

***A Challenge to Theistic  
Evolution***

**from Biblical and Scientific perspectives**

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Foreword by Adrian Pickett

First published 2021 by

**Dawn Christadelphian Publications**

5 Station Road, Carlton, Nottingham, NG4 3AT, U.K.

Printed and bound in Great Britain

Set in Nimbus Sans L

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ISBN 978-1-874508-43-4

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## **Foreword**

This book asks an important question: has science proved that God did not create life in six days, but, instead, used a much longer process often described as "Theistic evolution"? Could this subtle interpretation be consistent with the message of redemption? Following the enormous increase of knowledge of life and the universe, is it still reasonable for a 21st century believer to accept the astounding miracle of creation in just six days?

Theistic evolution has been the subject of other publications. However, *A Challenge to Theistic Evolution* very helpfully examines the topic from two standpoints in a single book that will be welcomed by a wide readership, regardless of scientific knowledge or interest.

First, could creation as described in the Bible really be a broad metaphor for life having developed over long aeons, gently overseen by God in a process now called "evolution"? Or does the Bible itself, explicitly, exclude this idea by oft-repeated recollections of life's origin throughout Scripture? After all, these allusions are interwoven with essential features of God's offer of redemption, the principal subject of His book. It is evident that many parts of Old and New Testaments are involved here, and their meaning for creation is thoroughly reviewed in the first part of the book.

After looking at the theistic evolution argument from within God's word, the book then asks if science actually shows that evolution could have happened. Mindful that the theory of evolution was first postulated around 2500 years ago and then developed by Darwin and others from the early Victorian period onwards, it is obvious that the theory originated long before the genetics revolution and, predictably, carries huge weaknesses in its many assumptions. Thus, it is clearly necessary to evaluate evolution, theistic or otherwise, against the yardstick of 21st century knowledge, and that is precisely what this work comprehensively does.

The conclusion the authors draw from the Bible and science is that Christians may confidently proclaim complete faith in a creation of six days as recorded in the first two chapters of the Book of Genesis and confirmed throughout God's word.

**Adrian Pickett**

11/12/20

## **Dedication and acknowledgements**

We acknowledge with gratitude all the help and strength that we have received from our Heavenly Father in writing this book.

This book is dedicated to all of God's children who strive to honour Him and the truth of his Word while living in a world that increasingly does neither.

No book is written just by those whose names appear on the cover and so we also want to acknowledge our indebtedness to many brothers and sisters and particularly the following for their help and encouragement, which has enabled this book to come to fruition.

From Simon Perfitt: to Steve Irving and Duncan Southgate for their honesty about my early efforts (I hope someone will read it now!); to Anna Craven and Claudia Tomkins for their constructive criticism and for picking me up when the writing just seemed too hard; to John Meadows for saying that on reading a later draft he didn't want to stop; to my co-author and good friend for his hard work and dedication including sorting out our technical muddles; and to those who attended Swanwick Study Weekend 2020 who said they would hold me to account to get my bit done – the prospect of public shame can be a powerful driver!

From Laurie Broughton: to a number of people for ploughing through the scientific stuff, and pulling me up over a number of errors; to Steve Irving for his encouragement and work sorting out the publishing details; to my co-author and good friend for his very necessary and unvarnished criticism of my efforts; and particularly to Julie, my beloved, faithful and endlessly patient sister wife, who went through the text with an eagle eye for all sorts of non-sequiturs, omissions and grammatical errors.

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## Preface

We have called this book *A Challenge to Theistic Evolution*, a presentation of scriptural and scientific evidence, but before we proceed to challenge what some people believe about Genesis 1–3 we ought to set out our own beliefs concerning the creation account.

When any of us speak or write about a subject our view is coloured by an array of underlying beliefs and assumptions, even if we are not aware of them or are not always able to articulate them. This seems to be especially true when it comes to views about the origin of our world and the universe around us. As Gerald Rau puts it, “Although everyone has access to the same evidence [as seen in the natural world], the presuppositions implicit in a person’s philosophy determine the perspective from which he or she views the data.”<sup>1</sup> These presuppositions, as he calls them, our assumptions, form the basis of our personal and sometimes collective set of beliefs about the world and are often referred to as our ‘world view.’<sup>2</sup> (Chapter 14, Philosophical Issues)

Likewise, as authors, our own set of assumptions about God and the authority of the Bible determine how we interpret the science about origins in relation to Genesis 1–3. It is on the basis of these beliefs that we consider that the assumption of Theistic Evolutionists (which is that evolution was the means by which God ‘created’ living things) is incompatible with what is written God’s Word.

Theistic Evolutionists place a great deal of emphasis on the concept of God revealing Himself through ‘Two Books’ (Chapter 14, Philosophical Issues): the ‘Book of His Word’, the Bible, and the ‘Book of His Work’, the world around us and the universe beyond. They argue that the wonder in the world around us, and declarations in the Bible such as “The heavens declare the glory of God; the skies proclaim the work of his hands” (Ps. 19:1), is evidence that God has revealed Himself in His creation as much as through His Word.

We highly value the contribution that the sciences have made to our understanding of the world created by God. More than that, the Scriptures confirm that the study of the world enables us to appreciate more about the Creator God.

As the Apostle Paul says:

“Since the creation of the world God’s invisible qualities—his eternal power and divine nature—have been clearly seen, being

understood from what has been made, so that people are without excuse.” (Rom. 1:20)

However, when it comes to God’s revelation of His will and His purpose, we do not attach the same weight to an understanding of the living world as we do to understanding what the Bible says. Unlike Theistic Evolutionists, we take what the Bible says as a starting point and measure the conclusions of science against that standard.<sup>3</sup>

Psalm 19, which extols the majesty of the heavens, whose “voice goes out into all the earth”, goes on to say that only in the outworking of God’s Word is “there great reward” (19:7–11). This is a statement confirmed by Paul when he wrote to Timothy:

“How from infancy you have known the Holy Scriptures [the OT], which are able to make you wise for salvation through faith in Christ Jesus.” (2 Tim. 3:15)

It is important to stress that we believe that God caused the Bible to be written for the salvation of all who acknowledge Him as their Creator and who believe what He has written.<sup>4</sup> It is not a textbook of science, ancient or modern, and neither is it a history book purely for the sake of historical record. It is a record of God’s dealings with His people in the widest sense of that term. Having said that, we believe that where statements are made about the living world or history, these are factually correct. Put simply, we believe in the inerrancy of Scripture through the inspiration of God.<sup>5</sup>

Below is a summary of what we believe about Genesis chapters 1-3:

- Genesis 1:1 – This was a point in time when God created the universe, including the earth.<sup>6</sup>
- Genesis 1:2 – This describes an unspecified time that the earth existed prior to the creation described in Genesis 1:3–31.<sup>7</sup>
- Genesis 1:3 – 2:1 – These verses describe six consecutive days in which, by His word, God created the vegetation, birds, sea creatures and land creatures, culminating in the creation of Adam and Eve as the first humans in our current world.<sup>8,9</sup> From this point onwards the entire Bible is only about God’s plan and purpose with the earth and mankind upon it.
- Genesis 2:4–25 – This amplifies Day 6, describing the specific creation of Adam and Eve.<sup>10</sup> Adam was created from the “dust of the ground”, as described in Genesis 2:7.<sup>11</sup>

- God placed the one man he had made in the Garden of Eden that He had planted, so that Adam would “work it and take care of it”.<sup>12</sup>
- God then made a woman from Adam’s rib, as described in Genesis 2:21–22, when “no suitable helper was found” for Adam among other living creatures (cf. 1 Cor. 11:8–9).<sup>13</sup>
- God told Adam that he could eat from any tree in the garden except from the tree of the knowledge of good and evil, and that eating from this tree would result in death.<sup>(14)</sup>
- Following temptation by the serpent in the garden, Adam and Eve disobeyed God’s command and ate from the tree.
- God cursed the serpent for its deception which led to Adam and Eve’s sin, and He made the serpent a symbol of the power of sin which would deceive future generations (Heb. 3:12–13).
- God proclaimed that the power of sin would eventually be destroyed by one who was born of a woman (Gen. 3:15), namely Christ (Rom. 8:3; Gal. 4:4; Heb. 2:14, 9:26).
- God proclaimed the punishment of death (Gen. 3:19), because of sin, to the human race through Adam (Rom. 5:12; 1 Cor. 15:22).<sup>15</sup>

As we shall see throughout the course of our consideration of the biblical evidence, the beliefs of Theistic Evolutionists are incompatible with the above. It is our view that theistic evolution calls into question the truthfulness God’s Word, not just in Genesis 1–3, but in what is written about Genesis elsewhere in Scripture.<sup>16</sup>

We are also convinced that theistic evolution is a totally untenable alternative to accepting the Genesis account of creation from a consideration of the scientific evidence, evidence which argues strongly against biological evolution.

Having stated our position we acknowledge with humility that some readers may come to this book with a different perspective. We would like to make it clear that it is not our intention to disparage views with which we may disagree. We have endeavoured to ensure that our writing avoids this, but apologise in advance if we have not fully succeeded. We are convinced that the information we provide, and the arguments we present, fully support our beliefs about Genesis 1–3.

We sincerely trust that the presentation of the biblical and scientific evidence presented in this book provides a robust “Challenge to

Theistic Evolution” and faithfully supports all believers in maintaining “the faith that was once for all entrusted to the saints” (Jude 3).

**Note:** Although we have chosen to place the biblical perspective first in our presentation of evidence, it is not essential to read the two parts in order. Some may wish to start with the scientific perspective if this is of greater immediate interest.

Secondly, please note that the indexes to both parts are at the end of the book, but the notes and references are put at the end of the relevant chapter.

## Notes and references

- 1 Rau, G., *Mapping the Origins Debate – Six Models of the Beginning of Everything*, InterVarsity Press, Nottingham. England, 2012, p. 20
- 2 Ibid p. 21
- 3 This is the opposite approach to that taken by Theistic Evolutionist John H. Walton, who says that someone who denied that Adam and Eve were the first human beings and unconnected to other species, "could not be accused of rejecting the Bible or the faith. This does not mean that such a person should accept the scientific consensus uncritically, but interpreters would not be a position to say that specific biblical texts or theology in general demand the rejection of the scientific consensus. Any science must be weighed on its merits, *but the Bible would not predetermine the outcome*" (emphasis added) *Four Views On The Historical Adam*, Edited by Matthew Barrett, Ardel B. Caneday and Stanley N. Gundry, Zondervan, Grand Rapids, Michigan 49530, p. 113. This is an approach also taken by several Christadelphian Theistic Evolutionary writers, bloggers and speakers.
- 4 "Without faith it is impossible to please God, because anyone who comes to him must believe that he exists and that he rewards those who earnestly seek him" (Heb. 11:6).
- 5 Biblical inerrancy is the belief that the Bible "is without error or fault in all its teaching", or, at least, that "Scripture in the original manuscripts does not affirm anything that is contrary to fact." [https://en.wikipedia.org/wiki/biblical\\_inerrancy](https://en.wikipedia.org/wiki/biblical_inerrancy). We shall see as we progress that Theistic Evolutionists believe the "inerrancy" of Scripture is limited by the intention of the human writer. This view has serious implications for the truthfulness of the Bible because the Biblical 'truth' becomes subjective. "By contrast, many limited inerrantists base their view on an intentionality view of truth which says, "A statement is true if it accomplishes what the author intended it to accomplish and a statement is false if it did not accomplish it." This at first may appear to give room for one to affirm something as true which is really false, and we consider it true (even though it is false) if their intentions are right. ... If the intentionality view is right, not only is such a world unlivable, but such a world could never contain absolute truth that is something that is true for everyone, everywhere and for all time. Truth becomes something that can be created and changed by the intentions of persons." *A Seismic Shift in the Inerrancy Debate*, Norman L. Geisler & Douglas E. Potter, 2018; <https://defendinginerrancy.com/a-seismic-shift-in-the-inerrancy-debate/>.
- 6 We do not believe that the Scriptures comment on the age of the earth (and the universe), as the Christadelphian writer John Thomas says, "The *duration* of the earth's revolutions round the sun previous to the work of the first day is not revealed: but the evidences produced by the strata of our globe show the period was long continued" (emphasis original). *Elpis Israel*, 13th Ed, p.10, John Thomas, first published 1850. "The Bible teaches that there was an earth and inhabitants in it ages before the Adamic era. It shows us the earth mantled in darkness and the deep at the time when the six days' work of re organization began, ... How long it had been in that state, there is no intimation." Editor of the Christadelphian Magazine, R. Roberts, Christ is Coming, *The*

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*Christadelphian*, 1879. The creation in Gen. 1:1 precedes the storyline that follows as in Gen. 24:1: "the LORD *had* blessed him [Abraham] in every way", *Gen. 1–4 – A Linguistic, Literary and Theological Commentary*, C. John Collins, P&R Publishing Company, Phillipsburg, New Jersey, 2006, p. 51.

- 7 "Now the earth *became* [NIV footnote] formless and empty" (Gen. 1:2). The Hebrew for "formless" and "empty" only occurs together in Is. 34:11 and Jer. 4:23. Both passages describe a land that has become desolate as a result of the judgements of God. The use in Gen. 1:2 *may* suggest the destruction of a previous creation.
- 8 Acts 17:26.
- 9 While we reject biological macroevolution of species by universal common descent, we accept microevolution leading to adaptation and changes within species. See Ch. 11 for the distinction between micro–and macro–evolution.
- 10 Some Theistic Evolutionists (e.g. John Walton) argue that Genesis 2 could be a sequel that happened long after Genesis 1. *Four Views On The Historical Adam*, p.109. For a study of the harmony between chapters 1 and 2 see *Genesis 1–2, A Harmonised and Historical Reading*, Peter Heavyside, Ascent Publications, 2018.
- 11 At which point Adam was alone as stated in Genesis 2:5: "there was no man [human] to work the ground" and Gen. 2:18 "It is not good for man to be alone."
- 12 There are many elements of Genesis 1–3 that are echoed in the furniture and decorations in the tabernacle and temple, leading some Theistic Evolutionists to argue that Genesis is describing the role of humans in God's cosmic temple, not the origins of human life.
- 13 The creation of Eve is the conclusion of the two–stage process set out in Genesis 1:27: "So God created man in his own image, in the image of God he created *him*," followed by, "male and female he created *them*." Paul confirms this order in 1 Cor. 11:7–9 and 1 Tim. 2:13. As a consequence the Bible knows only two genders, male and female, and marriage between a man and a woman is confirmed by Jesus quoting (Matt. 19:4–5) from Genesis 1:27 and Genesis 2:24.
- 14 Those Theistic Evolutionists who do believe Adam and Eve existed (many do not) say that they were already dying as a consequence of their biological evolution.
- 15 As much as it is important to accept what Scripture says about human death, it is also important not to assume more than what is stated. As a result we cannot say whether death and decay was present in the rest of creation before the sin of Adam. Even if we assume that God's words in Genesis 1:30 mean all land creatures were vegetarian, we are not told about the diet of sea creatures. If we fully embrace the concept of death then the plants would die when eaten. Biblical death is the consequence of sin and sin only relates to those descended from Adam. It is only those made in the "image of God" who have been given the hope of everlasting life – not anything else in the rest of our created world. Some may feel that Romans 8:19–22 teaches that death came to the whole creation as a result of Adam's sin. For an application of this passage to the new creation in Christ, see *Bible Studies*, Harry Whittaker, Biblia Publishing, 1987, p. 308f.
- 16 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 821.

## **Abbreviations:**

AIDS – Acquired Immune Deficiency Syndrome

ANE – Ancient Near East (including Assyria, Babylon and Egypt, i.e. the modern Middle East)

ASV – American Standard Version

BSW – Biological Society of Washington

cf. – ‘compare with’

CFS – Chronic Fatigue Syndrome

Darby – John Nelson Darby’s translation

DNA – Deoxyribonucleic acid

e.g. – ‘for example’

ESV – English Standard Version

etc. – ‘and so-on’

FBI – Federal Bureau of Investigation

Gk – Greek word

Heb – Hebrew word

i.e. – ‘that is’

Ibid – same reference as given above

JME – Journal of Molecular Evolution

KJV – King James Version

LUCA – Last Universal Common Ancestor

ME – Mylagic Encepalopathy

MOD – Ministry of Defence

my – million years

mya – million years ago

NASA – National American Space Administration

NASV – New American Standard Bible

NCSE – National Center for Science Education

NIV – New International Version

NKJV – New King James Version

NOVA – Public Broadcasting Service Video Stream

NPR – National Public Radio

NT – New Testament

OSC – US Office of Special Counsel

OT – Old Testament

PACE – Programs of All–Inclusive Care for the Elderly  
PBSW – Proceedings of the Biological Society of Washington  
PVS – Post Viral Syndrome  
RNA – Ribonucleic acid  
RSV – Revised Standard Version  
sw – same word, usually with reference to biblical Hebrew or Greek  
TE – Theistic Evolutionists  
Tyndale – translation by William Tyndale  
UCD – Universal Common Descent





# **PART 1: THEISTIC EVOLUTION FROM A BIBLICAL PERSPECTIVE**



# CHAPTER 1: INTRODUCTION

## Questions to address

Theistic evolution or evolutionary creation is the belief that God used biological evolution to create life on earth. In Part 1 we examine theistic evolution from the perspective of what is written in the Bible. The questions we address in the following chapters are:

- a) What do those who believe in theistic evolution understand about the creation account in Genesis, and the references to that account in the New Testament?
- b) Why do we believe that such an understanding is not supported by what is written in the Bible?

