the word of God, but merely contains it. He states that “*the Bible comes to us in the form of thoroughly human language and literature.*”¹⁹⁷⁹ Bizarrely Van Till suggests that whilst the **message** of the Bible is divine, the vehicle and packaging (“*the historical-cultural context*”) through which the message is conveyed are all thoroughly human in origin.¹⁹⁸⁰ Longman argues that we must “*focus on discovering the intention of the human author,*” because “*the Bible is similar to other books,*” and must therefore be studied as a piece of “*literature in general.*”¹⁹⁸¹ Denis Alexander uses the much misunderstood and misused phrase “*matters of faith and conduct*” in connection with Scripture to limit their authority.¹⁹⁸² The Bible contains everything we need to know only so far as “*our salvation and growth in Christ*” is concerned.¹⁹⁸³ B. Ramm states that the “*theological truths*” of Genesis are “*expressed in ... outmoded scientific notions.*”¹⁹⁸⁴ The Bible conveys human language in “*the terminology of the culture prevailing at the time the various books were written.*”¹⁹⁸⁵ Consequently the Bible is simply a **human** production upon which God has (somehow?) set His stamp of approval. In other words Genesis is given to us with a science that is now obsolete.¹⁹⁸⁶

1975 **Denis Alexander.** Creation or Evolution. Do we have to choose? P257,

1976 **Hugh Ross.** Navigating Genesis. P23. **Vern S. Poythress,** Redeeming Science. P256. **B. Ramm.** The Christian View of Science and Scripture. P24.

1977 **Henri Blocher.** In the Beginning. P26.

1978 **John Sailhamer.** Genesis Unbound. P16,90,91.

1979 **Howard Van Till.** The Fourth Day. P5.

1980 **Howard Van Till.** The Fourth Day. P8.

1981 **Tremper Longman III.** How to read Genesis. P18,23.

1982 **Denis Alexander.** Creation or Evolution. Do we have to choose? P151.

1983 **Denis Alexander.** Creation or Evolution. Do we have to choose? P147,148.

1984 **B. Ramm.** The Christian View of Science and Scripture. P52.

1985 **B. Ramm.** The Christian View of Science and Scripture. P52.

1986 I do not accept the idea that Genesis depicts an ancient cosmology.

Walton recognises the dilemma but believes that this is not really a problem. He believes we ought not to be concerned with “*the question of “truth” with regard to the Bible’s use of Old World science,*” because “*some scientific framework needs to be adopted,*” and accepting “*the framework of the target audience is most logical.*”¹⁹⁸⁷ Thus we are forced to rely on human reasoning and logic, despite the difficulties his assumptions have raised. John Walton limits “*authority and inerrancy*” of the Bible to those things which “*it affirms,*” and these “*are not of a scientific nature.*”¹⁹⁸⁸ It is more important, according to Walton, that we look at the Bible as a human book, for the “*human author is our doorway into the room of God’s meaning and message,*” and all “*authority is tied to the message*” of the human author, because God limited Himself to speaking through “*the world of ancient Israel.*”¹⁹⁸⁹

John Fesko contends that to grasp the meaning of Genesis we must go back to the “*world of the original audience,*” who had no knowledge of science and history and would not appreciate such categories.¹⁹⁹⁰ To study Genesis we need to view it through “*documents with the same historical context such as Enuma Elish,*” or, in other words, we are to consider it through pagan eyes!¹⁹⁹¹ In the writing of Peter Enns we see a fully human Bible. The Pentateuch is not revelation from God but a piece of Israelite “*self-definition.*”¹⁹⁹² Enns contends that the Bible writers were very “*creative,*” by which he means inventive, and he suggests that some of the Biblical writers efforts were “*shoddy*” and they were not beyond using “*deception*” in their writing.¹⁹⁹³ With regard to Genesis Enns suggests that the early stories must be considered “*inadequate, confusing, inaccurate, or downright bizarre.*”¹⁹⁹⁴

ANE language and cultures.

As a follow on from accepting the results and theories of modern science, it comes as no surprise that many of the writers we have examined also defer to the secular academic assessment of history and the archaeological world. It is thus generally believed that the Israelites were late on the scene in the ANE. Consequently we must view their writings through the lens and help of the more ancient and sophisticated cultures such as Babylon, Egypt Canaan and so on.

Hugh Ross, Henri Blocher and John Lennox all reference a belief in the primacy of the ANE

1987 **John H. Walton.** The Lost World of Genesis One. P60.

1988 **John H. Walton.** The Lost World of Adam and Eve. P20.

1989 **John H. Walton.** The Lost World of Adam and Eve. P15,19.

1990 **J. V. Fesko.** Last Things First. P34.

1991 **J. V. Fesko.** Last Things First. P37.

1992 **Peter Enns.** The Evolution of Adam. 2012. Brazos Press. P xviii.

1993 **Peter Enns.** The Evolution of Adam. P xi,6,79,80,81, 96,102,103,113,135. “Shoddy” is found in **Peter Enns.** The Evolution of Adam. P113. “Deception” is found in **Peter Enns.** The Evolution of Adam. P21.

1994 **Peter Enns.** The Evolution of Adam. P62.

over Scripture.¹⁹⁹⁵ Bernard Ramm speaks of ancient cultures that pre-date Genesis so that it “*employs the culture of the times.*”¹⁹⁹⁶ John Lennox is explicit, declaring that Genesis “*is from the ancient Near East,*” so that to understand it we must not read it as if it were a document written in our time, but must make use of the “*knowledge of the literature and culture of the time.*”¹⁹⁹⁷ According to Bruce Waltke, Genesis is not original but shows evidence of Canaanite influence, so that its “*language was Canaanite and her literary compositions, in their physical outward form, conformed to the literary conventions of her age.*”¹⁹⁹⁸ Van Till argues that the covenantal form of Scripture derives from “*the ancient Near East.*”¹⁹⁹⁹ He suggests that the various elements found in Genesis (light, dark, waters above and below etc.), are “*common ancient Near Eastern concepts.*”²⁰⁰⁰ This ANE setting for Genesis means that we are not to think of it as a modern text, and so cannot ask of it modern questions.

C. John Collins suggests that the ANE creation stories give us the “*ideological background*” for Genesis.²⁰⁰¹ The Genesis account is thus a later text and is a re-writing of the creation accounts but with a new purpose. It is not, therefore, according to C. John Collins a history, rather it is a “*story.*”²⁰⁰² Vern Poythress contends that the Genesis account does not deal with modern questions because it comes from an ANE backdrop.²⁰⁰³ Longman argues that the ANE context of Genesis implies that it cannot be taken literally, but must be read with “*Mesopotamian conceptions.*”²⁰⁰⁴ Longman also affirms that since Genesis has come much later in time, it is unlikely that the “*advanced culture*” of Mesopotamia has borrowed its information from the “*inferior culture*” of Israel.²⁰⁰⁵ Denis Alexander uses the pre-eminence of ANE texts as a basis for discounting the historical basis for the woman's creation from Adam in Genesis 2.²⁰⁰⁶ For John Walton, the only way we can understand Genesis is through “*immersion in the literature of the ancient world,*” for the ANE literature is “*the interpretive key.*”²⁰⁰⁷ Of all the writers we have considered Peter Enns takes the influence of the ANE on Scripture the furthest. He contends that Genesis 1 was not compiled

1995 **Hugh Ross.** Navigating Genesis. P81. **Henri Blocher.** In the Beginning. P53. **John C. Lennox.** Seven Days that Divide the World. P43,120.

1996 **B. Ramm.** The Christian View of Science and Scripture. P48.

1997 **John C. Lennox.** Seven Days that Divide the World. P43,120.

1998 **Bruce Waltke.** The Creation account in Genesis 1:1–3 Part IV, *Bibliotheca Sacra*. **132**:327–342, 1975. P329.

1999 **Howard Van Till.** The Fourth Day. P10

2000 **Howard Van Till.** The Fourth Day. P86.

2001 **C. John Collins.** Genesis 1-4. P238.

2002 **C. John Collins.** Genesis 1-4. P242.

2003 **Vern S. Poythress,** Redeeming Science. P72,73,91,92,98,128,162,225.

2004 **Tremper Longman.** Reading Genesis 1–2: An Evangelical Conversation. P109.

2005 **Tremper Longman III.** How to read Genesis. P86.

2006 **Denis Alexander.** Creation or Evolution. Do we have to choose? P197.

2007 **John H. Walton.** The Lost World of Adam and Eve. P22. **John H. Walton.** The Lost World of Genesis One. P10,76.

until the “*postexilic period*” so that “*Genesis 1 is not the prototype but presumes and interacts with the far older Babylonian theology of the dominant culture.*”²⁰⁰⁸ Having decided that Genesis relies on the ANE accounts, Enns then concludes that it must have been written simply as a “*self-defining document,*” and as a “*polemic*” against the surrounding nations, and not history.²⁰⁰⁹

Scripture and “nature” are the “Two Books” we can read.

Many of the writers we have chosen view modern science and Scripture as two separate means of discovering truth. Some consider these as separate and distinct and so limit the purview of each. Others reckon that the two must harmonise in some way and allow each influence on the other. The classic “Two Book” metaphor may not always be referenced clearly in their writings but the essence of the idea is certainly a feature for many.

Writing in the first half of the nineteenth century Thomas Chalmers describes the new science of geology in terms of a record or book that can be read. He calls the rocks which bear fossils, “*the archives of nature,*” and further, the “*scrolls or inscriptions on which we might read.*”²⁰¹⁰ He considers both science and Scripture as revealing truth, and declares that: “*whatever story the geologists of our day shall find to be engraven on the volume of nature, it will only the more accredit that story which is graven on the volume of revelation.*”²⁰¹¹ Hugh Ross makes direct appeal to the idea of the “Two Books” that God has written as well. He argues that “*the two “books” of revelation*” come “*from the same Source,*” so that the two must declare “*the same message.*”²⁰¹² Consequently, “*nature’s record will never contradict Scripture.*”²⁰¹³ Henri Blocher is another who mentions directly the metaphor of “Two Books.” The two have a “*common origin,*” and the book of nature he describes as “*natural’ light*” which comes “*from God, the ultimate author of facts.*”²⁰¹⁴ Although Vern Poythress never mentions the phrase “Two Books” his descriptions of modern science and Scripture seem to fit the analogy rather well.²⁰¹⁵ Bernard Ramm follows this idea by declaring that “*God cannot contradict His speech in Nature by His speech in Scripture,*” and that “*the two books of God must eventually recite the same story.*”²⁰¹⁶

Although we have referenced only those who directly mention or allude to this “Two Book” metaphor, all the other writers are committed to some form of integration between modern science

2008 **Peter Enns.** The Evolution of Adam. P38,39,47.

2009 **Peter Enns.** The Evolution of Adam. P6.

2010 The Works of **Thomas Chalmers.** Book II Chapter II P2407,248

2011 The Works of **Thomas Chalmers.** Book II Chapter II P2407,248

2012 **Hugh Ross.** Navigating Genesis. P13,16-20.

2013 **Hugh Ross.** Navigating Genesis. P218.

2014 **Henri Blocher.** In the Beginning. P25,27.

2015 **Vern S. Poythress,** Redeeming Science. P33.

2016 **B. Ramm.** The Christian View of Science and Scripture. P25.

and Scripture which usually leads them to belief in some form of theistic evolution. Whether they refer to the metaphor or not, it is clear that by taking modern science as a sure means to truth which is equal or superior (in some respects) to Scripture, the end result is that we as thinkers must sit in judgement over the two realms. Such a view is in flat contradiction to the position a true believer must adopt which can be summed up from the following Scripture:

... as the eyes of servants *look* to the hand of their masters, as the eyes of a maid to the hand of her mistress, so our eyes *look* to the Lord our God.²⁰¹⁷

The Lord looks to those who “*tremble*” at His word, not to those who give respect and honour to men and their minds.²⁰¹⁸

Biblical creation is too embarrassing!

A very surprising discovery on reading many of the authors mentioned in this book is the desire for reputation. I say surprising because the Scriptures teach unequivocally that a believer has no reputation in this world. The Saviour who gave up His reputation to serve and give His life as a ransom for many expects us to follow in His footsteps.²⁰¹⁹ Thus some writers declare that a literal belief in Genesis is too much to bear. At least two writers (John Lennox and Temper Longman) point out that a literal view of Genesis has been held by believers and the church in many ages prior to these last two hundred years.²⁰²⁰ Despite this long pedigree a considerable number now want to pour scorn on those who continue with such a naïve belief.

Thomas Chalmers threw in his lot with the newly developing uniformitarianism and wrote in frank opposition to those geologists who honoured the Mosaic account in their studies. He referred to Granville Penn as a “*violent ... and unnecessary alarmist*” and as one who “*does not respect enough the indications of nature.*”²⁰²¹ According to Chalmers, the “Scriptural geologists” like Penn (who held a literal view of Genesis) did not have “*sufficient preparation of natural science,*” by which he meant an acceptance of the geology of Hutton and Lyell. Hugh Ross states that creationism presents “*nonsense about creation,*” because it is “*a demonstrably false notion,*” and thus “*infuriates science.*”²⁰²² Creationism (a literal belief in Genesis as history) will force people

2017 Psalm 123:2.

2018 Isaiah 66:2. See also Ezra 9:4.

2019 Luke 16:15; 21:17; John 15:18; 17:14; Philippians 2:5f; Hebrews 11:26.

2020 **John C. Lennox**. Seven Days that Divide the World. P121,139. **Temper Longman III**. How to read Genesis. P24.

2021 The Works of **Thomas Chalmers**. Book II Chapter II P252.

2022 **Hugh Ross**. Navigating Genesis. P89,90.