## The impact of academic study on trust in the Bible as reliable history

To address these questions we first consider the impact that some forms of academic Bible study have had on the authority of the Bible as the inspired Word of God. We shall see that this approach to understanding the Bible has generated doubt in the authorship and authenticity of Genesis in particular, and as a consequence has eroded trust in the historical reliability<sup>1</sup> of the creation account. Sadly these views about the authority of the Bible underpin much of the thinking of those who believe in theistic evolution. However, they completely contradict our understanding of the way in which God directed the writing of Scripture by inspiration. (see Chapter 7, “The Inspiration of Scripture.”)

## Theistic Evolutionists’ view of Genesis

We follow this by examining specifically what three Theistic Evolutionists say they believe about the Genesis account of creation, in the light of their acceptance of biological evolution. These writers are:

John H. Walton, Professor of Old Testament at Wheaton College and Graduate School, Wheaton, Illinois;

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Peter Enns, Professor of Biblical Studies at Eastern University, Philadelphia, Pennsylvania; and

Denis Alexander, Emeritus Director of the Faraday Institute for Science and Religion, St Edmund's College, Cambridge.

We have chosen these particular writers because their views, published between 2009 and 2015, are representative of the many theistic evolutionary opinions. They are well known for their biblical studies and authorship, and as a consequence their theistic evolutionary views are influential in the wider 'Christian' world.

We will be looking in particular at what these writers believe about Adam and Eve, and how they explain what the New Testament teaches when referring to Adam and Eve and the creation account. We will endeavour to show clearly from the Bible the flaws in the evidence they put forward, and how their various interpretations of Genesis contradict the teaching in God's Word about fundamental doctrines.

### **Method**

At the beginning of each chapter we have summarised the main points of argument that follow. These summaries provide a basic understanding of the issues raised by Theistic Evolutionists for those readers who do not wish to delve into the details of the various ideas and how we have refuted them.

Some readers may find our approach to challenging the ideas put forward by Theistic Evolutionists unfamiliar. For example, we have chosen to quote extensively from their writings so that readers are aware of the arguments put forward by Theistic Evolutionists, and so that the validity of our responses can be properly evaluated. We hope that this approach will enable readers to challenge the arguments of Theistic Evolutionists themselves, should they wish to.

It is important to stress at the outset that this is by no means an exhaustive presentation of this subject. The bibliography at the end of the book will enable readers to explore particular aspects in greater depth should they wish to do so.

We believe that the account in Genesis 1–3 should be taken as a historically reliable account of the creation of current life on earth. The proponents of theistic evolution present alternative interpretations of the meaning of these chapters that will accommodate their acceptance of biological evolution, including Universal Common Descent (UCD, see Chapter 12, Fallacy 8). In the course of this

analysis we will consider the implications of theistic evolution for the authority of the Bible and its teaching about sin, death and the atonement sacrifice of Christ. We will show that theistic evolution is not supported by the Word of God.

### Note

---

- 1 We need to define what we mean by the word 'history' in phrases such as 'historical reliability' and 'historical truthfulness'. By 'history' we mean that what is written really happened. It does not imply that what is written has no figurative or metaphorical elements, or that all the details of events are included, or that it is automatically in exact chronological order, unless stated as such by the text. So by 'historical reliability' we mean first and foremost that a particular Biblical account of past events can be relied upon as a truthful version of what actually happened, even though it may contain aspects which are also figurative. It is for the latter reason that we do not use the word 'literal' in relation to the Genesis account of creation.



# CHAPTER 2: IS THEISTIC EVOLUTION REALLY A 'PROBLEM'?

## Summary

In this chapter we address the question of whether acceptance of theistic evolution really is a problem that needs to be challenged. Our answer is to show that there is a growing acceptance of theistic evolution within the wider Christadelphian community, and to express our concern over the impact that this acceptance has upon belief in the fundamentals of our faith.

There is also concern in the wider Christian world about the impact of theistic evolution on belief in the truthfulness of the Bible and other doctrines. Many conclude that theistic evolution is not a viable alternative view of the Genesis account.

We illustrate the impact that doubt in the historical truthfulness of Genesis 1–3 can have upon faith with a quotation from a former Christadelphian.

We conclude that the historical truthfulness of Genesis 1–3 is foundational for believing the Gospel, and therefore this makes rejecting theistic evolution essential for maintaining 'the faith'.<sup>1</sup>

We would add that our children need to be aware not only of the strength of the historical creation argument from a scientific perspective, but also how the hope of salvation is bound to the historical reliability of the Genesis account.

\* \* \* \* \*

We believe that an acceptance of theistic evolution is destructive to 'the faith', even for those who do not believe this false idea themselves. However, before examining the views of Theistic Evolutionists we ought first to establish whether there really is a problem to be confronted, since most Christadelphian readers don't believe in the commonly accepted ideas of evolution and therefore have no reason to espouse theistic evolution.

Some readers, who have heard various arguments put forward in support of theistic evolution, may find themselves uncertain about how

## A Challenge to Theistic Evolution

to choose, or whether it really matters anyway. Others may be relieved that theistic evolution appears to be a way of reconciling their belief in the authority of the Bible as the Word of God with what is presented as current scientific ‘facts’ that purport to show that all life evolved.

To those who may feel that by raising the issue we are in danger of creating curiosity about something best left alone, we say that, whether they realise it or not, the ‘genie is out of the bottle’. Theistic evolution has many adherents and influential advocates among writers in the ‘Christian’ world,<sup>2</sup> and from there has a growing appeal within the Christadelphian community through the explosion of public debate on the subject, especially in online forums and through chat rooms. All those arguing for theistic evolution do so because they have accepted the received ‘wisdom’ in the world, that biological evolution is the explanation for life on earth.<sup>3</sup>

An example of the changing views on Genesis 1–3 within the Christadelphian community, is expressed by David Brown in his booklet, “*GENESIS: don’t take it literally*”, who concludes that

“the Bible itself suggests that the early chapters of Genesis should not be taken literally”.

When this booklet was reviewed in the Christadelphian *Endeavour Magazine*, the Editor confirmed his support for the author’s conclusions. He wrote:

“It follows that evolution is in no way excluded as the likely method used by God to bring the living world as we know it into being, and that the ‘two books’ – of God’s word and God’s works – speak in harmony.”<sup>4</sup>

Concern that this is not an isolated example is illustrated by the comments of the following Christadelphian writers.

Jeremy Thomas wrote in *The Testimony* magazine in July 2013:

“What is more disturbing is that views of the creation record which impact on fundamental doctrine are now being promoted within the Brotherhood—such as the claim that Adam was not the first man.”<sup>5</sup>

In 2020 Thomas wrote a two part editorial entitled, ‘A matter of honesty’, in which he again expressed grave concerns about the impact that the growing acceptance of theistic evolution, among other things, was having on the Christadelphian community. He wrote:

“Much of what has previously been accepted as a faithful reflection of Bible teaching, in both practical and doctrinal terms, now seems

## Chapter 2: Is Theistic Evolution really a ‘problem’?

to be ‘up for grabs.’ This extends well beyond peripheral aspects of life in the Brotherhood, to include the promotion of beliefs that have hitherto been regarded as incompatible with the essential teachings of Scripture, as summarised in our principal statements of faith. ... I have observed that some of these new teachings require us to change the basic meaning of words. As the word ‘creation’ is redefined to include theistic evolution (despite the fact that ‘creation’ and ‘evolution’ do not mean the same thing at all), so too the word ‘inspiration’ now includes things that are recorded in the Bible but which are supposedly not actually true. When this discrepancy is challenged, a typical answer goes something like this: ‘The Bible is an inspired record of what people at the time thought was true’ (with the implied addition, ‘But we know better’).”<sup>6</sup>

Mark Allfree and Matt Davies, in their book, *The Deception of Theistic Evolution*, published in 2017, wrote:

“Theistic evolution is not a new view – it has been developed over many years. ... What is comparatively new is its emergence within the Christadelphian community, and it is being promulgated widely, especially via the medium of social media and internet forums.”<sup>7</sup>

The same writers also commented:

“It is sad to say that there appears to be a lack of perception within the Christadelphian community that theistic evolution does indeed represent an attack on the fundamentals of the faith, and is not consistent with “the things concerning the kingdom of God, and the name of Jesus Christ.”<sup>8</sup>

These brief references illustrate both the intrusion of theistic evolution into the thinking within the Christadelphian community as a whole<sup>9</sup>, and the apparent lack of awareness of its implications for “the faith that was once for all entrusted to the saints.” (Jude 3)

To those who may consider the ideas of theistic evolution an ‘optional’ alternative view of the early chapters of Genesis that fits with modern scientific thinking, we echo the words of Wayne Grudem, Research Professor of Theology and biblical studies at Phoenix Seminary, Arizona, who wrote:

“Theistic Evolution is not at all a harmless ‘alternative opinion’ about creation, but will lead to progressive erosion and often even denial of the following eleven Christian doctrines.”<sup>10</sup>

## A Challenge to Theistic Evolution

The eleven doctrines he goes on to list include “The Truthfulness of the Bible”, “The Moral Justice of God”, “The Atonement” and “The Resurrection”.

We believe that the rejection of the historical reliability of Genesis 1–3 can have a devastating effect on our personal faith, because it erodes trust in the authority and reliability of Scripture as a whole. This is vividly illustrated by the following, written by a former Christadelphian, who in the past has written and lectured widely in defence of Bible teaching. He has since concluded that the sciences had so undermined his belief in the early chapters of Genesis as factual history that he could no longer believe that the Bible as a whole was trustworthy. He wrote:

“It seems highly unlikely that the original biblical authors intended to say what I interpreted them to say, but it was a way of trying to maintain some kind of religious faith that did not contradict scientific observations. The Genesis creation became little more than a founding myth, providing meaning to our existence and establishing a sense of who we are in the wider context of the world.

The problem with reaching this conclusion is that it raises questions about the rest of Scripture. Was Abraham also mythical? What about Moses, or David? If I could explain away the difficulties in Genesis by making it ‘spiritual’ or ‘allegorical’, was it acceptable to do the same with other parts of the Bible that inconveniently contradicted the observations of scientists, archaeologists and historians? Was faith even falsifiable once the inconvenient parts could be allegorized?”<sup>11</sup>

While such a loss of faith is truly heart-breaking, it is also logical to conclude that the truth of the Bible stands or falls as a whole. To do otherwise is to begin a game of ‘biblical Jenga’; how many pieces can we remove as ‘unreliable’, and therefore not required, before the whole of Scripture falls down and the Gospel message becomes null and void? It is therefore imperative that we confront the threat which belief in theistic evolution poses to faith within the Christadelphian community.

The inter-dependence between the historical truthfulness of Genesis 1–3 and other doctrines in Scripture will be a significant part of our argument for rejecting theistic evolution. We have structured the following chapters to give readers some understanding of the various theistic evolutionary perspectives, and to provide evidence that refutes these ideas.

## Chapter 2: Is Theistic Evolution really a ‘problem’?

### Notes and references

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- 1 We use the phrase 'the faith' to mean "the things concerning the Gospel of the kingdom of God and the name of Jesus Christ" (Acts.8:12). It encompasses confidence in the promises and prophecies made in the OT relating to the coming of Messiah, his sacrificial death, his resurrection, his future kingdom and the hope of eternal life that comes through the forgiveness of sins by the mercy of God for those who are baptised into him. The phrase 'the faith' (with the definite article) occurs several times in the NT. The churches in Galatia were exhorted to "remain true" to it (Acts.14:22), the Corinthian believers to "stand firm" in it (1 Cor.16:13), those at Philippi were instructed to "contend as one" for it (Phil. 1:27), and those at Colosse were exhorted to live in Christ Jesus as Lord in order to be "strengthened" in it (Col. 2:7).
- 2 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 842, 843n13.
- 3 Christadelphian Daniel Edgecombe states, "We are encouraged to prove all things (1 Thess. 5:21) and to hear all the arguments/facts before rushing to conclusions (Prov. 18:13). ... After much exploration of alternatives, evolutionary creationism (EC) appears to me to be the most likely reality – the way God brought about the creation we see around us today.". The word translated "prove" is the Gk *dokimazo* meaning to test, examine, prove (i.e to see if a thing is genuine or not), as in refining metals (LXX Jer. 6:27). The apostle John uses it when writing about testing the spirit of prophecy, "test (sw) the spirits to see whether they are from God" (1 John 4:1). In this book we are seeking to do just that and leave the reader to decide whether theistic evolution is from God or not.
- 4 Brown, D., *GENESIS: don't take it literally*, <https://www.endeavourmagazine.org/all-information/uploads/2013/12/E127-June-2012.pdf>.
- 5 *The Testimony*, Vol. 83, No. 984, July 2013, p. 270, Jeremy Thomas (Publishing Editor).
- 6 *The Testimony*, Vol. 90, No. 1058, March 2020, p.81, Jeremy Thomas (Publishing Editor).
- 7 *The Deception of Theistic Evolution*, Allfree, M., Davies, M., Bible Study Publications, 2017, p. 3.
- 8 *Ibid*, p. iv.
- 9 The following Christadelphian websites and blog posts contain articles which promote theistic evolution/God directed evolution: [www.livingfaith.org](http://www.livingfaith.org), <https://www.facebook.com/Christadelphian-Origins-Discussion> and <http://christadelphianeolution.blogspot.com/>
- 10 *Theistic Evolution*, p. 821.
- 11 <https://robjhyndman.com/unbelievable/ch10>.



# CHAPTER 3: WHY DO THEISTIC EVOLUTIONISTS DOUBT THE HISTORICAL RELIABILITY OF GENESIS 1–3?

## Summary

In this chapter we show that in addition to the acceptance of evolution, which contradicts the Genesis account of ‘Special Creation’, there are two other important influences which have led some in the biblical academic world to question the historical reliability of Genesis.

The first of these influences has arisen from the discovery over the last two centuries of written information about the culture, beliefs and practices of Ancient Near Eastern (ANE) peoples, e.g. Egyptian, Assyrian and Babylonian. A comparison of this information with the Hebrew Old Testament (OT) has led some academics to believe that these have greatly influenced the writing of the Genesis account of creation. The OT is seen by them as an Israelite equivalent to these ancient writings, created by humans and based on the understanding of the world at the time, and therefore no longer true today. Although this view is contrary to our belief about how Scripture was written through inspiration, it has gained a wide acceptance amongst Theistic Evolutionists.

The second of these influences is the opinion of some historians that the Pentateuch was not written by Moses, as confirmed elsewhere in the Bible, but compiled over several centuries, and wasn’t finalised until after Israel went into exile. This has led Theistic Evolutionists to create various alternative explanations for why Genesis 1–3 was written and what it means, alternative that is, to its being a historically reliable account of creation.

These twin attacks on the authority of the book of Genesis as reliable history underpin much of how Theistic Evolutionists understand the creation account. In the following chapters we will give more attention to whether this understanding is true or false.

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## **A Challenge to Theistic Evolution**

In this chapter we want to sketch out some background influences which have resulted in the development of evolutionary-based alternatives to accepting the Genesis creation account as historically reliable.

Readers could be forgiven for thinking that the simple and probably only answer to the question posed in the title of this chapter, is the promulgation of evolution over 'Special Creation'. It is evident that the promotion of biological evolution in the media, and teaching in schools and universities, has had a profound effect on the way many people view the Bible in general. In addition, the 'scientific' dogma that evolution is the only reasonable explanation for the development of life on earth has also been accepted by many professing a Christian faith, and increasingly so within the Christadelphian community.

However, there have also been other less obvious influences undermining the authority of Scripture within Christian theological circles during the last two centuries.<sup>1</sup> Unfortunately the cumulative effect of accepting the arguments of Evolutionists and the conclusions of critical academic biblical studies has been to undermine a conviction in the historical reliability of the Bible as a whole, and of Genesis in particular.<sup>2</sup>

### **The influence of archaeology**

During the last 200 years there have been enormous developments in biblical archaeology, not just in the number of finds, but in the painstaking and detailed analysis of the evidence provided by the excavations. As believers in the historical reliability of the Bible we have had our convictions vindicated on numerous occasions by the evidence which has been brought to light. These developments have been very welcome.