“all the more tenaciously to naturalistic evolutionary theory,” and he claims that such a denial of vast ages for the universe “has resulted in a loss of faith among many,” who are part of the Christian world.²⁰²³

Henri Blocher charges those who adopt a literal view of Genesis as promoting “a blatant Manicheism,” by which he intends to label creationists as gnostic or dualistic heretics.²⁰²⁴ To reject modern science is, according to Blocher, an act of “considerable bravado,” which requires the taking of “an immense step,” in flagrant opposition to countless modern scientists.²⁰²⁵ Sailhamer contends that many Christians have been “almost embarrassed by Genesis 1 and 2,” so that a new understanding of the text (such as he provides) is necessary in order to “enable us to live in peace with the findings of modern science.”²⁰²⁶ Longman has no time for any “young earth” position and criticizes those who take Genesis 1-2 literally.²⁰²⁷ F. Collins, who lauds modern science as the only means to truth about the world, suggests that a Biblical young earth position amounts to claiming “that two plus two is really not equal to four.”²⁰²⁸ Denis Alexander contends that believers who “attack evolution” and claim that such a theory denies God “are embarrassing and bring the gospel into disrepute.”²⁰²⁹ B. Ramm suggests that belief in a young earth can only be held and promoted by those who have “a complete ignorance of the data of science.”²⁰³⁰ He argues that a young earth creation viewpoint is an “embarrassment.”²⁰³¹ J. Fesko casts serious doubt on the modern creationist movement's pedigree and origins, arguing that it is a recent idea with dubious beginnings.²⁰³² The movement's “theological and hermeneutical presuppositions” are, according to Fesko, “antithetical to Reformed theology.”²⁰³³

Given that for the vast majority of the Christian church's existence it has held to six day creation some 6,000 years ago, what are we to make of these modern ideas? Does modern science triumph over the naïvety of the Scriptures? Must it mean that we lower our view of Scripture as we recognise that modern science has discovered something the Bible knows nothing of (I mean evolution)? Should we agree with these authors that Scripture only speaks about how to get saved and matters of behaviour and has nothing to tell us of world history? My answer is a decided and definite no! The Scriptures declare that they are the words and thoughts of God. How can we limit

2023 **Hugh Ross.** Navigating Genesis. P89,90,208.

2024 **Henri Blocher.** In the Beginning. P23.

2025 **Henri Blocher.** In the Beginning. P48.

2026 **John Sailhamer.** Genesis Unbound. P17,18.

2027 **Tremper Longman III.** How to read Genesis. P22,123.

2028 **Francis Collins.** The Language of God. P209.P174.

2029 **Denis Alexander.** Creation or Evolution. Do we have to choose? P352.

2030 **B. Ramm.** The Christian View of Science and Scripture. P120,121.

2031 **B. Ramm.** The Christian View of Science and Scripture. P79.

2032 **J. V. Fesko.** Last Things First. P18.

2033 **J. V. Fesko.** Last Things First. P18.

what God has said? When God speaks we must tremble. God not only created (and completed creation), He governs and rules over all. The rain does not fall except at His command. The seas remain still or pour forth in fury as He decides. All things are in His hand, and He will judge the living and the dead. How can we limit the Scriptures (what God has spoken) to speak only of the world of the heart and mind when so much speak of what God is doing in the world of nations, mountains, trees, animals and so on?

Distinctive ideas.

Given the variety of writers it is not surprising that we come across some new and novel ideas. This, of course, is the environmental culture that academia furnishes, the generation of novelty. In Vern Poythress and C. John Collins we have the analogical view which holds that the days in Genesis one are both normal and (confusingly) not normal days. They are normal in the sense that they represent a day for us, but they are not normal because they are actually “days of God,” and not normal 24 hour periods.²⁰³⁴ C. John Collins also holds to an analogical view where he speaks of the days of Genesis one as “*God’s workdays*.”²⁰³⁵ This understanding allows those who follow it to discount any history and to accept all that modern science says. However the biggest sticking point with this idea is that it tells us nothing at all about creation in reality. All we have, according to this view, is a story of God as a workman doing His work of “creation” over a period of seven periods of time.²⁰³⁶ This is surely a dumbing down of the text! It adds no more than we find in Exodus 20:8-11 and the details we find in Genesis one all become redundant.

John Sailhamer offers an extremely novel notion that essentially cuts the Genesis text into two unequal parts, and reduces the majority to being a simple statement of how God was preparing the land of promise, and not creating the universe.²⁰³⁷ The first part, comprising of just Genesis 1:1, does not tell us about the beginning as a point in time, but an extended and indefinite period. Although there are some “New Calvinists” who follow Sailhamer, this idea gives us no information about creation at all. The Lord God ends up more like a local deity of the Israelites rather than the God of the universe.

John Lennox offers a modified view of the gap theory, with no less than seven distinct gaps!²⁰³⁸ It would appear that his intention is to attempt to appease those who believe that the days

2034 Vern S. Poythress, Redeeming Science. P131,146,256.

2035 C. John Collins. Genesis 1-4. P124,161. <https://biologos.org/author/c-john-collins>

2036 C. John Collins. Genesis 1-4. P124.

2037 John Sailhamer. Genesis Unbound. P16,32,33,113.

2038 John C. Lennox. Seven Days that Divide the World. P54.

were real days and also those who want to accept the modern science view of earth history.²⁰³⁹

Bruce Waltke suggests that the first verse of the Bible offers us no detailed information about creation, and must simply be taken as a title summarising the detail that is found from verse 2 onwards.²⁰⁴⁰ By doing this, Waltke has God operating acts of creative activity upon pre-existing material. This view is based on a faulty view of the Hebrew of Genesis 1:1.²⁰⁴¹

John Walton's view, derived from a consideration of ANE texts, is perhaps the most odd novel view of all. Walton has discounted any thought of material creation. For Walton all the text tells us about is the origin of function only, and it gives us no information on the origin of material.²⁰⁴² For the later we need to look elsewhere (modern science).

All of these novel views stem from a reliance on modern science and an academic view of the ANE cultures and times. The Genesis text is thus viewed not as a God-given history, but as a document crafted by man to make sense of the world. Once again we are pressed to accept a man-centred view of the world rather than view all from God's perspective.

Concluding comments.

I have not scrutinised every detail of chapters 11 to 27 in making the comments above. I hope, however, that enough has been said to form the inevitable conclusion that a theistic evolution position and a long-age view, are both hopeless avenues to explore. The believer comes to Christ wholeheartedly and allows everything in their lives, including their thinking and all their experience, to come under Christ's authority. Scripture tells us clearly that coming to faith is a radical transformation. It is a new birth. It is a translation from the kingdom of darkness into the kingdom of light (the Kingdom of the Son of His love).²⁰⁴³ Everything is new. Nothing of the old life is allowed to be brought along. We must humble ourselves so that we can walk through the narrow gate onto the path of light.²⁰⁴⁴ Everything must be given up for Christ through whom the world is crucified to us.²⁰⁴⁵ Instead of the broken cisterns of the world we draw from the wells of salvation and apply to the fountain of life.²⁰⁴⁶ Such drawing includes all of our lives, both for salvation and for life. It covers our thinking and thought life so that we think like God. How can the new Christian imbibe the world's way of thinking, the world's view of life, when our Saviour has

2039 **John C. Lennox.** Seven Days that Divide the World. P55.

2040 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975. P225,226.

2041 **Bruce Waltke.** The Creation account in Genesis 1:1–3, Part III. *Bibliotheca Sacra*. **132**:216–228, 1975. P228.

2042 **John H. Walton.** The Lost World of Genesis One. 2009. IVP Academic. P92.

2043 Colossians 1:13.

2044 Psalm 119:105; Matthew 7:13,14; James 4:10.

2045 Galatians 6:14.

2046 Isaiah 12:1-6; Jeremiah 2:13,18.

within “*all the treasures of wisdom and knowledge*”?²⁰⁴⁷ How frequently Paul and other Bible writers implore their audience to forsake the world and its ways? How often are we taught that to truly follow God we must divest ourselves of the world and its thinking? We are not to love the world, and we are not to be conformed to its constraining ways.²⁰⁴⁸ In fact the apostle John does not stop at saying “*do not love the world,*” for he goes on to add that we should not love “*the things in the world,*” and continues by saying that if we do love the world, then “*the love of the Father is not in*” us.²⁰⁴⁹ Such division is sharp. Love God OR love the world. You cannot do both. Following the world's way of thinking which denies the things God says clearly is not loving God.

Paul pleaded with the Roman Christians that they give themselves in sacrifice to God.²⁰⁵⁰ To sacrifice is to offer up all. It is to crucify yourself and put yourself to death. This means no longer determining your path, what you think, and how you act. We become a bond-servant to Christ. He now governs our thoughts, our path and dictates our behaviour. This ruling and lordship extends to how we think about the world. We come to the Lord to hear His views on the matter. What does He say about life, our beginnings, our constitution? These things are found within Scripture! Why then take the dross and filth of this world? Paul implored the Romans further by telling them that they were not to be “*conformed to this world,*” but were to be renewed in mind.²⁰⁵¹ Elsewhere he warns against following philosophy and the worldly elements that lead astray.²⁰⁵² We should turn aside from the futility and darkness of our former way of thinking, including how we see this world and its origins, and put on Christ and His life, because “*the truth is in Jesus.*”²⁰⁵³

2047 Colossians 2:2,3.

2048 Romans 12:1,2; 1John 2:15.

2049 1John 2:15.

2050 Romans 12:1.

2051 Romans 12:2. See also Ephesians 4:23.

2052 Colossians 2:8.

2053 Ephesians 4:17f.

Appendix 1: Brief biographical data of selected scientists, philosophers and writers.

Name.	Dates.	Contribution.
Douglas Adams.	1952 – 2001.	The comedy books: The Hitch Hiker's Guide to the Galaxy.
Halton Arp.	1927 – 2013.	Astronomer who discovered numerous anomalies which challenge the idea of an expanding universe.
David Attenborough	1926 –	Atheist, naturalist, TV broadcaster and presenter of numerous wildlife programmes.
Douglas Axe.	Unknown.	Molecular biologist. Director of the Biologic Institute – part of Discovery Institute.
Francis Bacon.	1561 – 1626.	English philosopher who introduced induction. Lord chancellor and Attorney General.
Johnny Ball	1938 –	TV and radio presenter popularising maths and science.
David P. Barash	1946 –	Professor of Psychology at the University of Washington.
Ian Barbour.	1923 – 2013.	Physicist and significant contributor and writer on the relationship between science and Christian faith.
Richard Baxter.	1615 – 1691.	Significant Puritan church leader and theologian. He wrote in opposition to the mechanical philosophers and against Thomas Hobbes.
David Bellamy	1933 – 2019.	Botanist, TV presenter and conservationist. He did not hold to the prevailing view of climate change.
P. W. Bridgman.	1882 – 1961.	Physicist who received the Nobel Prize in 1946 for work on the physics of high pressures.
Robert Boyle.	1627 – 1691.	Irish natural scientist, chemist and theologian. Boyle was a Christian concerned with mission and with a Biblical view of enquiry.
Mathias Brust	Unknown.	Started publishing his research in about 1994 and is currently on the staff at Liverpool university as a Professor of Chemistry.
J. A. V. Butler	1899 – 1977.	English physical chemist and Fellow of the Royal Society.
Herbert Butterfield.	1900 – 1979.	Professor of History at Cambridge who wrote on the history of science. Apparently he held to Christian convictions.
Larry Cahill	Unknown.	Professor of Neurobiology and Behaviour at the University of California.

Name.	Dates.	Contribution.
A. J. Carlson.	1875 – 1956.	Swedish-American physiologist. President of AAAS in 1955. Signatory to the first Humanist Manifesto. First person to receive the American Humanist Association's Humanist of the Year award in 1953.
A. F. Chalmers.	1939 –	British-Australian physicist. Philosopher of science.
Nicolaus Copernicus.	1473 – 1543.	Polish born mathematician and astronomer. First to suggest a helio-centric view of the solar system.
Brian Cox.	1968 –	Former keyboard player for pop band D:Ream. Physicist and TV presenter touted to succeed Attenborough.
Charles Darwin	1809 – 1882.	English naturalist who is famous for his work introducing evolution (<i>On the Origin of Species</i>) published in 1859.
Rene Descartes.	1596 – 1650.	French mathematician and philosopher. Introduced the phrase “I think therefore I am” and a dualistic view of the world.
John Dillenberger.	1918 – 2008.	Professor of Historical Theology at the Graduate Theological Union in Berkeley California. His specialism was on the relation of science to Christian faith.
Murray Eden	1920 – ?	Professor of Electrical Engineering at MIT.
Arthur Eddington.	1882 – 1944.	English physicist and astronomer. He also wrote on philosophy of science and provided data which supported Einstein's theory of general relativity.
Albert Einstein.	1879 – 1955.	Physicist who revolutionised physics in the twentieth century.
Loren C. Eiseley.	1907 – 1977.	American anthropologist, educator, philosopher and science writer. Professor of Anthropology at University of Pennsylvania.
Epicurus.	341 – 270 BC.	Greek philosopher born on island of Samos. Influenced by Democritus and others.
Daniele Fanelli.	c.1980 –	Natural scientist with a PhD in biology. Science writer with an interest in scientific fraud.
Diana Santos Fleischman.	1981 –	American evolutionary psychologist. Senior lecturer at the University of Portsmouth.
Michael B. Foster.	1903 – 1959.	Tutor in philosophy at Christ Church Oxford. Chairman of the British Student Christian Movement and writer on Christian philosophy.