But it is probably less well known that these same archaeological investigations have also brought to light a great deal of written information about the culture, beliefs and practices of the ancient nations in the Near East.<sup>3</sup> Biblical scholars compare this information, and other ancient Hebrew texts, with the Hebrew OT to identify similarities. From this analysis, some scholars have concluded that the writing of the OT text has been significantly influenced by the culture, beliefs and practices of these ANE neighbours.<sup>4</sup>

Some Theistic Evolutionists who believe that the writing of Genesis was influenced in this way conclude that Genesis 1–3 has the same focus as other ANE literature. Some believe that the real focus of Genesis 1–3 is on the 'function' of what is being described, including

### Chapter 3: Why do TEs doubt the historical reliability of Genesis?

the role of humans, not about the physical or material origins of life.<sup>5</sup> Others interpret these chapters differently, but their core belief is that the creation account should be understood as “primarily or entirely figurative, allegorical or metaphorical literature.”<sup>6</sup> This means that it has not been written as a historical record, but *only* to present some other aspect of wider biblical teaching. This is an aspect of theistic evolution that we shall examine in subsequent chapters.

Peter Enns is among those who believe that the writing of Genesis was influenced by the beliefs of Israel’s ANE neighbours, and therefore how we should understand what Genesis says. He states:

“In earlier centuries the Old Testament could safely be read in isolation; now archaeological discoveries of the nineteenth century introduced *an external control by which to assess the nature of Genesis.*”<sup>7</sup> (emphasis added)

In describing these discoveries as ‘an external control’ for the Genesis account, he means that Genesis can only be properly understood through the lens of these other writings.

Those who believe that the OT is just another ‘ancient text’, which cannot be separated from the cultural influences of the surrounding nations, are ignoring its claim to be the uniquely inspired Word of the Creator God. Commenting on this ‘cultural relative’ approach to interpreting Scripture, Andrew Perry, a Christadelphian writer, states the following:

“It is not an interpretative approach found in Jesus’ day, but foreign to the context of understanding in which Jesus and the New Testament writers worked. It makes the wrong correlations between Genesis and ANE myths. Biblically, the concept of ‘Scripture’ is not relative to a culture or a time in such a radical way. The concept of ‘Scripture’ in Jesus’ day is addressed to people who are no longer of the ANE world view, and yet Genesis is treated literally. If we wish to retain this biblical concept of ‘Scripture’ among our beliefs, we cannot dismiss Genesis 1 as ‘just of its day’.”<sup>8</sup>

Nevertheless the approach to interpreting Genesis relative to the surrounding culture is widely accepted among biblical academics. This has happened despite being at variance with the view that the OT (and the NT) is uniquely written through the power of the Holy Spirit from an all-knowing God, and is not dependent on other ANE culture, beliefs and practices for its historical reliability.<sup>9</sup>

## A Challenge to Theistic Evolution

Perry, who studied at the Theology and Religion Department of Durham University, summarises how Scripture is viewed by some in academic theological circles:

“...historical scholarship is concerned with the human dimension. Sadly, *they don't allow the Spirit much say these days* and you will rarely find it in commentaries as a control on historical speculations.”<sup>10</sup> (emphasis added)

Put another way, this means that when some writers and academics, including many Theistic Evolutionists, look at Genesis, they do not see it as reliable history on the basis that it is written through the inspiration of God, “who does not lie.” (Tit. 1:2) Rather they judge whether it is historically reliable based on their belief that it is a document written by humans and influenced by the limited knowledge and understanding that they believe was available to the writers at the time.<sup>11</sup>

This begs the very important question as to how earlier readers of the ‘ancient text’ of Genesis, like Jesus, and the Apostles and Prophets, understood it, and before modern scholarship determined how it should be ‘properly’ understood. This is one of the questions we will address in subsequent chapters.

### The influence of academic criticism

In addition to the belief that ANE culture has significantly influenced the writing of Genesis 1–3, the authorship of the book of Genesis as a whole has come under intense critical scrutiny, especially since Julius Wellhausen published his views on the Pentateuch in the 1880s.<sup>12</sup> He argued that the Pentateuch was not written by Moses, but was compiled after the exile to Babylon from four distinct sources.<sup>13</sup> Although much of the detail of Wellhausen’s argument has since been abandoned, his principal conclusions continue to be promoted by those who assume that human, not divine, authority directed the writings.

These conclusions are:

- (1) parts of the Pentateuch were composed over several centuries, and
- (2) the Pentateuch as a whole was not completed until after the Israelites returned from exile.<sup>14</sup>

The impact of these conclusions on the understanding of the creation account is illustrated in the writings of Joseph Blenkinsopp, Scot McKnight and Peter Enns. These scholars interpret Genesis 1–3 as an

### Chapter 3: Why do TEs doubt the historical reliability of Genesis?

allegory of the nation of Israel, written to explain the tragedy of their experience of removal from their land to captivity in Babylon.

For example, Enns says that “Israel’s creation stories were not simply accounts of ‘how it all began’”, but “rooted their present experiences (e.g. the exile) in the very origins of the cosmos”.<sup>15</sup> He also says that the creation account was written retrospectively, to support “Israel’s claim that it has been God’s special people all along, *from the very beginning*.”<sup>16</sup> We will consider Enns’ views in more detail in Chapter 7.

The view of the Genesis account taken by these writers begins with a process of textual analysis known as ‘Source Criticism’. This analytical approach sets aside traditional ideas of who the author is, in this case Moses, and seeks to identify ‘discrepancies’, ‘inconsistencies’ and ‘contradictions’ in biblical texts, which they claim confirm multiple and sometimes contradictory authors.<sup>17,18</sup> In the case of the Pentateuch, this approach is the basis for their belief that the final text, as we have it, was created many years after the recorded events by the work of an editor or editors using various written and oral sources. They believe that the purpose of this editing was to create a historical narrative which met the need for national identity at a time of crisis, i.e. the Babylonian captivity.<sup>19</sup>

However, commenting on the reliability of Source Criticism analysis as a technique for Bible study Perry says:

“This process is inherently subjective and agreement between scholars has shifted as each generation has passed.”<sup>20</sup>

And:

“...it is difficult to see how they [the analyses] can be settled and engender confidence in the hypothesis of the critics.”<sup>21</sup>

In contrast to human judgement on the authorship of the Pentateuch, Jesus specifically attributes words recorded in Exodus, Leviticus and Deuteronomy to Moses.<sup>22</sup> In addition, other OT and NT writers make many quotations from the books of the Pentateuch which they also attribute to Moses.<sup>23,24</sup>

The critical approach to the authority of Scripture contradicts the description of inspiration given by the Apostle Peter when he wrote:

“Above all, you must understand that no prophecy of Scripture came about by the prophet’s own interpretation. For prophecy never had its origin in the human will, but prophets, though human, spoke

## A Challenge to Theistic Evolution

from God as they were carried along by the Holy Spirit.”<sup>25</sup> (2 Pet. 1:20–21)

The sum of this biblical evidence contradicts the assumptions made by many scholars about the Pentateuch, and Genesis in particular, and affirms our conviction in the authority and historical reliability of the Genesis account. Our conviction about the date and authorship of the Pentateuch is shared by C John Collins, Professor of Old Testament at Covenant Theological Seminary, St Louis, Missouri, who in his book, *Genesis 1–4*, concludes his examination of this issue with these words:

“We also need not doubt that Moses is the primary author of the Pentateuch as we have it.”<sup>26</sup>

We have briefly shown in this chapter that doubt in the historical reliability of the Genesis creation record has not just arisen from the promotion of biological evolution as the means of life. Two equally significant views, held by those engaged in biblical studies, have been involved in creating unwarranted doubt in the minds of some about the truthfulness of the biblical record: (a) biblical scholars who deny the unique nature of the Bible, but instead treat Genesis as equivalent to other ancient ‘creation stories’, and therefore historically unreliable, and (b) those who dispute the scriptural evidence that Moses was the writer of the Pentateuch. They claim that it was not completed until after Israel’s exile to Babylon and is therefore not a historically truthful account of the creation of current life on earth.

It is important to bear in mind that both of these ideas underpin much of what is believed by Theistic Evolutionists about the Genesis account and what Jesus and the Apostles say about creation.<sup>27</sup> We will examine these beliefs in more detail in subsequent chapters and show from the Scriptures how and why we believe their understanding to be incorrect.

## Notes and references

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- 1 Enns, P., *The Evolution of Adam – what the bible does and doesn't say about human origins*, Brazos Press, Grand Rapids, 2012 p. xviii.
  - 2 Long before Darwin, Francis Bacon (1561–1626) laid the ‘modern’ foundations of Scripture accommodating Science on the basis of understanding God through ‘reading’ His ‘Two Books’. For further reading on the impact of the Baconian philosophy in progressively undermining the authority of God’s Word, see *Theistic Evolution*, Chapter 24, p. 705–729.
  - 3 *The Evolution of Adam*, p. 5–6.
  - 4 *Ibid*, p.35
  - 5 Walton, J.H., *The Lost World of Genesis One – Ancient Cosmology and the Origins Debate*, InterVarsity Press, 2009, p. 33.

### Chapter 3: Why do TEs doubt the historical reliability of Genesis?

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- 6 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 65; 857.
- 7 *The Evolution of Adam*, p. 37,
- 8 Perry, A., *The Testimony*, Vol. 85 Issue 1010, November 2015, p. 432.
- 9 *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, p. 718.
- 10 Perry, A., 'Genesis', [email to S. Perfitt], 14 May 2019, <andrewneileen@gmail.com>, (accessed 30 September 2019)
- 11 *The Evolution of Adam*, p. 36.
- 12 Ibid. p. 20.
- 13 Wellhausen, J., *Prolegomena to the History of Ancient Israel*, Meridian, New York, 1957. The German original was published in 1882.
- 14 *The Evolution of Adam*, p. 20,
- 15 Ibid. p. 62.
- 16 Ibid. p. 66.
- 17 Perry, A., *Story and Typology*, Willow Publications, 2012, p. 261.
- 18 Enns, for example, compares the accounts in Genesis 1 and 2 and concludes, "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 the details." *Evolution of Adam*. p.52. This Theistic Evolutionary approach to the harmony of Genesis 1 and 2 is refuted by Heavyside P., in *Genesis 1–2 A Harmonised and Historical Reading*, Ascent Publications, 2018.
- 19 *The Evolution of Adam*, p. 32.
- 20 *Story and Typology*, p. 261.
- 21 Ibid. p. 263.
- 22 In Matt. 8:4 Jesus attributes to Moses the command in Lev. 14:2–32; in Mark 7:10 he quotes the commands of Moses in Ex. 20:12, Ex. 21:17, Lev. 20:9 and Deut. 5:16; in Mark 10:3,5 he attributes to Moses the divorce law in Deut. 24:1–4; in Mark 12:26 he calls Exodus "the book of Moses"; in John 7:19, 22, 23 he confirms that Moses wrote "the law" as a whole, and specifically the law of circumcision which is recorded in Lev. 12:3. Peter Enns acknowledges that "Jesus seems to attribute authorship of the Pentateuch to Moses", but dismisses the validity of this testimony by saying it "reflects the tradition that he himself inherited as a first-century Jew." *The Evolution of Adam*, p. 153n19.
- 23 There are words and events recorded in the Pentateuch and directly attributed to Moses in Joshua, Judges, 1 Samuel, 1 and 2 Kings, 1 and 2 Chronicles, Ezra, Nehemiah, Psalms, Daniel, Micah, Malachi, Acts, Romans, 1 and 2 Corinthians, 2 Timothy and Hebrews.
- 24 In saying that Moses was the author of the Pentateuch we are not saying there was no previously written or oral material available to him. The apostle Paul wrote regarding Gen. 15:6, "The words 'it was credited to him' were written not for him (Abraham) alone" (Rom. 4:23). This strongly suggests that there was some form of written text before Moses. It is also clear that Moses was not the sole author, as Deuteronomy 34 records the circumstances of his death as a post-script to his work.
- 25 The Greek for "own interpretation" is *idios*, meaning 'private', one's own house/family/business/property and *epi-lusis* meaning 'to release' (*epi*, up and *luo*, to loose). The use of *epilusis* occurs only in 2 Pet. 1:20 and not at all in the LXX. However the noun *lusis* occurs in Ecc. 8:1 (LXX) where it is the translation of the Hebrew *pshar pesh-ar* (Aramaic), corresponding to *pather paw-thar* a primitive root 'to open up', i.e. (figuratively) interpret (a dream) (*Strong's Hebrew Lexicon*). The latter word is used of Joseph's ability to interpret dreams (Gen. 40:8, 16, 22; Gen. 41:8, 12, 15) which he ascribed to God (Gen. 40:8; Gen. 41:16). Contrast this with the condemnation of those who, "prophecy the delusions of their own minds ... Let the prophet who has a dream tell his dream, but let the one who has my word speak it faithfully." (Jer. 23:25–28). This is the background to Peter's words. He is clearly affirming that the OT writings are not determined by their personal interpretation, including the socio-cultural influences of

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their time and place, as argued by Theistic Evolutionists, but are a truthful revelation from God through the Holy Spirit. The prophecies of Baalam (Num. 22–24) illustrate how God ensures that even such an unwilling mouthpiece was only able to "speak what the LORD puts in my mouth," despite his desire to get paid for a completely different message. The Apostle Peter states that the prophets were sometimes unable to fathom the full meaning of the prophecies they wrote, again confirming that these were not written by their own interpretation. (1 Peter 1:10–12)

- 26 Collins, J.C., *Genesis 1–4, A Linguistic, Literary, and Theological Commentary*, P&R Publishing Company, 2006, p. 235.
- 27 "This line of reasoning highlights where evolutionary science stands in the thinking of evolutionary creationists [Theistic Evolutionists]. It is their prior acceptance of the conclusions of evolutionary science that leads them to identify the different models for reading and handling Genesis 1 and 2. This explains why the same evolutionary creationist (P. Enns) places 19th century liberal biblical criticism and liberal biblical archaeology alongside evolution as the basis for easing evolution and Christianity toward meaningful dialogue. The different interpretive "models" evolutionary creationists have adopted, in order to accommodate their prior acceptance of evolutionary science, fall within the disciplines of liberal biblical criticism." *Genesis 1–2, A Harmonised and Historical Reading*, p.134, Chapter 13, 'Liberal Biblical Criticism' p. 140–152. *Theistic Evolution*, p. 705–729.

## CHAPTER 4: WHAT DO THEISTIC EVOLUTIONISTS BELIEVE ABOUT GEN. 1–3?

There are many answers to this question, but it is important to remember that all interpretations by Theistic Evolutionists arise from the acceptance that evolution is the vehicle by which God brought our present world, including humans, into existence. It is worth summarising how the conclusions from the various versions of theistic evolution differ from a historical reading of Genesis. The following list can be found in *Theistic Evolution*, chapter 27<sup>1</sup>.

- Adam and Eve were not the first human beings<sup>2,3</sup> (or they never existed<sup>4</sup>).
- Adam and Eve were born from human parents.<sup>5</sup>
- God did not act directly or specifically to create Adam out of dust from the ground.<sup>6</sup>
- God did not directly create Eve from a rib taken from Adam's side.<sup>7</sup>
- Adam and Eve were never sinless beings.<sup>8</sup>
- Adam and Eve did not commit the first human sins, for human beings were doing morally evil things long before Adam and Eve.<sup>9,10</sup>
- Human death did not begin as a result of Adam's sin, for human beings existed long before Adam and Eve and they were always subject to death.<sup>11,12</sup>
- Not all human beings have descended from Adam and Eve, for there were thousands of other human beings on Earth at the time God chose two of them as Adam and Eve.<sup>13</sup>
- God did not directly act on the living world to create different "kinds" of fish, birds, and land animals.<sup>14</sup>
- God did not "rest" from His work of creation or stop any special creative activity after plants, animals and human beings appeared on the Earth.

## A Challenge to Theistic Evolution

- God never created a “very good” living world in the sense of a world that was a safe environment, free of thorns and thistles and similar harmful things.<sup>15</sup>
- After Adam and Eve sinned, God did not place any curse on the world that changed the workings of the living world and made it more hostile to mankind.

These conclusions are a very significant departure from a belief that Genesis is a historically reliable account of creation by God. Readers should be aware that while these conclusions are not always explicitly stated by Theistic Evolutionists, they are the combined conclusions of the various interpretations of the Genesis account. This will become apparent as we examine examples of theistic evolutionary ideas in more detail in the following chapters.

In the next chapter we will consider how the Bible is regarded by Theistic Evolutionists as a collection of writings reflecting the knowledge and understanding of the times in which it was written. As a consequence, Genesis is viewed as describing an ancient and unscientific view of the world within the context of the Ancient Near East (ANE). It is a view of the Word of God which we believe is not supported by the evidence.