Name.	Dates.	Contribution.
Galileo Galilei.	1564 – 1642.	Italian physicist and astronomer. Known as the “father of physics.”
Kurt Gödel.	1906 – 1978.	Austrian mathematician and logician. Famed for his two “incompleteness theorems” published when he was 25 years old.
Stephen Jay Gould.	1941 – 2002.	American palaeontologist and evolutionary biologist. Taught at Harvard and was known for his “punctuated equilibria” idea for evolution.
Pierre Gassendi.	1592 – 1655.	French priest astronomer and mathematician. He introduced atomism and was an early contributor to the idea of mechanical philosophy.
Adam Hart-Davis.	1943 –	English scientist, author, photographer, historian and broadcaster.
Stephen Hawking.	1942 – 2018.	English theoretical physicist and cosmologist. He was the Lucasian Professor of Mathematics at Cambridge – a post held by Isaac Newton. Hawking suffered from motor neurone disease which confined him to a wheelchair for much of his life.
Werner Karl Heisenberg.	1901 – 1976.	German theoretical physicist. One of the pioneers of quantum mechanics. Awarded Nobel Prize in Physics in 1932.
Thomas Hobbes.	1588 – 1679.	English philosopher. One of the key founders of political philosophy. He also wrote in the sciences and promoted the idea of “Natural Law.” His most famous work was <i>Leviathan</i> published in 1651.
John Horgan	Graduated 1983.	American science journalist. Famous for his book <i>The End of Science</i> published in 1996. Was a senior writer for Scientific American but wrote for other top journals.
Richard Charles Horton.	1961 –	Fellow of the Royal College of Physicians. Editor of the Lancet. Honorary Professor at the London School of Hygiene and Tropical Medicine. Medical writer for a variety of news outlets.
Fred Hoyle.	1915 – 2001.	English astronomer famous for the Steady State Theory. Worked mainly from The Institute of Astronomy in Cambridge. Coined the phrase “big bang” and rejected this idea. Knighted in 1972.

Name.	Dates.	Contribution.
David Hume.	1711 – 1776.	Scottish (“Enlightenment”) philosopher. Former of empiricism, scepticism and naturalism. Argued against induction and miracles.
Laurence D. Hurst	Unknown.	Professor of Evolutionary Genetics at the University of Bath. Director of the Milner Centre for Evolution.
James Hutton.	1726 – 1797.	Scottish geologist sometimes known as the “father of geology.” Former of the principle later known as the principle of uniformitarianism. Argued for the earth being immensely old. Espoused deist views.
T. H. Huxley.	1825 – 1895.	English biologist and anthropologist. Known as “Darwin's Bulldog” for promoting Darwin's theory. Agnostic.
Leopold Infeld	1898 – 1968.	Polish physicist who worked mainly in Poland and Canada. He collaborated with Einstein at Princeton University in 1936-1938. Peace activist after first nuclear bomb dropped.
James Hopwood Jeans	1877 – 1946.	English mathematician and astronomer. Knighted in 1928 and won numerous awards for his work. Philosophically he was an idealist. Wrote many books for the layman.
C. E. M. Joad,	1891 – 1953.	English philosopher and broadcasting personality. He popularised philosophy but fell from celebrity status after a scandal involving an unpaid rail fare.
Immanuel Kant.	1724 – 1804.	German (“Enlightenment”) philosopher. Famous work: <i>Critique of Pure Reason</i> . Rationalism is the basis for all thought. Early humanist.
Pierre-Simon Laplace.	1749 – 1827.	French natural philosopher and mathematician sometimes viewed as the “French Newton.”
David Knight.	1936 – 2018.	Professor of the History and Philosophy of Science at Durham University. Studied chemistry and then the history of science.
Thomas Kuhn.	1922 – 1996.	American philosopher of science. Introduced the concept of paradigms and revolution in science. Most famous work: <i>The Structure of Scientific Revolutions</i> .
Pierre Lecomte du Noüy	1883 – 1947.	French biophysicist and philosopher. Moved from agnosticism to acceptance of Christianity he held to a belief in evolution that was moving into a spiritual direction. Met and shared ideas with Pierre Teilhard de Chardin.

Name.	Dates.	Contribution.
H. J. Lipson.	1910 – 1991.	British physicist and Professor of Physics at Manchester Institute of Science and Technology. Although he criticised Darwin he advocated the idea of evolutionary creation. He did not accept Genesis but formulated an idea which he did not consider to be testable.
John Loannidis.	1965 –	Greek-American physician and writer. Professor of Medicine at Stanford University School of Medicine.
John Locke.	1632 – 1704.	English (“Enlightenment”) philosopher. Considered the “father of liberalism.” He wrote on human consciousness arguing that at birth the mind was a “blank slate.” He stated that knowledge comes only via sense experiences.
Jeffrey A. Lockwood.	1960 –	American award-winning author. An entomologist and Professor of Natural Science at University of Wyoming. He is a Unitarian Universalist – a broadly spiritual group with no defined creed.
Bernard Lovell.	1913 – 2012.	English physicist and radio-astronomer. First director of Jodrell Bank Observatory.
Charles Lyell.	1797 – 1875.	Scottish geologist. Author of Principles of Geology. Promoted the idea of gradualism and the principle of uniformitarianism.
Casey Luskin.	Unknown.	Earth scientist and lawyer. Co-founder of the Intelligent Design and Evolution Awareness (IDEA) Center.
Ernst Walter Mayr.	1904 – 2005.	A leading evolutionary biologist, philosopher of science and explorer.
Lynn Margulis.	1938 – 2011.	American evolutionary biologist and science populariser. Famous for her symbiosis view of evolution and co-developer of the “Gaia hypothesis” (with James Lovelock).
A. McGrath.	1953 –	Northern Irish theologian, Anglican priest and writer on the relationship between science and Christianity. Noted for his work in historical theology.
Stephen C. Meyer	1958 –	American scientist, lecturer and writer who helped found the Discovery Institute and an Intelligent Design advocate.
Isaac Newton.	1642 – 1727.	English physicist, scientist and mathematician. Famous for his law of gravitation, laws of motion and work in optics.

Name.	Dates.	Contribution.
Chris Gary Packham.	1961 –	English naturalist and TV presenter. Passionate conservationist.
Thomas Paine.	1737 – 1809.	English-born American political activist.
Arthur Peacocke.	1924 – 2006.	English biochemist and Anglican priest. He wrote extensively on the relationship between science and faith.
Morgan Scott Peck.	1936 – 2005.	American psychiatrist whose work <i>The Road Less Travelled</i> (published in 1978) was a popular book on what it means to be human.
John Playfair.	1748 – 1819.	Church of Scotland minister, scientist and mathematician. Professor of Natural Philosophy at the University of Edinburgh. Best known work: <i>Illustrations of the Huttonian Theory of the Earth</i> (1802).
Plotinus.	204 – 270.	Hellenistic philosopher who lived in Roman Egypt.
John Charlton Polkinghorne.	1930 –	English physicist and Anglican priest. Prolific writer on the relationship between science and Christian faith.
Karl Raimund Popper.	1902 – 1994.	Austrian born philosopher. Famed for his idea of “falsificationism” as a theory of science.
Charles Earle Raven.	1885 – 1964.	English theologian and Professor of Divinity at Cambridge. Influential historian of science.
Arthur David Ritchie.	1891 – 1967.	British chemical physiologist and philosopher. Writer on science and faith.
Gina Rippon	1950 –	Professor of Cognitive Neuroimaging at Aston University. Her main work has been controversial amongst neuroscientists.
Colin Alistair Ronan.	1920 – 1995.	British author and specialist in the history and philosophy of science. He held a BSc in astronomy.
George Gaylord Simpson.	1902 – 1984.	American palaeontologist. Probably the most influential palaeontologist of the twentieth century. Professor of Zoology at Columbia University.
Arthur F. Smethurst.	1904 – 1957.	Scientist and Chancellor of Salisbury Cathedral. Wrote on the relationship between science and Christian belief.
Stephen C. Stearns.	1946 –	American biologist and Professor of Ecology and Evolutionary Biology at Yale University. Writer on the history of evolutionary theory and medicine.