## Notes and references

- 1 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017.
- 2 <https://biologos.org/common-questions/human-origins/were-adam-and-eve-historical-figures/>.
- 3 Alexander, D., *Creation or Evolution: Do We Have to Choose?* Monarch Books, 2nd Ed, 2014, p. 301.
- 4 Lamoureux, D., *Four Views on The Historical Adam*, Edited by Barrett, M., Caneday, A.B, Gundry, S.N., Zondervan, Grand Rapids, Michigan, 2013, p. 58.
- 5 Walton, J.H., *The Lost World of Adam and Eve: Genesis 2–3 and the Human Origins Debate*, InterVarsity Press, Downers Grove, Illinois, 2015, p. 76.
- 6 Ibid.
- 7 Ibid, p. 80.
- 8 Ibid, p. 154.
- 9 Lamoureux, D.O., *Evolutionary Creation: A Christian Approach to Evolution*, Wipf and Stock, Eugene, Oregon, 2008, p. 319.
- 10 Murphy, G.L., *Perspectives on Science and Christian Faith: Necessary Natural Evil and Inevitable Moral Evil*, Volume 68, Number 2, June 2016, p. 112.
- 11 Middleton, J.R., *Evolution and the Fall*, Edited by Cavanaugh, W.T., Smith, J.K.A., Wm B. Eerdmans Pub Co., Grand Rapids, Michigan, 2017, p. 80.
- 12 *The Lost World of Adam and Eve*, p. 159.
- 13 Haarsma, D.B., *Creation, Evolution, and Intelligent Design*, Edited by Gundry, S.N., Stump, J.B., Zondervan, Grand Rapids, Michigan, p. 147.
- 14 *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, p.813 n53.
- 15 Deane-Drummond, C., *Evolution and the Fall*, p. 42.

## CHAPTER 5: IS GENESIS A BOOK OF HISTORICAL TRUTH, OR MERELY OF ITS TIME?

### Summary

In this chapter we examine the idea that the Genesis account of creation is an example of an ancient understanding of the material world. We pay particular attention to the idea that the Bible confirms an ancient belief that the sky is a solid dome over the earth. We show that this idea is not supported by the scriptural evidence.

Theistic Evolutionists believe that God allowed His servants to say and write things about the living world which are not true, rather than confuse them with the truth. For Theistic Evolutionists, neither the writings of Paul nor the words of Jesus can be taken as a reliable endorsement of the historical truth of Genesis. They believe that both were teaching from the scientific ignorance and beliefs of their day.

We show that this claim is not supported by the passages of Scripture which Theistic Evolutionists use as evidence. We also show that both Paul and Jesus regard the Genesis account as a historically reliable authority for their teaching.

\* \* \* \* \*

In general, Theistic Evolutionists regard Genesis as a book of its time, and consider the views of Paul and Jesus about Genesis to be a reflection of what was commonly believed in their day.<sup>1</sup> As a consequence of the influences that we outlined in Chapter 3 they believe that Genesis can only be understood by reference to the ancient and pre-scientific world-view in which it was written, and that the views of Paul and Jesus must also be put into the cultural context of their day.

In his book *Historical Creationism*, Perry sets out the basic argument of Theistic Evolutionists, who insist that Genesis must be read in its ancient cultural context, alongside documents of similar antiquity. He says:

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“Theistic evolutionists argue that there is no point in harmonising Genesis with Science because Genesis is a narrative ‘of its time and place’ – a kind of ANE cosmology or ‘cosmic geography’. We can think of it as the ‘science’ of that day – their way of explaining origins. ... It is said that the language is relative to the culture of the day, not only in terms of meaning, but in terms of truth. Thus while the narrative was ‘true’ for them, it cannot be true in the same way for us.”<sup>2</sup>

Peter Enns, along with other Theistic Evolutionists, John H Walton, Old Testament Professor at Wheaton College, and Paul H Seely, an independent biblical scholar and writer, assume that because all other Near Eastern cultures wrote things that were not scientific or historically accurate, those who wrote for Israel must also have been subject to the same limitations.<sup>3</sup>

They believe that the account of creation given to Israel is just another example of ancient ways of understanding how the world began.<sup>4</sup> However, in the case of the writing of Genesis 1–3, they believe God allowed the writer(s) to describe a pre-scientific version of that beginning which we now know wasn’t true.<sup>5</sup>

Denis Lamoureux, Associate Professor of Science and Religion at St Joseph’s College, University of Alberta, another exponent of theistic evolution, agrees. He states:

“When referring to nature, the Holy Spirit in the revelatory process *allowed the use of an incidental ancient science*. Rather than confusing the biblical writers and their readers with modern scientific concepts, God *accommodated* (author’s emphasis).”<sup>6</sup>  
(other emphasis added)

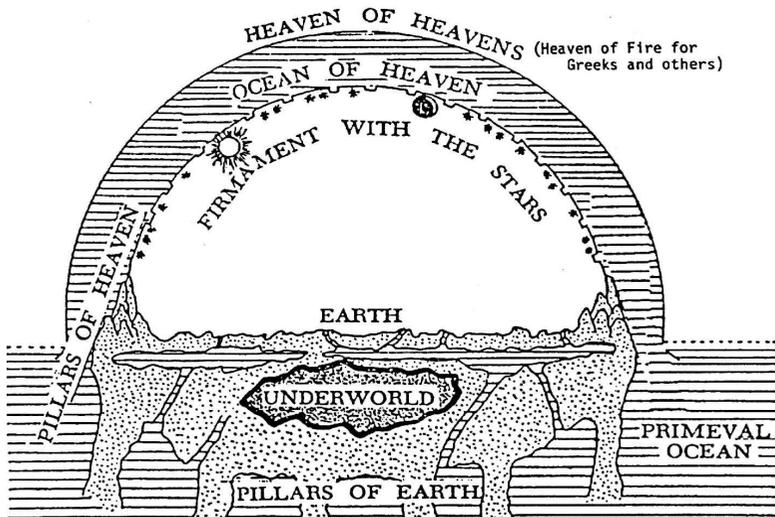
He adds:

“To state this problem more incisively, *Holy Scripture makes statements about how God created the heavens that in fact never happened*. ... The Lord accommodated in the Bible.”<sup>7,8</sup>  
(emphasis original)

To support this view of Scripture, Lamoureux cites the account of the creation of the ‘firmament’ (KJV), or ‘*expanse*’ (NIV, Hebrew *raqia*), recorded in Genesis 1:6–8 and 14–17, as an example of God allowing the use of “ancient science” rather than “confusing the biblical writers” with the truth.

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### Dome or Expanse?



**Fig. 1 The World According to Ancient Science<sup>9</sup>**

Lamoureux asserts that the word *raqia'* conveys the ancient idea of a solid dome or vault over the earth as believed by ANE cultures (See Fig. 1), and which we now know is not correct. This 'evidence' of ancient biblical science is often quoted by those who dispute the historical reliability of the Genesis account.<sup>10</sup>

We need therefore to ask whether the translation of the Hebrew word *raqia'* as a solid dome is valid. Is there a consensus on the meaning of the Hebrew that would lead us to conclude that the biblical account is indeed reflecting the ancient science of other ANE "creation" accounts?

In his book, *Genesis 1–4*, Collins comments on this view of Scripture held by Lamoureux, Seely and others.

He says:

"Many contend that the Bible presents a 'primitive' picture of the world – for example, it suggests that the sky is really a kind of hard canopy that keeps water from drowning us all. If we want to talk about biblical truth claims, they say, we will have to account for this feature."<sup>11</sup>

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However, he concludes that what are so often taken as examples of mistaken descriptions of the material world by biblical writers are in fact descriptions of appearance, using language that describes things in terms of what they look like to us. For example the English expressions “sunrise” and “sunset” are commonly used, even by astronomers and meteorologists, despite the fact that they know this is not what is actually happening; it is the perfectly acceptable language of what appears to happen.

To be certain that biblical authors are asserting a particular truth about the world we have to be sure that that is their intention when writing about it. There are several OT passages quoted by Theistic Evolutionists to support the argument that, in addition to Genesis, the Bible as a whole teaches an ‘ancient’ and incorrect view of the material world. Collins says that a closer look at these passages shows that the authors are not making statements of truth about the world.

He says:

“The statements about the world ‘not moving’ (Ps. 93:1; Ps. 96:10; Ps. 104:5) have to do with various kinds of stability, but not with physical immovability. Likewise, the phrase “*pillars of the earth*” appears in a poetic context (1 Sam. 2:8; Ps. 75:3), as does the expression “*corners of the earth*” (Job 37:3; Is. 11:12; Is. 41:9; Rev. 7:1; Rev. 20:8); there is no reason to suppose that physical description is what these authors were seeking.”<sup>12</sup>

Regarding the view that in the Genesis use of *raqia*’ the Bible is endorsing an ancient view that the sky is solid, he says:

“There is no evidence that the ‘expanse’ (עֲרֶבֶת *raqia*’) *must* be describing a solid canopy as a physical entity; it is enough to take it as speaking as if the sky were such.”<sup>13</sup>

Walton, although a Theistic Evolutionist, also disagrees with Lamoureux’s reading of the Hebrew in Genesis 1.

He states:

“In the past I had also drawn the conclusion that *raqia*’ referred to a solid dome, but more recently I have come to believe differently. Methodologically the procedure that he [Lamoureux] uses ... is unreliable. ... I therefore conclude that *raqia*’ refers to the air space that separates waters from waters.”<sup>14</sup>

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His conclusion that *raqia'* refers to the air space is consistent with what is said in Genesis 1:8: "God called the expanse (*raqia'*) 'sky'" and, "let birds fly above the earth across the expanse of the sky." (Gen. 1:20)

This conclusion is endorsed by Perry, who says about his own studies into the meaning of the word:

"We have set out the linguistics of *raqia'* and argued that it means 'expanse'. The expanse is whatever God did with the sky to separate the waters. 'Expanse' is a common choice for translators and commentators. The alternative of 'dome/vault' and the insistence that the *raqia'* is solid is based on a faulty analysis of the Hebrew linguistics and an accommodation with ANE ideas."<sup>15</sup>

Allfree and Davies devote a considerable part of their book, *The Deception of Theistic Evolution*, to addressing the meaning of *raqia'* and come to the same conclusion. They state:

"We can thus conclude that in Genesis 1:8, the 'firmament' that God called 'heaven' represents the sky, the atmosphere, that intervenes between the clouds and the seas. Clearly this is not solid, and the Scripture does not present it to us as if it is solid."<sup>16</sup>

They also examine other OT passages commonly advanced to support the solid dome theory and conclude:

"This chapter has demonstrated that there is no substance to the notion that Genesis 1 presents the firmament as being solid. The solid dome theory is one of the main foundation arguments for those who seek to dismiss a literal understanding of Genesis 1,2. But by careful Bible reading we have seen the Scriptures of truth are not based on ancient eastern pagan beliefs about the world at all."<sup>17</sup>

From this evidence we can be confident that the use of the word *raqia'* in the Bible does not endorse an unscientific view of the material world, and that the argument presented by Theistic Evolutionists is not supported either in Genesis 1:8 or elsewhere in Scripture (we address what is said about the beliefs of the Apostle Paul below). It cannot be said that the inspired writer of Genesis was influenced by the pagan beliefs of other ANE nations to write things about the world that were not true.

The view that Lamoureux and other Theistic Evolutionists have of Scripture is a fundamental challenge to its truthfulness. These writers are, in effect, saying that God wasn't being honest when He "allowed" His servants, through the instruction of the Holy Spirit, to write what He

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knew was an “accommodation” of the truth! If God said that He created the world in a way that readers until the present scientific age were expected to believe was true when it wasn’t, then surely God was lying.<sup>18</sup>

But the Bible says:

“He who is the Glory of Israel *does not lie* or change his mind; for he is not a man, that he should change his mind.” (1 Sam. 15:29)

And again:

“... a faith and knowledge resting on the hope of eternal life, which God, who does not lie, promised before the beginning of time.” (Tit. 1:2)

Everything about our Christian hope rests on the foundation that “God does not lie”. The truthfulness of what God says and does is fundamental to who God is, and this applies to his account of his creative actions recorded in Genesis.

As Wayne Grudem states:

“If the Bible tells us that God said, ‘Let the earth bring forth living creatures according to their kind’ (Gen. 1:24), is that statement historically true, or not? Did God speak these words and thereby cause living creatures to appear on the earth or not? ... And so it goes for every detail that Genesis 1–3 tells us about the earliest history of the earth and the human race. The most important issue at stake here is the truthfulness of the Bible as the Word of God.”<sup>19</sup>

In addition, we will now show that the Scripture which is used to support the idea that Paul believed in an ancient unscientific view of the world does not in fact support this claim. Contrary to this idea, his use of the creation account shows he believed that Genesis 1–3 was historically reliable.

### Paul and “ancient science”

There is a common belief among Theistic Evolutionists that the apostle Paul’s understanding of the formation of the material world was determined by what was believed in his own time and should not be taken as an authority for what we should believe now.

This view is illustrated by Enns, who says:

“As a first-century Jew, Paul, along with his contemporaries, assumed various ways of thinking about the world; these almost certainly include the issue of cosmic and human origins.”<sup>20</sup>

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This view is applied especially to what Paul says and writes about Adam and Eve, which we shall look at in much greater detail in the next chapters.

For now we will examine how one passage from Paul's writings is used by Lamoureux (and quoted by Enns<sup>21</sup>) in an attempt to show how God has accommodated "ancient science" more widely in Scripture. Lamoureux quotes the words of the apostle Paul about Jesus:

"Therefore God exalted him to the highest place and gave him the name that is above every name, that at the name of Jesus every knee should bow, in heaven and on earth and under the earth, and every tongue confess that Jesus is Lord." (Phil. 2:9–11)

According to Lamoureux, Paul's use of the Greek word *katachthonion*, translated in Philippians 2 as "under the earth", which means underground, shows that he believed in an ancient and inaccurate view of the world as shown in Fig 1.<sup>22</sup>

Lamoureux states:

"Therefore the more accurate translation of verse 10 is, 'at the name of Jesus every knee should bow, [1] in heaven and [2] on earth and [3] *in the underworld*'. In other words, *Paul is referring to the ancient understanding of the structure of the cosmos known as the '3-tier universe'.*"<sup>23</sup> (emphasis added)

In saying this he is seeking to confirm his view that throughout Scripture there is an erroneous belief in an ancient pagan, and non-scientific, cosmos. If he can do this, it will support his main objective, which is to show that the Genesis account of the creation of Adam is not historically reliable either.<sup>24</sup> We should therefore look carefully at whether his assertion about the Apostle Paul's belief about the cosmos is true or not.

In reality we find that his exposition of Philippians 2:10 is not supported by Scripture.<sup>25</sup> The word *katachthonion* is used only here in the NT and doesn't appear in the Septuagint, the Greek version of the OT. As a result we have no other points of reference in Scripture to help determine Paul's use of this word. However by his use of the quotation from Isaiah 45:23, "*before me every knee will bow*", with reference to Jesus, we can reasonably conclude that what is being described in Philippians 2.10 is the authority Jesus has been given since his resurrection. This understanding is supported by the context of the only other NT quotation from Isaiah 45:23:

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“For this very reason, Christ died and returned to life so that he might be the Lord of both the dead and the living. You, then, why do you judge your brother or sister? Or why do you treat them with contempt? For we will all stand before God’s judgement seat. It is written: ‘As surely as I live,’ says the Lord, ‘every knee will bow before me; every tongue will acknowledge God.’” (Rom. 14:9–11)

Here the quotation is used by Paul as evidence of the authority given to Jesus as Lord and judge of “both the dead and the living”. As the apostle Peter says:

“He [God] commanded us to preach to the people and to testify that he [Jesus] is the one whom God appointed as *judge of the living and the dead.*” (Acts 10:42)

And Paul confirms this:

“In the presence of God and of Christ Jesus, who will *judge the living and the dead*, and in view of his appearing and his kingdom ...” (2 Tim. 4:1)

Note that here the judging of “the dead” is future – “Christ Jesus, who *will judge*”. He has not yet judged those who are dead, since the judgement is related to “*his appearing and his kingdom*”, which necessitates their resurrection at his return.

We can conclude from these passages that Paul’s reference to the authority of Jesus over those “under the earth” is as Lord and judge of those in the grave awaiting resurrection. It has nothing to do with an ancient (and pagan) belief in the underworld. We can confidently say that Philippians 2:10 does *not* show that “Paul accepted a 3–tier universe”.<sup>26</sup> And Lamoureux’s conclusion that “God accommodated and allowed Paul to use his *ancient understanding* of the structure of the world”<sup>27</sup> (emphasis added) is similarly untrue. This passage does not support the ideas which this Theistic Evolutionist is encouraging us to accept.

Importantly Lamoureux builds upon his flawed argument to claim that Paul was similarly mistaken when he “accepted the historicity of Adam.”<sup>28</sup> We now know that there is no scriptural evidence to support the claim that Paul believed in an ‘ancient science’. It therefore follows that Lamoureux’s other conclusion, that Paul was mistaken in believing in a real Adam, has no foundation. It is an example of one false conclusion being built upon another. When defending the Gospel we frequently need to be aware of the details in false arguments.

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### What did Paul believe about Genesis 1–3?

The apostle Paul's foundational belief about all Scripture is as follows:

*“All Scripture is God–breathed and is useful for teaching, rebuking, correcting and training in righteousness, so that the man of God may be thoroughly equipped for every good work.”* (2 Tim. 3:16–17)

The Scripture that Paul is referring to is Israel's Scriptures, the OT (the NT had not been compiled). It was to these Scriptures that he consistently appealed in his preaching and teaching. He specifically referred to, or quoted directly from, Genesis 1–3 on many occasions as the authority for what he said and wrote about Christian doctrine and practice, as we see from the following.

In his appeal to the idolaters at Lystra he cites the creation of all things, as recorded in Genesis 1, by *“the living God”*, as opposed to the supposed authority of their *“worthless”* idols. He said:

*“Men, why are you doing this? We too are only men, human like you. We are bringing you good news [the gospel], telling you to turn from these worthless things to the living God, who made the heavens and the earth and the sea and everything in them.”* (Acts 14:15)

When he preached about the greatness of the *“unknown God”* to the intellectuals at Athens, he quoted God's creative acts recorded in Genesis 1 as evidence of his sovereignty:

*“The God who made the world and everything in it is the Lord of heaven and earth and does not live in temples built by human hands.”* (Acts 17:24)

While the examples above are evidence that Paul believed the world around us was made by God as described in Genesis 1, they do not contradict the theistic evolutionary view that evolution was the means by which God may have achieved this. However the following quotations do contradict this view.

As evidence of the unity of all peoples, he referred to the creation of Adam as the first human, recorded in Genesis 2:

*“From one man he made every nation of men, that they should inhabit the whole earth.”* (Acts 17:26)

In his teaching on the presence of sin in the world, he quotes the disobedience of Adam recorded in Genesis 3, as the *“one man”* who originated that sin:

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“... sin entered the world through *one man* ...” (Rom. 5:12)

He also attributes death to the sin of that “one man”, Adam, as recorded in Genesis 3:

“... *and death through sin*, and in this way death came to all people, because all sinned.” (Rom. 5:12)

“For since *death came through a man* ...” (1 Cor. 15:21)

His instructions about orderly worship in the ecclesias are supported by the authority of Genesis 1, which records the creation of Adam in the image of God:

“A man ought not to cover his head, since *he is the image and glory of God*.” (1 Cor. 11:7)

In addition, he bases his instructions about headship in the ecclesia on the reason for, and means of, God’s creation of Eve, as recorded in Genesis 2:

“For man did not come from woman, but *woman from man* [from his side]; neither was man created for woman, but *woman for man* [as a suitable helper].” (1 Cor. 11:8–9)

The order of the creation of Adam and Eve, as recorded in Genesis 2, is confirmed when he uses it as the authority for his instructions to Timothy about worship:

“I do not permit a woman to teach or to assume authority over a man; she must be quiet. *For Adam was formed first, then Eve*.” (1 Tim. 2:12–13)

Paul also uses the events recorded in Genesis 3 regarding the temptation of Eve by the serpent. He uses this record to illustrate his concern that the ecclesia at Corinth might be similarly tempted away from obedience to Christ:

“But I am afraid that just *as Eve was deceived by the serpent’s cunning*, your minds may somehow be led astray from your sincere and pure devotion to Christ.” (2 Cor. 11:3)

(Italic used for emphasis in all quotations.)

We will return to consider some of these quotations in more detail in the following chapters when we look at what Theistic Evolutionists say specifically about Adam and Eve. But for now we simply observe that it is impossible to read what Paul said and wrote based on Genesis 1–3 and not recognise that he regarded the Genesis record as historically

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factual. In the same way he regarded other events in the OT as factual history, for example Israel's crossing of the Red Sea, referred to in 1 Corinthians 10:1, and the account of Sarah and Hagar, referred to in Galatians 4:21–31. Without that historical truth there is no authoritative basis for his theological conclusions and moral instructions.

It is also very important to remember that the apostle Peter said that the writings of Paul had the same authority of inspiration as “the other Scriptures.”

He wrote:

“His [Paul's] letters contain some things that are hard to understand, which ignorant and unstable people distort, as they do *the other Scriptures*, to their own destruction.” (2 Pet. 3:15–16)

By “*the other Scriptures*” he meant Israel's OT Scriptures that Paul quoted from so extensively, as we have shown, and which Peter says were given to men through the Holy Spirit:

“For prophecy never had its origin in the will of man, but men spoke from God as they were carried along by the Holy Spirit.” (2 Pet. 1:20–21)

Unlike Israel's Scriptures, the pagan ANE literature was not given by inspiration from God, and it cannot teach us the gospel of salvation or train us in righteousness in the way that Paul says Israel's Scriptures can.

The way in which Theistic Evolutionists understand Scripture removes from Paul the historical authority on which his teaching is based. This is not just significant for his immediate audience, but also for us who, through our obedience to the same OT Scriptures, are endeavouring to “*be thoroughly equipped for every good work.*” (2 Tim. 3:17) Any Christian contemplating accepting a theistic evolutionary view of the Genesis account should be aware of how these ideas are based on a view of the Bible that is not consistent with the truth as it is in Jesus.

### **Jesus and the historical reliability of Scripture**

In addition to what is claimed about Paul's understanding of the physical world, it is also said that when Jesus quoted Genesis 1 and 2 in answering a question about divorce (Matt. 19:3–9), he was using ‘ancient science’. Lamoureux says that Jesus “was accommodating to the Jewish belief of the day that Adam was a real person”,<sup>29</sup> in order to “deliver inerrant spiritual truths.”<sup>30</sup>

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However Jesus is the Son of God, of whom we are told:

“... the one whom God has sent *speaks the words of God*, for God gives the Spirit without limit.” (John 3:34)

As one who spoke the words of God, Jesus had the authority to answer the question about divorce without direct reference to the authority of Scripture. He had already used this authority several times in the Sermon on the Mount when he said: “You have heard it said (followed by a quote from the Law of Moses), *but I say to you ...*”

However, in Matthew 19:4–5, when Jesus answered the question posed by the Pharisees, he began with the question, “*Haven't you read?*”:

“‘Haven't you read,’ he replied, ‘that at the beginning the Creator “made them male and female”, and said, “For this reason a man will leave his father and mother and be united to his wife, and the two will become one flesh”?’”

The answer Jesus gives is not based on his own authority but on the authority of the creation account in Genesis 1 and 2. His quotation of the words, “*For this reason ... and the two will become one flesh*”, taken from Genesis 2:24, explicitly links his answer to the account of the creation of Eve from the rib of Adam. Jesus is affirming both the creation by God of a single pair, as recorded in Genesis 1, and specifically the separate creation of Eve from Adam as described in Genesis 2. However, many Theistic Evolutionists deny the creation of an original single pair.

There are no instances in Jesus' quotations from the OT where it can be shown that he didn't believe it was true. Put another way, if Jesus was quoting from Genesis 1 and 2 only to “accommodate” an incorrect Jewish belief, what other teaching of Jesus, based on the OT, was also accommodating the beliefs of his day which are now known not to be true?

Jesus quoted many other OT events and characters to support his teachings. Here are some examples:

- 1) That the murders of Abel (Gen. 4:8) and Zechariah (2 Chron. 24:21) illustrated the blood guilt of the Jews of his day, which would result in their punishment (Matt. 23:35).
- 2) That the attitude of people in the days before the flood and Noah going into the ark (Gen. 7:9) are a parallel for events prior to his Second Coming (Matt. 24:38).

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- 3) That his opponents would see Abraham, Isaac and Jacob in the Kingdom of God, but themselves excluded (Matt. 13:28).
- 4) That the attitude of people in the time of Lot, before the destruction of Sodom (Gen. 19:23), is a parallel for events prior to his Second Coming (Luke 17:29).
- 5) That the message to Moses at the burning bush (Ex. 3:6) is evidence for the reality of the resurrection (Luke 20:37).
- 6) That Israel ate manna in the wilderness (Ex. 16:15) but died; however he is the true “bread from heaven” that gives eternal life (John 6:49).
- 7) That Moses raising a bronze serpent on a pole to save the Israelites from death (Num. 21:9) was a type of his crucifixion (John 3:14).
- 8) That David eating the shewbread from the tabernacle, which was against the Law of Moses (1 Sam. 21:6), showed that breaking the Law of Moses was not always a black and white issue as his opponents claimed (Matt. 12:3).
- 9) That the visit of the Queen of Sheba to listen to Solomon’s wisdom (1 Kings 10:1–13) condemned those who wouldn’t listen to Jesus, as he was greater than Solomon (Luke 11:31).
- 10) That Elijah being sent to save a Gentile widow from starvation (1 Kings 17:9), and Elisha healing Naaman, a Gentile, of his leprosy, showed that God had revealed Himself to Gentiles in the past as a result of Israel’s unbelief (Luke 4:25–27).
- 11) That Jonah being inside a fish for three days and nights (Jonah 1:17) was a sign of the period he, Jesus, would spend in the tomb (Matt. 12:40).
- 12) That the preaching of Jonah to the people of Nineveh, and their subsequent repentance (Jonah 3:1–5), condemned those who wouldn’t listen to Jesus because he was greater than Jonah (Matt. 12:39–41).

Which of these people and events did Jesus regard as historically reliable, and which were an accommodation of erroneous Jewish beliefs? If, however, these were all historically reliable, then logically Jesus’ reference to the creation of Adam and Eve should be treated in the same way.

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If, as Theistic Evolutionists say, Genesis 1–3 is not historically reliable, at what point do the OT Scriptures change from being an account that isn't historically reliable to one that is? We believe that the evidence supports our belief that Genesis 1–3 is as historically reliable as the rest of the OT.<sup>31</sup>

### **Conclusion**

We have shown how a belief that the writer of Genesis used 'ancient science' to describe the creation of the world, similar to the writings of other ANE peoples, is not supported by the evidence. This is true in respect of the description of the heavens recorded by Moses in Genesis 1, and the writings of the apostle Paul, separated by some 1500 years. Theistic Evolutionists claim that God allowed biblical authors to write descriptions of the world as they understood it but these are now known to be incorrect. We have shown that this claim is inconsistent with the teaching of Scripture.

It is very clear that both Jesus and Paul believed that Genesis 1–3 describes reliable history. Theistic Evolutionists however do not, because this does not conform to their belief that evolution is the correct and reliable history of the current world. Theistic Evolutionists who argue that we should base our understanding of Genesis on the culture and writings of the Ancient Near East do so because they have already accepted the evolutionary narrative. They are therefore driven to seek an alternative interpretation of the Genesis account.<sup>32</sup> In doing so they contradict both the Master they claim to serve and the one appointed by Jesus to carry the gospel to Jews and Gentiles (Acts 26:17,18).

Before we move on to the next chapter it is important to reinforce the fact that the claims we have challenged here are more fundamental to faith than might at first appear. Arguments about the meaning of words, pagan mythology, solid skies and ancient texts may seem far removed from the gospel of salvation. In reality, however, what is at stake is the truthfulness or otherwise of Scripture. If there is no Adam then there is no Eve, no physical garden and no disobedience. If there is no disobedience then death is not a punishment for that disobedience, and there is no doctrine of atonement initiated after the fall and perfected in the sacrifice of Christ, and so on.

Of course, Theistic Evolutionists vigorously dispute this analysis and argue that what one believes about Genesis 1–3 is not a salvation issue.<sup>33</sup> We strongly disagree, as do others who also hold to the inerrancy of Scripture. In our concluding chapter we will address the importance for salvation of rejecting theistic evolution.

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Finally, readers are directed to a fuller analysis of the issues addressed in this chapter, provided by Allfree and Davies in *The Deception of Theistic Evolution* chapters 3–5, and by John D Currid in *Theistic Evolution*, chapter 26.

### Notes and references

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- 6 Lamoureux, D., *Four Views on The Historical Adam*, Edited by Barrett, M., Caneday, A.B, Gundry, S.N., Zondervan, Grand Rapids, Michigan, 2013, p. 50.
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- 8 Lamoureux's argument that God did not want to confuse ancient Israelites with the truth about 'origins' is a common one, e.g. "If God had chosen to give a scientific, rather than a theological, account of his creation, then no one would have understood it anyway." Alexander, D., *Creation or Evolution: Do We Have to Choose?* Monarch Books, 2nd Ed, 2014, p.174. Heavyside disputes this reasoning. "This is demonstrably false because it is clear that Epicurean philosophers in the period 300 BCE to 200 CE taught a form of evolution without modern scientific language. Such a teaching is seen in the Epicurean view that uncreated matter organised itself according to strict causal laws. With this in mind it is evident that God could likewise have described in a non-scientific manner the creation of Genesis 1–2 and man's origins as having taken place through evolutionary processes, if these processes were factually what happened." Heavyside P., *Genesis 1–2 A Harmonised and Historical Reading*, Ascent Publications, 2018, p. 138.
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- 16 *The Deception of Theistic Evolution* p.39
- 17 *Ibid*. p. 57.
- 18 This is denied by Lamoureux who says, "Did God lie in the Bible? Again my answer is 'No! The Lord accommodated in the Bible." He tries to support his idea of "accommodation" by quoting the use Jesus made of parables by which he "accommodated" to "deliver inerrant heavenly messages" (*Four Views on The Historical Adam*, p. 54). In saying this he is ignoring the reason Jesus gives for using parables (Matt. 13.10–15). Parables were not an "accommodation" to enable a simple understanding of "heavenly messages", but were to obscure the message from all but the most diligent disciple.
- 19 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 825.

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- 20 *The Evolution of Adam*, p. 80.
- 21 *Ibid*, p. 93.
- 22 *Four Views on the Historical Adam*, p. 49.
- 23 *Ibid*, p. 48.
- 24 *Ibid*, p. 50.
- 25 Many biblical commentaries on Philippians 2.10 interpret the phrase "under the earth" as referring to a place for spirits or demons. It might be thought that the reference in 1 Peter 3.19 to preaching to "spirits in prison" supports this, or Lamoureux's idea of a nether realm beneath the earth. For an exposition of 1 Peter 3.18–20 see Abel, R., Allfree, J., *Wrested Scriptures*, Revised 2011, The Christadelphian Magazine & Publishing Association Ltd, p. 185,.
- 26 *Four Views on the Historical Adam*, p. 61.
- 27 *Ibid*, p. 50.
- 28 *Ibid*, p. 61.
- 29 *Ibid*, p. 60.
- 30 *Ibid*, p. 61.
- 31 *Genesis 1–4*, p. 251–255.
- 32 *Four Views on the Historical Adam*, p. 64.
- 33 *Theistic Evolution*, p. 823.

# CHAPTER 6: A THEISTIC EVOLUTIONARY UNDERSTANDING OF THE CREATION OF ADAM AND EVE

## Summary

In this chapter we focus on the core views about Adam and Eve expressed by John H. Walton, who, unlike some Theistic Evolutionists, does believe they were real people. However he does not believe that the account of their creation in Genesis 2 should be taken as historically reliable, or that they were the first biological humans. He believes that the account of the creation of Adam from dust is a metaphor for the mortality of all life, before and since Adam. He also believes that the account of Eve's creation from Adam's rib is only visionary, to show to Adam her importance in his life.

Walton's acceptance of biological evolution means that he does not believe that death came into the world as the consequence of Adam's sin, or that sinful behaviours originated with Adam and Eve. He believes that the consequence of Adam's sin was not death but expulsion from the Garden of Eden to prevent access to the tree of life, which until then had kept their natural mortality at bay. However there is no evidence that Adam and Eve ate from the tree of life while in the garden to sustain their mortal lives. We show that 'dust' in Scripture is not simply a metaphor, but was the material from which Adam was created. Other Scriptures confirm this and the uniqueness of the creation of Adam and Eve as recorded in Genesis. This unified message is an important feature of Scripture, as we will demonstrate in the next chapter.

\* \* \* \* \*

When writing about Genesis, Walton adopts a similar position to the other writers we have considered in saying that it must be read in its ancient cultural context<sup>1</sup>. However, unlike the stance taken by Lamoureux, who says that there is "no Adam", or Enns who says that "Adam is a metaphor for Israel", Walton believes that "Adam and Eve

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are historical figures – real people in a real time”. But he qualifies that belief by saying:

“I contend that the formation accounts [i.e. the ‘forming’ of Adam and Eve described in Genesis 2] are not addressing their material formation as biological specimens, but are addressing the forming of all humanity ... If this is true, Genesis 2 is not making claims about biological origins of humanity, and therefore the Bible should not be viewed as offering competing claims against science about human origins.”<sup>2</sup>

By this he means that the Genesis account is not telling us about the unique physical and material creation of the first man Adam from dust, or the making of the first woman Eve from Adam’s rib. He believes that Genesis 2 is concerned with describing the formation of all humanity, using Adam and Eve as “representative” figures. He says:

“The core proposal of this book [*The Lost World of Adam and Eve*] is that the forming accounts of Adam and Eve should be understood archetypically rather than as accounts of how those two individuals were uniquely formed.”<sup>3</sup>

Walton defines what he means by archetype:

“I am referring to the simple concept that an archetype embodies all others in the group. An archetype in the Bible can well be an individual and usually is.”<sup>4</sup>

We agree that types are very important in Scripture. However for Walton, the concept that Adam and Eve are a special or primary type has very important consequences for his understanding of the creation of Adam and Eve, as recorded in Genesis 1–3.