Name.	Dates.	Contribution.
Alexander Smith Russell.	1888 – 1972.	Physical chemist and writer on the relationship between science and faith.
Betrand Arthur William Russell.	1872 – 1970.	British philosopher, logician and mathematician. Argued against idealism and founded analytical philosophy.
Steven Shapin.	1943 –	American Professor of History at Harvard University. Writer on the history of science for which he has won awards.
Harold K. Schilling.	1899 – 1979.	Professor of Physics at Pennsylvania State University. Wrote extensively on science and religion.
Erwin R. J. A. Schrödinger.	1887 – 1961.	Austrian physicist and Nobel Prize winner for work in quantum theory and wave mechanics.
Charles Joseph Singer.	1876 – 1960.	Trained in zoology and medicine, Singer became noted for his understanding of the history of science and in particular the history of medicine.
C. P. Snow.	1905 – 1980.	A physical chemist and novelist who held positions in the Civil Service and the UK government.
Herbert Spencer.	1820 – 1903.	English biologist, philosopher and liberal political theorist. Originator of the expression: “survival of the fittest.”
Hwang Woo-Suk.	1953 –	South Korean veterinarian and researcher. Professor of Biotechnology. Dismissed and disgraced for fabricating data.
James Ussher.	1581 – 1656.	Archbishop of the Church of Ireland. Prolific scholar and church leader.
Arie van den Beukel.	1933 –	Dutch physicist. Writer on relationship between science and faith. Published: <i>The Physicists and God: The New Priests of Religion?</i> in 1995.
Rudolph Virchow.	1821 – 1902.	German physician, anthropologist and biologist. The “father of modern pathology.”
Alfred Russel Wallace.	1823 – 1913.	British naturalist, biologist and explorer. Independently arrived at the theory of evolution by natural selection.
John Wesley.	1703 – 1791.	English Anglican cleric and evangelist who founded “Arminian Methodism.”
Richard Westfall.	1924 – 1996.	An American historian of science known for a biography of Isaac Newton.

Name.	Dates.	Contribution.
John Archibald Wheeler.	1911 – 2008.	American theoretical physicist with an interest in general relativity.
Alfred North Whitehead.	1861 – 1947.	English mathematician and philosopher. Collaborated with former student Bertrand Russell on his major work: <i>Principia Mathematica</i> . Advocated process philosophy.
George Whitfield.	1714 – 1770.	English Anglican cleric who became a noted evangelist. Founder of “Calvinistic Methodism.”
Chandra Wickramasinghe.	1939 –	Sri-Lankan mathematician and astronomer. Worked with Fred Hoyle. Advocated the idea of panspermia with Hoyle.
Robert M. L. Winston.	1940 –	British medic, Professor of Medicine and TV presenter.

Appendix 2. The worship of creation in modern science.

The following is just a random selection of blog comments and statements which show how modern science involves the worship of creation:

"We owe our existence to a star that exploded long, long ago." ²⁰⁵⁴

"The Earth, the only inhabited planet in which life has been evolving for millions of years is a cosmic compendium of life forms sustained in a fragile biosphere where the living planet supports itself; a prodigy, a marvel which we have not been capable of understanding and to whom we owe recognition and veneration." ²⁰⁵⁵

"Each of us owes our existence to a stellar alchemy some thirteen billion years in the making where simplest elements hydrogen and helium were transformed by the process of nucleosynthesis into the heavy elements which were forged in the hearts of distant and massive suns. These stars eventually died a spectacular death in the form of a stellar explosion know as a Supernova." ²⁰⁵⁶

"Mass extinction of sea creatures millions of years ago opened the door for humans. Putting aside the possibility that we owe our existence to the death of sea animals at some point in the past, there is considerable evidence that today's fish species which form a significant part of our food chain are getting smaller which raises the probability of another period of extinction." ²⁰⁵⁷

"Each person must realize that human beings don't own the planet. Life does, on every level. We owe our existence to plankton, blue-green algae, and one-celled organisms at the base of the food chain, not to mention our evolutionary debt to primitive life forms going back billions of years." ²⁰⁵⁸

These and countless other quotes simply show that the question of origins is settled as far as the world is concerned, and especially as far as the media is concerned in this country. Belief in evolution leads to the worship of creation.

2054 <http://www.space.com/7758-dusty-stars-existence.html>

2055 <https://vivasieragorda.wordpress.com/tag/environmental-services/>

2056 http://discoveryenterprise.blogspot.com/2009_11_01_archive.html

2057 <http://www.sealandenergy.co.uk/news%20archives/may%202010%20news.html>

2058 http://www.climatechangenews.org/newsArchive/newsArchive2007_jan-apr.html

Appendix 3: The Biblical accounts of Behemoth and Leviathan in the book of Job.

15 “Look now at the behemoth, which I made *along* with you; he eats grass like an ox. **16** See now, his strength *is* in his hips, and his power *is* in his stomach muscles. **17** He moves his tail like a cedar; the sinews of his thighs are tightly knit. **18** His bones *are like* beams of bronze, his ribs like bars of iron. **19** He *is* the first of the ways of God; only He who made him can bring near His sword. **20** Surely the mountains yield food for him, and all the beasts of the field play there. **21** He lies under the lotus trees, in a covert of reeds and marsh. **22** The lotus trees cover him *with* their shade; the willows by the brook surround him. **23** Indeed the river may rage, *yet* he is not disturbed; he is confident, though the Jordan gushes into his mouth, **24** *Though* he takes it in his eyes, *or* one pierces *his* nose with a snare.”²⁰⁵⁹

1 “Can you draw out Leviathan with a hook, or *snare* his tongue with a line *which* you lower? **2** Can you put a reed through his nose, or pierce his jaw with a hook? **3** Will he make many supplications to you? Will he speak softly to you? **4** Will he make a covenant with you? Will you take him as a servant forever? **5** Will you play with him as *with* a bird, or will you leash him for your maidens? **6** Will *your* companions make a banquet of him? Will they apportion him among the merchants? **7** Can you fill his skin with harpoons, or his head with fishing spears? **8** Lay your hand on him; remember the battle— never do it again! **9** Indeed, *any* hope of *overcoming* him is false; shall *one not* be overwhelmed at the sight of him? **10** No one *is so* fierce that he would dare stir him up. Who then is able to stand against Me? **11** Who has preceded Me, that I should pay *him*? Everything under heaven is Mine. **12** “I will not conceal his limbs, his mighty power, or his graceful proportions. **13** Who can remove his outer coat? Who can approach *him* with a double bridle? **14** Who can open the doors of his face, *with* his terrible teeth all around? **15** *His* rows of scales are *his* pride, shut up tightly *as with* a seal; **16** One is so near another that no air can come between them; **17** they are joined one to another, they stick together and cannot be parted. **18** His sneezings flash forth light, and his eyes *are* like the eyelids of the morning. **19** Out of his mouth go burning lights; sparks of fire shoot out. **20** Smoke goes out of his nostrils, as *from* a boiling pot and burning rushes. **21** His breath kindles coals, and a flame goes out of his mouth. **22** Strength dwells in his neck, and sorrow dances before him. **23** The folds of his flesh are joined together; they are firm on him and cannot be moved. **24** His heart is as hard as stone, even as hard as the lower *millstone*. **25** When he raises himself up, the mighty are afraid; because of his crashings they are beside themselves. **26** *Though* the sword reaches him, it cannot avail; nor does spear, dart, or javelin. **27** He regards iron as straw, *and* bronze as rotten wood. **28** The arrow cannot make him flee; sling-stones become like stubble to him. **29** Darts are regarded as straw; he laughs at the threat of javelins. **30** His undersides *are* like sharp potsherds; he spreads pointed *marks* in the mire. **31** He makes the deep boil like a pot; he makes the sea like a pot of ointment. **32** He leaves a shining wake behind him; *one* would think the deep had white hair. **33** On earth there is nothing like him, which is made without fear. **34** He beholds every high *thing*; he *is* king over all the children of pride.”²⁰⁶⁰

2059 Job 40:15-24.

2060 Job 41.

Appendix 4: Biographical details of the 17 authors treated in this work.