### The first humans

While Walton is very clear that he believes Adam and Eve were real people, he doesn’t think this requires them to be the first people, or the biological/genetic ancestors of all humans.<sup>5</sup> He believes that the creation accounts in Genesis 1 and 2 are describing different events, possibly separated by a long period of time. He says:

“If this is so, the second account [Genesis 2] is not detailing the sixth day, but identifying a sequel scenario, recounting events that potentially and arguably could have occurred long after the first account [Genesis 1]. In such a case, Adam and Eve would not necessarily be envisioned as the first humans beings, but would be elect individuals drawn out of the human population...”<sup>6</sup>

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However, Walton's view, that Genesis 1 and 2 are not overlapping and complementary accounts of the creation of Adam and Eve, is contradicted by the way Jesus and Paul refer to the two chapters. As we highlighted in the previous chapter, Jesus combined both Genesis 1:27 and Genesis 2:24 in his reply to the question about divorce in Matthew 19:3–6, which indicates, by the way, that he [Jesus] read Genesis 1 and 2 as complementary texts.<sup>7</sup> Jesus is also affirming the historical reliability of Genesis 1 and 2 and thus affirms "Adam and Eve as the first humans beings on earth, not (as theistic evolution would have it) as two among thousands of other human beings on earth."<sup>8</sup>

Likewise in 1 Corinthians 15:45, Paul cites Genesis 2:7: "The first man Adam became a *living being*". Then in verse 49 Paul refers to Genesis 1:26–27 in the words: "Just as we have borne the *likeness* [Gk *eikon*, image] of the earthly man..." Throughout verses 45–49 Paul links "the *first man* Adam", with "*living being*" and "*of the dust*" from Genesis 2:7, and "*image*" from Genesis 1:26–27, making it clear that he understood Genesis 1–2 to be about the same creation at the same time.

Paul told the Athenians on Mars Hill that: "From one ['man'] is implied in the Gk] he made every nation of men." (Acts 17:26)<sup>9,10</sup> This is only true if Adam was a unique and special creation, which Walton denies because, based on genetic studies, he believes Adam and Eve were part of a much larger population.<sup>11</sup>

### The creation of Adam

Walton questions the account of Adam's creation from actual dust as recorded in Genesis 2:7:

"The LORD GOD formed the man from the dust of the ground and breathed into his nostrils the breath of life, and man became a living being."

He states "we can reasonably deduce from the passage itself that dust carries an archetypal rather than a material significance. ... *Dust refers to mortality*, and everyone is formed from the dust."<sup>12</sup>

He says that this meaning of 'dust' in Genesis is substantiated by the wording of Psalm 103:14, which uses the same vocabulary as Genesis 2:7, showing that we are *all* made of dust, that is to say, we are all mortal.<sup>13</sup> The Psalmist says:

"As a father has compassion on his children, so the Lord has compassion on those who fear him; for he knows how we are *formed*, he remembers that we are *dust*. As for man, his days are like grass, he flourishes like a flower of the field; the wind blows

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over it and it is gone, and its place remembers it no more.” (Ps. 103:13–16)

However it is clear from the translations of the Hebrew for ‘dust’, (i.e. dry earth, dust, powder, ashes, earth, ground, mortar, rubbish) that Adam was “formed” directly by God from the material dust of the ground.<sup>14</sup> This understanding of the word ‘dust’ in Genesis 2:7 is confirmed by what we read about the resurrection: “Multitudes who sleep in the *dust* (same Hebrew) of the earth will awake.” (Dan. 12:2) We have no reason to interpret ‘dust’ in this passage as a metaphor for their ‘mortality’, but rather it is the material into which those who have died decompose, which is a scientific fact. God had said: “until you return to the ground, since from it you were taken; for dust you are and to dust you will return.” (Gen. 3:19; cf. Ps. 90:3)

Regarding Walton’s understanding of Psalm 103, the Psalms are poetic literature and are therefore very different from the writing of Genesis.<sup>15</sup> The reference in the Psalm to forming from dust is in the context of the love and compassion of the LORD (vv. 4, 8, 11, 13, 17) with regard to our sins (vv. 3, 10, 12). While it may be referring to the forming, sin and punishment of Adam in Genesis 2–3, it is not a historical commentary on those events. The psalmist is highlighting the frailty of human existence in the words: “As for man, his days are like grass.” We are made of dust and we die, as the psalmist says: “the wind blows over it and it is gone.”

The Psalm is not a historical account any more than Psalm 104 is a historical account of creation, or Psalms 105 and 106 are historical accounts of the Exodus and wilderness journey. These Psalms are poetry. Although they are based on actual historical events, they do not present all the historical details or present them in strict chronological order, and significantly they do not contain additional historical material. They are not written as history but as poetic reflections on what that history teaches.

Walton’s interpretation of ‘dust’ in Genesis 2:7 as a metaphor for mortality makes the LORD God ‘forming’ Adam into a dying creature, even before he had “breathed into his nostrils the breath of life, and man became a living being.” Genesis 3:19 confirms the creation of Adam directly from the earth in the words: “until you return to the ground, *since from it you were taken*”, and: “The LORD God banished him from the Garden of Eden to work the ground *from which he had been taken*.” (Gen. 3:23)

Walton seeks to find an alternative understanding of the forming of Adam from the “dust of the earth” in order to accommodate the

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possibility that Adam was not a unique and special creation.<sup>16</sup> He believes that “mortality was the natural human condition” in the garden.<sup>17</sup>

If mortality/death was Adam’s natural state by the process of biological evolution, then the warning not to eat of the tree, “or you will surely die” (2:17), is a meaningless consequence because he was already subject to death. This line of reasoning makes God ‘responsible’ for mortality through evolution, rather than the consequence of Adam’s sin as stated in Romans 5:12. But God holds Adam responsible for the consequences of his (and Eve’s) disobedience when he says:

*“Because you listened to your wife and ate from the tree about which I commanded you, ‘You must not eat of it,’*

*Cursed is the ground because of you; through painful toil you will eat food from it all the days of your life.*

*It will produce thorns and thistles for you, and you will eat the plants of the field.*

*By the sweat of your brow you will eat your food until you return to the ground, since from it you were taken; for dust you are and to dust you will return.”* (Gen. 3:17–19)

Walton sees further evidence that Adam and Eve were mortal in the provision of a ‘tree of life’.<sup>18</sup> He says that when they were excluded from the garden “they lost access to the antidote” and became “subject to their natural mortality.”<sup>19</sup> However, God said that death (mortality) would be the consequence of eating from the tree of “the knowledge of good and evil.”<sup>20</sup> (Gen. 2:16–17) He did not say that mortality would be the consequence of *not eating*, or being unable to eat, from the tree of life.<sup>21,22</sup>

Reviewing the scriptural evidence about the creation of Adam we can say with confidence that ‘dust’ is not a metaphor for Adam’s natural mortality, and the tree of life was not the antidote required to stay alive in the garden. Contrary to the idea that Adam and Eve were naturally mortal, we believe that Adam and Eve were in a state of probation<sup>23</sup> in the garden. We believe that they were given free will with the potential for either obedience and the continuity of life, or disobedience and the punishment of mortality.<sup>24</sup> Given their disobedience, and how that is then understood in the NT Scriptures we have considered, we believe this is the most reasonable explanation for their status in the garden.

We will further examine Walton’s understanding of death later in this chapter.

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### The creation of Eve

Having decided that although Adam was a real person, the account of his creation from ‘dust’ is not historical, Walton also argues that the formation of Eve as written in Genesis 2 should not be taken as historical reality either. Because the Hebrew translated ‘rib’ can refer to the side of something (e.g. side rooms of the temple construction) he states:

“The result of this analysis suggests that God takes one of the two sides of the archetypical man to build an archetypical woman. ... God puts the archetypical man into *a deep sleep so he can show him in a vision something important* about the nature and identity of the woman to whom he is about to introduce him.”<sup>25</sup> (emphasis added)

However there is no evidence in Scripture that Adam had a visionary experience of being cut in half to show how Eve is related to him. Visions and dreams are clearly identified as such in Genesis 15:1; 20:3; 28:12; 37:5,6; 37:9; 41:1, and elsewhere in Scripture.<sup>26</sup> There is no reason to accept Walton’s theistic evolutionary alternative version of the creation of Eve.

Walton says that the NT references to Eve in 2 Corinthians 11:3 and 1 Timothy 2:13 are also describing someone who is a representative. He says that Paul is writing about Eve as an archetype, and is not confirming the historical reality of Genesis and therefore not affirming material biological human origins through Eve as the “mother of all living.” As we have already stated in Chapter 5, we believe the evidence in Scripture shows that Paul regarded the Genesis account as historical truth and not just an allegory or some other literary device.

In addition, in this theistic evolutionary understanding of Genesis 2–3, Eve would not “become the mother of all living” because there were other humans around at the time from whom Adam himself could have been born. Walton states:

“The conclusion of this line of reasoning is that *being formed from dust does not refer to the material origins* of any of us, nor does the fact that we are formed from dust preclude that we were born of a woman by a natural process. Following that line of reasoning back, we could also suggest that *Adam being formed from dust does not preclude him being born of a woman.*”<sup>27</sup> (emphasis added)

However, this view *is* precluded by the following quotation from Paul about head–coverings in the ecclesia:

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“A man ought not to cover his head, since he is the image and glory of God; but woman is the glory of man. For *man did not come from woman, but woman from man*; neither was man created for woman, but woman for man.” (1 Cor. 11:7–9)

In 1 Corinthians 11 Paul bases his instructions on the words, “So God created man in his own image, in the image of God he created him.” (Gen. 1:27)<sup>28,29</sup>

Although in neither of the passages quoted does Paul say how or from what Adam and Eve were separately created, his confirmation of the order of creation supports our belief that he accepted the details given in Genesis 2 as historically reliable events.

### Walton’s view of sin and death

If Adam was not physically formed by God from the dust of the ground, but the account is a metaphor to describe the mortality of humans that already existed, then death did not come into the world as a result of Adam’s sin.

In accepting a biological evolutionary process for human origins, all those believing in theistic evolution have to acknowledge that human behaviours, which the Bible describes as “sinful”, were present in evolutionary history.<sup>30,31</sup> In order to reconcile the conflict between this view and the Bible’s explanation for the entry of sin into the world through “one man” (Rom. 5:12) Walton says:

“Although engaging in activities that we would label sinful, they [those before Adam] were not held accountable ... in a state of original innocence ... Accountability would not come until the fruit of the tree of knowledge of good and evil was eaten.”<sup>32</sup>

To support this argument he quotes Romans 5:13: “sin is not taken into account when there is no law.” The implication of this is that those sinful behaviours, which might be part of the process of ‘natural selection’, were not deemed sinful until there was a law that declared them to be so. He says “people outside the garden were still dying and *were not yet accountable*.”<sup>33</sup> (emphasis added) He believes that accountability did not arrive until the individuals whom the Bible calls Adam and Eve were chosen to carry out a priestly role in the garden.

He states that through Adam and Eve there was:

“... an opportunity for greater order to be established, but that opportunity was forfeited when they sinned ... In that choice, they brought disorder into the world, *gained accountability for*

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*themselves and all humans through them* (beginning of sin), and lost the hope of life for themselves and all humanity.”<sup>34</sup> (emphasis added)

This is an example of how easy it is to be persuaded by an argument when Scripture is used to support it, even when the reasoning behind the quotation of Scripture is erroneous. Walton’s argument that sin wasn’t actually sin until there was a law to define it as such is based on a quotation taken out of context. In Romans 5:13 Paul is not referring to the ‘law’ in the garden, or to law as a concept, but specifically to the Law of Moses. This is clear from the earlier part of Romans 5:13: “... *before the law was given* [by God to Moses] *sin was in the world.*” To which Paul adds: “Nevertheless death reigned from the time of Adam to the time of Moses, even over those who did not sin by breaking a command, as Adam did.” (Rom. 5:14)

Having said in verse 12 that “sin entered the world through one man, and *death through sin*”, Paul is now saying that death, resulting from Adam’s sin, was in the world from that point on until Moses received the Law, even for those who had not broken a specific law or command as Adam did. Paul is making it clear that sin, which “*entered the world through one man*”, is more than *just* people breaking specific commands or laws; it is more than *just* behaviours that would be defined as sinful under a law.<sup>35</sup>

In Romans, Paul is concerned to describe not so much the behaviour of men and women since Adam, but their nature, their predisposition or the propensity towards sin, what he calls “the sinful nature” (NIV), or “the flesh” (KJV), or “the law of sin at work within my members.” (Rom. 7:23) Paul uses language like “sin *reigning*”, “*slaves to sin*” and “*set free from sin*”, to illustrate the mastery of sin in the minds of all people as a consequence of what Adam did. It is this Sin power that “entered the world through one man”, and that causes death irrespective of actual sins. It is for this reason that Christ, as descended from Adam (Luke 3:23–38), had to die (1 Cor. 15:22), although he had not broken any command as Adam did (1 Pet. 2:22).

The theistic evolutionary belief that, without contradicting Scripture, death existed before Adam because there was nothing until Adam to define sin, does contradict Paul who says: “sin entered the world through one man, and *death through sin.*” (Rom. 5:12) In addition, Rom. 5:13 does not support Walton’s argument that sinful behaviours in supposed evolutionary populations before Adam would not have been regarded as sin until God commanded Adam not to eat from the tree of the knowledge of good and evil.

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According to Walton, the consequence of Adam and Eve's disobedience/sin was not the punishment of death as stated by God (Gen. 2:17), but expulsion from the garden so they could not access the tree of life. However this makes the consequence of disobedience to be the removal of a privilege rather than any change in Adam's constitution by the sentence of death. In addition, the sentence was pronounced (Gen. 2:19) before Adam was banished from the garden, to prevent his access to the tree of life (v. 23). The 'removal of privilege' idea destroys the important biblical connection between sin and death, and the nature of man after the fall, a connection which is vital for a proper understanding of the nature of Christ and the atonement.<sup>36</sup>

More specifically Romans 5:12 states that death came "through sin", and sin "through one man." 1 Corinthians 15:21 also states: "death came through a man, ... For as in Adam all die... ." Neither of these Scriptures is true if mortality/dying was already present as "the natural human condition."

In addition, 1 Corinthians 15:25–27 describes the rule of Christ in the kingdom of God until God has put "everything/his enemies" under Christ's feet, the last enemy being death. If death is a necessary aspect of God's creative processes through evolution, then describing that aspect as an "enemy" to be destroyed through the reign of his Son, makes God the destroyer of a very significant part of his own processes.

Similarly 1 Corinthians 15:54–56 states that when immortality is given: "The saying that is written will come true: 'Death has been *swallowed up in victory*' ... Thanks be to God! He gives us *the* victory through our Lord Jesus Christ." Also 2 Corinthians 5:4–5 states: "For while we are in this tent, we groan and are burdened, because we do not wish to be unclothed but to be clothed instead with our heavenly dwelling, so that *what is mortal may be swallowed up by life*." If Theistic Evolutionists are correct that death existed before Adam's sin, then God grants victory over something of his own making and which was an integral part of his evolutionary plan!

### Conclusion

Walton's overarching view of what Genesis says about Adam and Eve is this:

"If Genesis does not make the claim that Adam and Eve are the first and only people and does not give an account of material human origins, then *there is no biblical claim concerning the genetic role of*

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*Adam and Eve or of material human origins.* If the Bible makes no such claims then the Bible will not stand opposed to any views science might offer (e.g. evolutionary models or population genetics), as long as God is not eliminated from the picture.”<sup>37</sup> (author’s examples; emphasis added)

Note carefully how he frames his conclusion: “*If Genesis* does not make the claim that Adam and Eve are the first and only people ... then *there is no biblical claim concerning the genetic role of Adam and Eve.*” However, irrespective of whether Genesis specifically claims that Adam and Eve were the first and only people, the rest of Scripture is very clear about this. There are many aspects of Scripture, historical accounts and statements about doctrine and practice, that are only fully understood by reference to parallel accounts or statements made in another context. Genesis 1–3 is not the only point of reference given to us to help us understand that the description of the creation of Adam and Eve is reliable history.

As Perry says:

“Of the stories we find in the Bible, we can ask whether the creation story is parable, say, or historical. ... When deciding this issue, we cannot ignore the wider context of the creation story and its use in Israelite and Christian theology. ... Accordingly, if we restrict our attention to the first few chapters of Genesis, we may see no identifying characteristics that identify the story as historical narrative. ... However the subsequent use made of the story is in historical comment, and this is one pointer to the status of the story. It lies within the historical frame of reference of Israelite and Christian theology. Early figures such as Lamech, Noah and Abraham, and later individuals such as David and Isaiah, all use Genesis in a factual manner.”<sup>38</sup>

The common feature, in the writings about Genesis 1–3 by Theistic Evolutionists, is that they focus on interpreting aspects of these chapters in the light of what ‘science’ has to say about origins. Having arrived at an interpretation that does not violate the ‘science’, they then fit references to the Genesis account which occur elsewhere in Scripture into that interpretative framework.