Name.	Dates.	Details.
Thomas Chalmers.	1780 – 1847	A nineteenth century gentleman-scientist, mathematician, Church of Scotland minister, and professor of theology. He is mainly famous for introducing the gap theory to explain Genesis in the context of modern (geological) science.
Hugh Norman Ross.	1945 –	A Canadian astrophysicist with a PhD in Astronomy from the University of Toronto. Ross established his own ministry and website called “Reasons to Believe.” He promotes progressive creation, day-age and an old earth because of modern science.
Henri A. G. Blocher	1937 –	An “evangelical” professor of systematic theology. He has taught in a variety of colleges in various countries including France, USA, Canada, Australia and Africa. He follows the framework hypothesis.
John H. Sailhamer.	1946 – 2017.	An American professor of Old Testament who lectured at a variety of evangelical seminaries in the USA. He was the author of a number of influential theological works, and served as president of the Evangelical Theological Society in 2000. He influenced many “new Calvinists” especially John Piper. His view of the Old Testament
John Carson Lennox.	1943 –	An Irish mathematician and professor of mathematics at Oxford. He has lectured on mathematics, philosophy and an intellectual defence of Christianity in North America, Europe and Australasia. He holds to a form of the gap theory.
Bruce K. Waltke.	1930 –	An American reformed evangelical professor of Old Testament and Hebrew. He has held positions in a variety of US seminaries and has written numerous theological works including a commentary on Genesis. He is linked closely with the BioLogos organisation. He suggests that Genesis 1:1 is a summary title.
Howard J. Van Till.	1938 –	An American physicist and professor of physics. Van Till taught at Calvin College for over 30 years and was then charged with heresy for his views expressed in the book <i>The Fourth Day</i> . He has written on the relationship between science and Christianity through various platforms and is a forthright defender of theistic evolution and the framework hypothesis. In later years he has departed from orthodox Christian teaching.

Name.	Dates.	Details.
C. John Collins.		An American professor of Old Testament studies who also has degrees in computer science and systems engineering. His PhD was in Biblical Hebrew linguistics taken at the University of Liverpool, and he has published widely in the field of science and faith. He promotes the analogical view of Genesis.
Vern Sheridan Poythress.	1946 –	An American Calvinist, theologian and professor of New Testament. He has BS and PhD degrees in mathematics, and a string of degrees in theology specialising in the New Testament. He favours the analogical view.
Tremper Longman III	1952 –	An American professor of Biblical Studies at Westmont College, California. He has written over 30 books on Biblical subjects including commentaries. He is a contributor to the theistic evolution promoting website, BioLogos, and favours the framework hypothesis.
Francis Sellers Collins.	1950 –	An American physician-geneticist who lead the Human Genome Project and then became director of the National Institutes of Health (USA). He has degrees in chemistry and medicine and initiated the BioLogos foundation to promote theistic evolution. He favours a poetic view of Genesis.
Timothy J. Keller.	1950 –	An American pastor who has written many books on a variety of pastoral subjects. He is the founding pastor of Redeemer Presbyterian Church, Manhattan, USA, and a contributor to BioLogos. He advocates theistic evolution.
Denis Alexander.	1945 –	An English molecular biologist, director of the Faraday Institute for Science and Religion, and contributor to BioLogos. He has written a number of works on the relationship between science and faith and upholds theistic evolution.
Bernard L. Ramm.	1916 – 1992.	An American baptist theologian from an evangelical background. Although he began studies in chemistry, he switched to philosophy and then theology gaining a PhD in 1950. He wrote mainly on Biblical hermeneutics and influenced many in the mid twentieth century.
John H. Walton.	1952 –	An American Old Testament scholar and professor who has taught at Moody Bible Institute and Wheaton College. His main area of interest is ANE cultures and he advocates a functional approach to creation in Genesis that allows modern science to say what it will.

Name.	Dates.	Details.
John Valero Fesko.	1970 –	An American theologian with degrees in theology. He has worked as professor of systematic and historical theology at Westminster Seminary, California. He promotes the temple view of the early chapters of Genesis and is a theistic evolutionist.
Peter Eric Enns	1961 –	An American Biblical scholar and theologian with degrees in theology. Professor of Biblical studies at Eastern University and has held posts in other institutions. He was a frequent contributor to BioLogos, and has courted great controversy by working out the implications of holding to theistic evolution.

Select bibliography.

References have been provided throughout the body of this work. Here I present some of the most important works I have consulted. The reader is warned to always read works with Scripture in view. No man or woman writes without some form of bias or error and we must read carefully at all times. The following is not exhaustive.

Part 1.

Ian. G. Barbour. Issues in Science and Religion. 1966. Harper and Row Publishers.

Michael J. Behe. Darwin's Black Box: The Biochemical Challenge to Evolution. Free Press. 1996.

Robert Boyle. A Free Enquiry into the Vulgar Notion of Nature. In The Philosophical Works of the Honourable Robert Boyle Esq. Ed. Peter Shaw. London 1725.

P. W. Bridgman. Reflections of a Physicist. 1950. Philosophical Library Inc.

Sir Herbert Butterfield. The Origins of Modern Science 1300-1800. 1950. London. G. Bell and sons.

A. F. Chalmers. What is this thing called Science? 1982 (second edition), The Open University Press.

Charles Darwin. On the Origin of Species. 1859.

Richard Dawkins. The God Delusion. Mariner Books. 2006.

Michael Denton, Evolution: A Theory in Crisis. 1985. Burnett Books.

John Dillenberger. Protestant Thought and Natural Science. (A Historical Interpretation). 1961. Collins, London.

Arthur Eddington. The Philosophy of Physical Science. 1949. Cambridge University Press.

Albert Einstein and Leopold Infeld. The Evolution of Physics. 1938. Cambridge University Press.

M. B. Foster. The Christian Doctrine of Creation and the Rise of Modern Natural Science. Philosophical Journal: Mind. Volume 43. Number 172. 1934. P446-469.

Stephen Jay Gould. The Structure of Evolutionary Theory. Harvard University Press. 2002.

Stephen Jay Gould. Wonderful Life. 1990. Hutchinson Radius.