While accepting the fallibility of all human endeavour in the interpretation of Scripture, we believe that a much sounder approach to understanding God’s revelation is achieved by considering his Word as a whole. In Chapter 7 we will address the importance of reading Scripture as a unified revelation, and not simply considering the evidence provided by only one part.

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The falsity of Walton's ideas is summed up by Guy Waters, Professor of New Testament, in this way, "In the interest of reconciling Scripture with evolutionary theory, Walton's proposal stands against the teaching of Scripture in matters that are central to that teaching, namely, sin and redemption."<sup>39</sup>

In the next Chapter we shall consider the views of a Theistic Evolutionist who starts from the belief that Genesis is an allegory of Israel's history, and seeks to show that Paul is reinterpreting Genesis to explain the coming of Jesus. However, as we shall see, his ideas also conflict significantly with fundamental Bible teaching.

### Notes and references

- 1 Walton, J.H., *The Lost World of Adam and Eve – Genesis 2–3 and the Human Origins Debate*, InterVarsity Press, Downers Grove, Illinois, 2015, p. 15.
- 2 Walton, J.H., *Four Views on The Historical Adam*, Edited by Barrett, M., Caneday, A.B., Gundry, S.N., Zondervan, Grand Rapids, Michigan, 2013, p. 89.
- 3 *The Lost World of Adam and Eve*, p. 74.
- 4 Ibid.
- 5 *Four Views on The Historical Adam*, p. 115.
- 6 Ibid, p. 109.
- 7 Collins, C.J., *Did Adam and Eve really exist? Who they were and why it matters*, InterVarsity Press, Nottingham, England, 2011, p. 76.
- 8 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 797.
- 9 Commenting on Paul's "From one man" (ἕξ ἑνός, *ex honos*, "Out of one [man]") in Acts 17:26, Walton says "it is quite plausible that this verse could be a reference to Noah" as the 'one' that all nations come from (Genesis 10) *Four Views on The Historical Adam*, p. 105. However this view ignores Paul's use of the same Greek *honos*, 'one' with reference to Adam in Romans 5:15, 16, 17x2 and with reference to Christ in vv 17, 19b. In these verses there is no specific word in the text for 'man' but it is implied and so added for clarity in the NIV and many other versions (cf "but 'and to your seed' meaning one (*honos*) [person], who is Christ" (Gal. 3:16). Noah is never referred to in this way. Similarly Denis Alexander also misses Paul's use of the same Greek word in Romans 5. When writing about what Paul says in Acts 17:26 he states, "However the NIV has added the word 'man', which is in none of the original Greek manuscripts, ... so Paul here is most likely highlighting the more general point of *the common humanity* of his hearers, a major theme in this particular sermon" *Creation or Evolution*. p. 234. This is the view stated on the internet blog Christadelphian Origins Discussion, "Paul isn't talking about origins specifically but rather commonality before God ... Paul is just as likely saying that God made all humans alike."  
<https://christadelphiansoriginsdiscussion.wordpress.com/2017/06/15/paul-in-acts-17-say-god-made-all-men-of-one>. This ignores the point that with or without the implied word 'man' in the Greek text, Paul is still saying all nations come from 'one', not 'many'. Paul is confirming Adam as the first man from whom all are descended.
- 10 The Christadelphian Origins Discussion blog website presents an alternative view to Adam being the "one man" Paul means in Acts 17:26. It states, "If there is any Old Testament passage in the back of Paul's mind it is Deuteronomy 32:8 – not Genesis 1–3. Consistent with the collective context of Paul's words, Deuteronomy 32 describes God setting the allotted regions of the nations. Luke's text shows clear connection to the Greek of the LXX in this passage, which speaks against Adam as being contextual at all. Even without this clear textual link the passage doesn't support an assertion of common

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descent from Adam. Paul doesn't introduce Adam. This would be incomprehensible to the Athenians and break Paul's pattern of building from common ground to the gospel. Jewish and Christian readers might read in Adam, but it is not explicit. Contextually the passage is about Greek thought not Adam and Paul is quoting Deut 32, not Genesis." <https://christadelphiansoriginsdiscussion.wordpress.com/2019/09/24/acts-1726-inserting-adam-is-incorrect/#more-2865>. Even if Luke is making a connection with the LXX in this passage the reference would still be to descent from Adam since Deut 32:8 (LXX) states, "When the Most High gave the nations their inheritance, when he divided [dispersed] the sons of Adam (διέσπειρεν υἱοὺς Ἀδᾶμ)." Contra to the conclusions above, Bruce commenting on Acts 17:26 states, "The unity of the human race as descended from Adam is fundamental to Paul's theology." Bruce, F.F, *Acts: Greek Text with Introduction and Commentary*, Tyndale Press, London, 1970, p. 337. In contrast to the interpretation above it is equally valid to view Moses (like Paul) as basing the start of his address in Deuteronomy 32 on the creation record with his references to 'heavens' and 'earth' (v1), 'tender plants' (v2), 'acting corruptly' (v5), 'shame' (v5) and 'made (sw Gen. 2:4) you' (v6).

11 *The Lost World of Adam and Eve*, p. 183.

12 *Four Views on The Historical Adam*, p. 93.

13 *Ibid.*

14 Walton also argues that the Hebrew verb translated "formed" in Genesis 2:7 should not automatically be assumed to refer to a material process because other occurrences of the word are related to "forming" things that are not material. But C John Collins says, "Walton's treatment of the verb in Genesis 2:7 lacks appropriate lexical rigour." Collins goes on to state that the structure of the Hebrew in Genesis 2:7 confirms the grammatical link between what is made (the man) and the material used (dust of the ground), so making it clear that in this context the "forming" is a material process. *Four Views on The Historical Adam*, p. 129.

15 *Theistic Evolution*, p. 800.

16 *The Lost World of Adam and Eve*, p. 197.

17 *Four Views on The Historical Adam*, p. 93, 93n5.

18 *The Lost World of Adam and Eve*, p. 73.

19 *Ibid.*, p.74

20 Throughout this book we take mortality to be the same as being subject to death. However Theistic Evolutionists often argue that death and mortality are different. Christadelphian Jonathan Burke has stated that because 'death' and 'mortality' are two different Greek words when Paul wrote that death came by sin (Rom. 5:12) he was not teaching that mortality came as a result of sin, only death. (J Burke, in response to *The Lampstand* magazine article entitled 'Evolution and the Statement of Faith', May-June 2013). Also Christadelphian Ken Gilmore states, "The first point is that death, not mortality is the consequence of Adam's sin. I do not die because I sin. I die because I am made of corruptible material. I remain dead as a punishment for sin if I choose to reject the offer of salvation, and that is the point Paul is making here – death as a punishment for sin was introduced into the world when the first sin was committed. Prior to Adam's sin, humans lived and died as the 'beasts that perish' but as God's law was unknown, sin as a concept did not exist and therefore death as a punishment for sin simply did not apply." (Ken Gilmore, *Mortality v Eternal Death + Romans 5*). However the Greek words for death and mortality (*thanatos*, and *thnētos*, respectively) have the same root *thnēskō*, "to die" and Paul uses them synonymously in 1 Cor. 15:54 where the word translated 'death' is the same as in Rom. 5.12, 14, 17, 21. Paul makes no distinction with respect to his use of *thanatos*, and *thnētos*. The assertion by Gilmore that humans prior to Adam "lived and died as the 'beasts that perish'" because "sin as a concept did not exist" is speculation based on his acceptance of evolution, not on Scriptural evidence. (see Chapter 6, Walton's view of sin and death)

21 There was no command to eat from the tree of life. On the contrary evidence from the book of Revelation strongly suggests that Adam and Eve did *not* eat of the tree of life in the garden. The promises made at the end of each of the letters to the churches

## Chapter 6: A TE understanding of the creation of Adam and Eve

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recorded in Revelation 2–3, are promises relating to the gift of immortality. The first letter ends with the promise relating to eating from the tree of life. It is reasonable to assume that the promise of eating from the tree of life is describing the one–off action of receiving immortality, just as the one–off eating of the tree of the knowledge of good and evil led to mortality.

If this is the case then Adam and Eve did not eat of the tree of life in the garden or they would have had immortality before the fall. This conclusion is supported by the reason given for their banishment from the garden, in the words, "He must not be allowed to reach out his hand and take [also][most versions] of the tree of life and live for ever" (Gen. 3:22).

It is important to recognise that it is fruit from the tree of life (not leaves) that has the power to impart life. God said "I give you every seed–bearing plant on the face of the whole earth and *every tree that has fruit* with seed in it. They will be yours for food" (Gen. 1:29). It was *fruit* on the tree of knowledge of good and evil that "was good for food and pleasing to the eye" (Gen. 3:6).

In stating this we acknowledge that, as the consequence of insufficient definitive evidence, the nature of Adam and Eve before their 'fall' has been the subject of significant disagreement and fluctuating views for a very long time. While it is generally accepted that they were not immortal some readers may believe strongly that they were mortal and object to the argument presented here.

- 22 The promise of Jesus to "give the right to eat from the tree of life, *which is in the paradise of God*," (Rev. 2:7) is clearly referencing the exclusion of Adam and Eve from the garden (sw *paradeisos* throughout Gen 2–3 LXX) to prevent them eating from the tree of life to live for ever. By this reference Jesus is confirming the historical reliability of these aspects of the Genesis record.
- 23 By 'probation' we mean "A period of time during which someone is judging your character and ability while you work, in order to see if you are suitable for that type of work." <https://www.collinsdictionary.com/dictionary/english/probation>. We believe this definition fits the Genesis account where Adam was placed in the garden to "work it and take care of it" (Gen. 2:15). He and Eve were commanded to "rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground"(Gen. 1:28). When Adam listened to Eve and she listened to the serpent they failed in the task they had been given of 'ruling', and as a consequence Adam was no longer fit to work and take care of the garden, but was banished "to work the ground [outside the garden] from which he was taken" (Gen. 3:23).
- 24 *The Atonement*, Logos Publications, 1990, p. 240. Also expressed in *A Statement of the One Faith, forming the 'Dawn' Christadelphian basis of Fellowship and the Birmingham Amended Statement of Faith (BASF)*, Clause 4.
- 25 *Four Views on The Historical Adam*, p. 97.
- 26 *Theistic Evolution*, p. 803.
- 27 *Four Views on The Historical Adam*, p. 93.
- 28 The 1984 edition of the NIV followed the translation of the KJV, NKJV, RSV and many others in the wording of Genesis 1:27, "in the image of God he created him". In the 2011 edition this was changed to "in the image of God he created them", indicating that both 'male and female' were created in the image of God. Of thirty–one translations checked only seven others follow the 2011 NIV translation, several of which are paraphrase versions rather than translations. 1 Corinthians 11:7 confirms the majority translation, "A man ought not to cover his head, since he is the image and glory of God; but woman is the glory of man."
- 29 In *Head Coverings and Creation*, Perry shows that the factual order of the creation of Adam and Eve as set out in Genesis 1:26, 27 and Genesis 2 is central to Paul's argument in 1 Corinthians 11:2–16 regarding symbolic roles for men and women at the breaking of bread. For example he says, "It is important to appreciate the typological dimension to Paul's argument. The literal dimension consists of the facts about creation; the typological dimension is the application of the facts to order behaviour in the new creation" p. 37.

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30 *The Lost World of Adam and Eve*, p. 154.

31 *The Evolution of Adam*, p. 147.

32 *Four Views on The Historical Adam*, p. 114.

33 *Ibid.*, p. 115.

34 *Ibid.*

35 Perry, A., *The Doctrine of Salvation*, Willow Publications, 1992, p. 94.

36 *Ibid.*, p. 34.

37 *Four Views on The Historical Adam*, p. 112.

38 *The Doctrine of Salvation*, p. 13.

39 *Theistic Evolution*, p. 920. Pages 916–920 give a full critique of Walton's view of Paul's understanding of Adam.

# CHAPTER 7: A THEISTIC EVOLUTIONARY UNDERSTANDING OF PAUL'S TEACHING ABOUT ADAM

## Summary

In this chapter we focus on the views expressed by Peter Enns about Adam. The starting point for Enns is that the Genesis account of creation is an allegory written to help Jews make sense of their exile to Babylon, and therefore is not about human origins. However, Enns recognises that it is difficult for Christians to accept his view, given the evidence that the Apostle Paul believed Adam (and Eve) were real people and that he accepted the created origins of human life. Enns acknowledges that to Paul, Adam was real, but says that Paul was reinterpreting the Genesis account in order to explain how the death and resurrection of Jesus fitted into Israel's history.

In order to build a case for believing that Genesis does not mean what Paul says, he examines Paul's use of five OT passages to try and show that Paul changed what these meant in their original context. We analyse his reasoning in two out of the five examples and show that Paul's interpretation of these OT passages is consistent with the unity of the gospel message within the wider teaching of Scripture. Enns' view of inspiration allows him to question the reliability of what Paul writes about Adam, because he does not acknowledge the unity of God's revelation of salvation, from the sin of Adam to the death of Christ. We conclude that by denying the existence of a real Adam and his specific sin, Enns demonstrates that he does not understand the doctrine of the atonement through Christ, which is fundamental to the gospel of salvation.

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In Chapter 3 we showed how academic studies questioning the authorship of the Pentateuch have created doubt about the historical reliability of Genesis. Although the conclusions of this 'critical'

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approach do not agree with the scriptural evidence, many Theistic Evolutionists agree with these conclusions.

In his book, *The Evolution of Adam*, Peter Enns states that the account of the creation of Adam, his sin and removal from the garden, is not to be read as reliable history.<sup>1</sup> His understanding of what is written in Genesis 2–3 is based on the assumption that Genesis was not written by Moses<sup>2</sup>, and that the whole of the OT “owes its existence to the post–exilic period.”<sup>3</sup> He believes that Genesis is a piece of retrospective story–telling about Israel’s ‘creation’ by God as a nation, their subsequent ‘fall’ through disobedience, and their banishment from the land. Enns calls this, “Israel’s story from exodus to exile.”<sup>4</sup>

Based on these beliefs about Genesis, Enns’ general conclusion about Adam (and Eve) is that:

“Adam is not a story of the origin of humanity in general but of Israel in particular. When seen from this perspective, efforts to reconcile Adam and evolution become unnecessary – at least from the point of view of Genesis.”

But he immediately adds an important caveat:

“Paul’s use of the Adam story ... is another matter.”<sup>5</sup>

So how does Enns, a Theistic Evolutionist, understand the apostle Paul’s writings about Adam? (His NT focus is only on Paul’s writings).<sup>6</sup> His understanding of Paul’s writings in general, and about Adam specifically, is underpinned by the belief that what Paul thought and wrote was influenced by the thinking of the world in which he lived. He says:

“As a first–century Jew, Paul, along with his contemporaries, assumed various ways of thinking about the world; these almost certainly include the issue of cosmic and human origins. Also, as a trained Jewish interpreter of his Scripture, Paul’s handling of Adam must be seen against the backdrop of the variety of ancient interpretations of Adam, all of which grapple with the significance of this story for *their time and place*.”<sup>7</sup> (emphasis added)

And again:

“The fact that biblical authors wrote these things down does not mean they are accurate descriptions of physical reality. Rather, they simply reflect ancient ways of thinking. Paul’s conception of what is above him reflects his intellectual world.”<sup>8</sup>

## Chapter 7: A TE understanding of Paul's teaching about Adam

Enns argues that because “what happened to Adam in the garden” had been the subject of theological interpretation within Judaism since the Babylonian exile, Paul was similarly “appropriating an ancient story to address pressing concerns of the moment.”<sup>9</sup> Enns believes that Paul uses OT Scriptures, not to show that Jesus is a fulfilment of those Scriptures, but to find an explanation of the new reality of the death and resurrection of Jesus. Enns says that Paul was doing with Genesis what the Jews had done previously when seeking an explanation for the new reality of their captivity and exile.<sup>10</sup> For Enns, Paul's use of the OT Scriptures is not a Spirit-guided exposition of the gospel message in the OT, but “the concluding chapter to Israel's story ... the lens through which Israel's story is now to be read in a fresh way.”<sup>11</sup>

To support his belief that Paul is interpreting OT Scriptures in this way, Enns examines five examples of Paul's use of OT passages.<sup>12</sup> In his examination of these passages, Enns seeks to show that Paul's use of Scripture to explain doctrine was not the intended meaning of these Scriptures in their original context. The goal of this approach is to build a platform from which he can conclude that what Paul also believed about Adam and Eve was his 1st Century Christian interpretation, and not the original meaning intended in Genesis 2–3.