Stephen Hawking. Reading God's Mind. Newsweek Magazine. June 13th 1988.

Stephen Hawking. A Brief History of Time. (From the Big Bang to Black Holes). 1988. Bantam press, London.

Werner Heisenberg. The Physicist's Conception of Nature. 1958. Hutchinson Scientific and Technical

James Jeans. Physics and Philosophy. 1942. Cambridge University Press.

- C. E. M. Joad.** Philosophy. (Teach yourself books). 1956. The English Universities Press Ltd.
- David Knight.** The Nature of Science. (The History of Science in Western Culture since 1600). 1976. Andre Deutsch.
- Thomas Kuhn.** The Structure of Scientific Revolutions. 1962. The University of Chicago Press.
- Thomas Kuhn.** The Structure of Scientific Revolutions. 50th Anniversary edition with an introductory essay by Ian Hacking. 2012. The University of Chicago Press.
- Sir Bernard Lovell.** In the Centre of Immensities. 1979. Arrow Books.
- Lynn Margulis and Dorion Sagan.** Acquiring Genomes: A Theory of the Origin of Species. Basic Books. 2003.
- Alister E. McGrath.** A Scientific Theology. Volume 1, Nature. 2001. T & T Clark Ltd, Edinburgh.
- T. J. Mortenson.** The Great Turning Point: The Church's Catastrophic Mistake on Geology—Before Darwin. 2004. Green Forest, AR: Master Books.
- Arthur Peacocke.** Theology for a Scientific Age. (Being and Becoming – Natural, Divine and Human). 1993. Fortress Press.
- Arthur Peacocke.** Creation and the World of Science. (The Bampton Lectures: 1978). 1979. Oxford: Clarendon Press.
- Arthur Peacocke.** God and Science. (A Quest for Christian Credibility). 1996. London: SCM Press.
- Arthur Peacocke.** From DNA to Dean. (Reflections and Explorations of a Priest-Scientist). 1996. Norwich: The Canterbury Press.
- Arthur Peacocke.** All That Is. (A Naturalistic Faith for the Twenty-First Century). 2007. Edited by Philip Clayton, Minneapolis: Fortress Press.
- John Polkinghorne.** Reason and Reality. 1991. SPCK.
- John Polkinghorne.** Science & Christian Belief. (Theological Reflections of a Bottom-Up Thinker – The Gifford Lectures for 1993-4). 1994. SPCK.
- John Polkinghorne.** Science & Theology. (An Introduction). 1998. SPCK/Fortress Press.
- John Polkinghorne.** Science and Religion in Quest of Truth. 2011. SPCK.
- A. D. Ritchie.** Studies in the History and Methods of the Sciences. 1960. Edinburgh University Press.
- A. D. Ritchie.** Civilisation, Science and Religion. 1945. Pelican Books.
- Colin Ronan.** The Cambridge Illustrated History of the World's Science. 1983. Cambridge University Press and Newness Books.
- Arthur F. Smethurst.** Modern Science and Christian Beliefs. 1956. James Nisbet and Co. London.

H. K. Schilling. Science and Religion. (An Interpretation of Two Communities). 1963. George Allen and Unwin Ltd.

Erwin Schrödinger. Science and Humanism. (Physics in our time). 1961. Cambridge University Press.

Steven Shapin. Science and the Modern World. (Third edition. Edited by: Edward Hackett; Olga Amsterdamska; Michael Lynch; Judy Wajcman). CAMB, MA:MIT Press. 2007. PP 433-448.

Charles Singer. A Short History of Scientific Ideas to 1900. 1959. Oxford.

Ian T. Taylor. In the Minds of Men. (Darwin and the New World Order). 1987. TFE publishing, Toronto, Canada.

Part 2.

Here I list only the major works referenced.

CHALMERS:

John E. Webster. Science and the Scottish Evangelical Movement in Early Nineteenth Century Scotland: a study in the interactions of science and theology in the work of the Rev. Dr. Thomas Chalmers D.D., LL.D., 1780-1847. M.A. Thesis. Department of Science and Technology Studies, University of Wollongong. 1989.

The Works of **Thomas Chalmers**, D.D & LL.D. Professor of Theology in the University of Edinburgh. Third Uniform Edition. Volume First. New York: Robert Carter, 56 Canal Street. 1841.

ROSS:

Hugh Ross. Navigating Genesis. A scientist's journey through Genesis 1-11. 2014. Reasons to Believe press.

BLOCHER:

Henri Blocher. In the Beginning. 1984. IVP.

SAILHAMER:

John Sailhamer. Genesis Unbound. Book Villages. 1996. Second Edition 2011

LENNOX:

John C. Lennox. Seven Days that Divide the World. 2011. Zondervan.

WALTKE:

B. K. Waltke.

The Creation account in Genesis 1:1–3, Part I, *Bibliotheca Sacra*. **132**:25–36, 1975.

The Creation account in Genesis 1:1–3, Part II, *Bibliotheca Sacra*. **132**:136–144, 1975.

The Creation account in Genesis 1:1–3, Part III, *Bibliotheca Sacra*. **132**:216–228, 1975.

The Creation account in Genesis 1:1–3 Part IV, *Bibliotheca Sacra*. **132**:327–342, 1975.

The Creation Account in Genesis 1:1–3 Part V, *Bibliotheca Sacra*. **132**:28–41, October 1975.

VAN TILL:

Howard Van Till. The Fourth Day. 1986. William B. Eerdmans.

C. J. COLLINS:

C. John Collins. Genesis 1-4. A Linguistic, Literary, and Theological Commentary. 2000. P & R Publishing. Phillipsburg NJ.

POYTHRESS:

Vern S. Poythress, Redeeming Science: A God-centred Approach. 2006. Wheaton ILL: Crossway Books.

LONGMAN III:

Tremper Longman III. How to read Genesis. 2005. IVP Academic.

F. COLLINS:

Francis Collins. The Language of God: A Scientist Presents Evidence for Belief. 2007. Pocket Books.

KELLER:

Tim Keller. Creation, Evolution, and Christian Laypeople. <https://biologos.org/articles/creation-evolution-and-christian-laypeople/> PDF version: https://wp.biologos.org/wp-content/uploads/2019/02/Keller_white_paper-compressed.pdf.

Tim Keller. Sinned in a Literal Adam, Raised in a Literal Christ. <https://www.thegospelcoalition.org/article/sinned-in-a-literal-adam-raised-in-a-literal-christ/>

ALEXANDER:

Denis Alexander. Creation or Evolution. Do we have to choose? 2008. Monarch Books.

RAMM:

Bernard Ramm. The Christian View of Science and Scripture. First published in 1954. Reprinted 1987. William B. Eerdmans Publishing Company. Grand Rapids, Michigan. USA.

WALTON:

John H. Walton. The Lost World of Genesis One. 2009. IVP Academic.

John H. Walton. The Lost World of Adam and Eve. 2015. IVP Academic.

FESKO:

J. V. Fesko. Last Things First: Unlocking Genesis 1-3 with the Christ of Eschatology. 2007. Mentor, Christian Focus.

ENNS:

Peter Enns. The Evolution of Adam. 2012. Brazos Press.