For the purposes of illustration we will consider the two examples chosen by Enns where Paul interprets other passages in Genesis. Through examining Enns' reasoning we will show that his view of Paul is not supported by the scriptural evidence.

### 1 Paul's understanding of the “seed” of Abraham

In our first example, Enns is trying to show that the “seed” promised to Abraham in Genesis referred to his many natural descendants (Israel) and was not referring to a single seed meaning Christ, as Paul states:

“The promises were spoken to Abraham and to his seed. The Scripture does not say ‘and to seeds’, meaning many people, but ‘and to your seed’, meaning one person, who is Christ.” (Gal. 3:16)

Enns acknowledges that like ‘seed in English both the Hebrew *zera* and Greek *sperma* can be either singular or plural. However he asserts:

“Paul seems to come to Genesis with the expectation that Jesus is its ultimate subject [we agree] ... *But this is not what Genesis means*, despite the grammatical flexibility of ‘seed’.”<sup>13</sup> (author's emphasis)

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Enns says that “it is not exactly clear what specific OT passage” Paul is referring to in Galatians 3:16. However he identifies several passages where Abraham is promised a numerous seed, from which he concludes: “*The entire point* of the promise is that the offspring will be many, *not one.*”<sup>14</sup> (emphasis added)

We believe that the most obvious Scripture Paul is referring to is Genesis 22:18, which states: “... through your offspring [seed] all nations on earth will be blessed.” We believe this is the passage because it is the only promise to Abraham that combines a reference to “the seed”, and “the blessing to all nations”, which has been the focus of Paul’s exposition in Galatians 3 thus far. For example: “... that *the blessing* given to Abraham [of righteousness/justification by faith Gal. 3:6–9] *might come to the Gentiles* through Christ Jesus.” (Gal. 3:14)<sup>15</sup>

It is unclear why Enns does not identify Genesis 22:18 as the ‘seed’ passage Paul is referring to, despite the fact that many aspects of Genesis 22 typify the death of Christ, who Paul says is the promised ‘seed’.<sup>16</sup> If the reference to the ‘seed’ in this verse was intended by God to mean that all nations on earth would be blessed through Abraham’s natural seed, then this promise has surely failed. As Isaiah laments about Abraham’s natural descendants: “We have not brought salvation to the earth.” (Is. 26:18)<sup>17</sup>

In contrast, the blessing for *all* nations, which means the forgiveness of sins, has come through the one descendant of Abraham, Jesus. Several years before Paul wrote about this blessing (cf. Rom. 4:7–8; Gal. 3:8), the Apostle Peter had preached to the Jews that the promise to Abraham meant the forgiveness of sins through the Christ. He told them:

*“Repent, then, and turn to God, so that your sins may be wiped out, that times of refreshing may come from the Lord, and that he may send the Christ, who has been appointed for you—even Jesus. He must remain in heaven until the time comes for God to restore everything, as he promised long ago through his holy prophets. Indeed, all the prophets from Samuel on, who have spoken, have foretold these days. And you are heirs of the prophets and of the covenant God made with your fathers. He said to Abraham, ‘Through your offspring all peoples on earth will be blessed.’ When God raised up his servant, he sent him *first to you to bless you by turning each of you from your wicked ways.*” (Acts 3:19–26)*

Despite the evidence of Scripture, Enns says that Paul’s exposition of the ‘seed’ passage as referring to Christ “is not what Genesis means.”

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But this is his opinion, which he doesn’t support from Scripture. In the same way he states his belief that Paul does not derive his teaching about the oneness of believers as the seed of Abraham (Gal. 3:29) from reading the OT. Rather he says that Paul reads the OT in the light of Christ, even if it means ignoring the original meaning.<sup>18</sup>

These are all assumptions about how Paul is reading Scripture. Enns doesn’t allow that Paul’s understanding of the OT is guided by the Holy Spirit, to give us an insight into the purpose of God from creation. Paul calls this Spirit–guided insight “the mystery made known to me by revelation”, and he continues:

“In reading this, then, you will be able to understand my insight into the mystery of Christ, which was not made known to people in other generations as it has now been revealed by the Spirit to God’s holy apostles and prophets. This mystery is that through the gospel the Gentiles are heirs together with Israel, members together of one body, and sharers together in the promise in Christ Jesus.” (Eph. 3:4–6)

When Paul says that this “mystery of Christ” was not previously made known, he is not saying that it was not written into God’s revelation, but that previous generations did not fully grasp the import of what was being revealed to them. This is confirmed by the Apostle Peter, who wrote:

“Concerning this salvation, the prophets, who spoke of the grace that was to come to you, searched intently and with the greatest care, trying to find out the time and circumstances to which the Spirit of Christ in them was pointing when it predicted the sufferings of Christ and the glories that would follow. It was revealed to them that they were not serving themselves but you, when they spoke of the things that have now been told you by those who have preached the gospel to you by the Holy Spirit sent from heaven. Even angels long to look into these things.” (1 Pet. 1:10–12)

Paul and Peter take a very different position on the revelation of God’s purpose in the OT to that taken by Enns, who says: “Paul’s use of the Old Testament is not marked by the so–called balance and objectivity of modern exegesis.”<sup>19</sup> This is an example of an approach taken by many modern biblical academics to Scripture, which we noted in previous chapters. It is an approach which runs counter to the biblical teaching about inspiration and the unity of the revelation of God through His Word, both of which we address later in this chapter.

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### 2 Paul's understanding of justification by faith

In our second example from Enns, he is trying to show that, contrary to Paul's teaching, the original meaning of Genesis 15:6 does not show that Abraham was declared righteous by his faith. Enns believes that righteousness in the OT is based only on "right actions". On the basis of this belief he argues that in Romans 4:3 Paul is distorting the original meaning of Genesis 15:6 to support a new doctrine of righteousness by faith.

He says:

"In context, Genesis 15:6 *does not refer to that act of faith that makes one righteous before God*. ... Abraham's act of faith (better, 'trust') has a concrete focus. It concerns the promise of children, and *for Paul to extrapolate from that some general sense of a sinner being justified before God apart from the law does not seem to be consistent with the context*. Abraham is simply saying that he trusts God to deliver on his promise of offspring, and God counts that as an act of righteousness towards him."<sup>20</sup> (emphasis added)

Enns states that:

"... 'righteousness' in the Old Testament is not someone's inner status before God; instead, it refers to specific right actions that please God."<sup>21</sup>

But this assertion is not supported by what David expressed in Psalm 32:1–2, and which is directly quoted by Paul in Romans 4:7–8:

"Blessed is he whose transgressions are forgiven, whose sins are covered. Blessed is the man whose sin the Lord will never count against him."

Paul is quoting David in support of his argument that God "justifies the wicked" (v. 5) who trust Him, and as a consequence "his faith [trust] is credited as righteousness" (v. 5). It is difficult to see how there could be a greater expression of someone's "inner status before God" than the sense of blessing or blessedness that comes from knowing that our sins are forgiven through faith, and that we are considered as righteous in His sight.

Paul expresses it in this way:

"David says the same thing when he speaks of the *blessedness* of the man to whom God credits righteousness apart from works." (Rom. 4:6)

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As already pointed out, Enns challenges Paul's presentation of OT teaching on righteousness, stating that righteousness in the OT refers to "specific right actions". However Enns is confusing the teaching about righteousness across the OT with right actions under the Law of Moses specifically. Paul makes it clear on numerous occasions that "no-one will be declared righteous in [God's] sight by observing the law." (Rom. 3:20) However, that does not mean that a righteousness "apart from law" was not proclaimed in the OT. As Paul says:

"But now a righteousness from God, apart from the law, has been made known, *to which the Law and the Prophets testify.*" (Rom. 3:21; cf. Acts 10:17–26)

In Romans 4 Paul is now specifically using Psalm 32 to illustrate that "God credits righteousness *apart from works.*" (v. 6) Paul's use of Psalm 32 builds on his earlier use of Psalm 51:4 in Romans 3:4 with its reference to God's judgement of David's sin with Bathsheba. In Romans 4 the power of the quotation of Psalm 32 is in the "blessedness" David received through the forgiveness pronounced by Nathan the prophet in the words: "The LORD has *taken away your sin.*" (2 Sam. 12:13) Here David, 'a sinner', is forgiven (Ps. 32:5) without any sacrifice under the law [works], since no sacrifice could atone for the sin of murder.

Commenting on Paul's use of Psalm 32 and Genesis 15:6 in his exposition about faith, Richard B. Hays, professor of New Testament at Duke University, says:

"In order to make the case, he weaves together Gen. 15:6 ('Abraham believed God, and it was reckoned to him for righteousness') with Ps. 32:1–2: 'Blessed are those whose iniquities are forgiven, and those whose sins are covered. Blessed is the man whose sin the Lord will not reckon.'

David, in the psalm, pronounces a blessing on the man whose sin the Lord does not "reckon." (This pronouncement is fraught with poignancy for the reader who has already heard the echoes of Ps. 51 in Rom. 3:4: David, who confessed his own guilt and God's justice, now speaks blessings in acknowledgment of God's forgiveness.) Paul uses the catchword reckon to connect David's blessing with Gen. 15:6 and Abraham."<sup>22</sup>

Although Paul only quoted from Psalm 32:1–2, he would have been very familiar with the whole Psalm where, after acknowledging his sin, David concludes by saying

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“... the LORD's unfailing love surrounds the man who trusts in him.”  
(Ps. 32:10)

This is the justification through faith/trust that Paul refers to when he says:

“To the man who does not work [through the requirements under the Law] but trusts God who justifies the wicked, his faith is credited as righteousness.” (Rom. 4:5)

Hays again:

“Paul wants to argue that Judaism itself, rightly understood, claims its relation to Abraham not by virtue of physical descent from him (*kata sarka*), but by virtue of sharing his trust in the God who made the promises. *In that sense, the gospel, which invites all people, including Gentiles, into right relation with God through faith, confirms the Law*; it is consistent with the real substance of the Law's teaching. This is the proposition that Paul sets out to demonstrate through his exposition of Genesis.”<sup>23</sup> (emphasis added)

Contrary to how Enns reads Scripture, Scripture itself confirms that Paul was entirely justified in applying what was written in Genesis 15:6 to the “general sense of a sinner being justified”. Faith/trust in God, demonstrated by obedience to his instructions (James 2:17), has always been what pleases God. This was demonstrated before Abraham by Abel, Noah and Enoch among others, as is made clear in Hebrews 11:4–7.

The reverse is also true; Israel's lack of belief/trust in what God said resulted in their disobedience in the wilderness (Heb. 3:18–19). Adam's (and Eve's) lack of belief/trust in what God said led to their disobedience and punishment.

The evidence shows that there is no justification for Enns to draw a distinction between righteousness in the OT and that described in the NT, nor therefore to conclude that Paul is reinterpreting the OT message in the light of Christ. Rather Paul is explaining that ‘faith’ had always been an underpinning feature of God's revelation, even if that had not been understood by all. In the same way Jesus went through the OT with the disciples to show them what had always been written about him, which they had not recognised (Lk. 24:44–45).

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### The unified revelation of God in the Bible

For Enns, the Bible cannot be a unified story authored by God because he believes that much of the OT was constructed retrospectively to tell the story of Israel as the people of God in the traumatic aftermath of the Babylonian invasion that destroyed the temple, ended the monarchy and resulted in mass exile.

He also believes that Paul's understanding of the OT Scriptures was *his* interpretation. He says that Paul's understanding of the OT was

“... informed both by the ancient conventions we are looking at here *and* his conviction that the crucified and risen Jesus requires Israel's story to be reinterpreted.”<sup>24</sup> (emphasis original)

From this perspective Enns concludes:

“Simply put, we cannot and should not assume that *what Paul says about Adam is necessarily what Genesis was written to convey* – any more than we should assume that what Paul says about Isaiah or Habakkuk is exactly what those authors had in mind.”<sup>25</sup> (emphasis added)

We should not forget why Enns is putting forward this argument about the original meaning of OT texts. He wants to build upon this in order to argue that Paul's understanding of Adam was also his 1st century reinterpretation of the meaning of the Genesis 2–3 account, and not what was originally intended. (For Enns' understanding of the inspiration of the Scriptures see below.)

Enns accepts that *for Paul*, Adam is a historical figure and the first man God created, from whom the human race descended and from whom all inherited sin and death.<sup>26</sup> However, he says *for us* this is “not a viable option” in the face of “the scientific evidence we have for human origins and the literary evidence we have for the nature of ancient stories of origins.”<sup>27</sup> (See Chapter 12:2)

Enns recognises that rejecting Paul's belief in a historical Adam is problematic, but that it is the necessary consequence of accepting evolutionary origins. He says:

“By saying that Paul's Adam is not the historical first man, we are leaving behind Paul's understanding of the cause of the universal plight of sin and death. But *this is the burden of anyone who wishes to bring evolution and Christianity together* – the only question is how that will be done. ... So, although my suggestion here leaves behind the truly historical Adam of Paul's thinking, so do any other

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attempts – *except those of biblical literalists, who reject the evolutionary account of human origins.*<sup>28</sup> (emphasis added)

Here is an honest recognition of the conflict between an evolutionary understanding of origins and one that treats Genesis as a historically reliable account. Exponents of theistic evolution like Enns have to jettison the historical Adam described in Genesis, and believed by Paul (and Christ), in order to accommodate an acceptance of evolution. They also have to have an alternative explanation for the origin of sin and death, that is, an alternative to what is stated in Scripture, in particular in Genesis 3, Romans 5 and 1 Corinthians 15. But more fundamental than this, rejecting a historical Adam through whom sin entered the world destroys the reason for the death and resurrection of Christ. We consider this below.

In contrast to Enns, we believe that both Old and New Testaments are the unified message of God for salvation. Paul says about the OT Scriptures:

“From infancy you have known *the Holy Scriptures, which are able to make you wise for salvation* through faith in Christ Jesus. All Scripture is God-breathed and is useful for teaching, rebuking, correcting and training in righteousness, so that the man of God may be thoroughly equipped for every good work.” (2 Tim. 3:15–17)

Commenting on Paul’s interpretation of OT Scriptures in general, Hays states:

“The insistent echoing voice of Scripture in and behind Paul’s letter [specifically Romans] presses home a single theme relentlessly: the gospel is the fulfilment, not the negation, of God’s word to Israel.”<sup>29</sup>

Earlier in this chapter we quoted the words of Peter recorded in Acts 3:19–26. In addition to his explanation of salvation through Jesus he also confirms that this is the consistent message from the OT prophets. He says:

“But this is how God fulfilled what *he had foretold through all the prophets*, saying that his Christ would suffer. ... Heaven must receive him until the time comes for God to restore everything, *as he promised long ago through his holy prophets*. ... Indeed, beginning with Samuel, *all the prophets who have spoken have foretold these days.*” (Acts 3:18–24)

In his book, *The Gospel of Genesis*, Warren Austin Gage, Assistant Professor of Old Testament at Knox Theological Seminary, demonstrates the unity of the Gospel message throughout the Bible.

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He believes that the consistency of that message is so clear that Jesus was justified in condemning the leaders of his day for not recognising it when they read the OT.<sup>30</sup>

One aspect of the consistent message across the testaments is the teaching about sin and death, and the process of atonement. We will now consider Enns' beliefs about Adam in the light of biblical teaching about salvation through the death and resurrection of Jesus.

### Adam and the Atonement in Jesus

Enns writes:

“... the uncompromising reality of who Jesus is and what he did to conquer the objectively true realities of sin and death do not *depend* on Paul's understanding of Adam as a historical person.”<sup>31</sup>  
(emphasis original)

By this he means that the death and resurrection of Jesus in order to destroy sin does not need a real Adam to have brought that sin into the world. However, he fails to explain *how* what Jesus did conquers those “true realities of sin and death”. The reason for this lack of clarity is that, when Theistic Evolutionists jettison a belief in the historical reality of Genesis 2–3, they dispense with the foundations for understanding how the death and resurrection of Jesus brings about salvation from sin and death for the human race.

For Enns, the death and resurrection of Jesus shows that “the root problem must be *death*.”<sup>32</sup> (emphasis added) This is the theistic evolutionary position, since death is built into the evolutionary process and in evolutionary history death is not caused by sin, or behaviours that might be defined as sinful. Although Theistic Evolutionists acknowledge the moral concept of sin and evil in human behaviour, they cannot say at what point in the evolution of human behaviour a consciousness of morality might or can be regarded as being present in the population<sup>33</sup> (See Appendix 1).

Those believing theistic evolution come up with a variety of answers for the emergence of moral consciousness in human evolutionary history to explain what the Bible calls sin.<sup>34</sup> None of these explanations agree with the single historical event of Adam's sin recorded in Genesis 3 and referred to extensively by Paul. In the absence of clarity regarding the origin of sin in humans, exponents of theistic evolution focus on the universality of *death* as the problem to be overcome.

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However this view is not consistent with the teaching of the apostle Paul, who states that *sin* (which of course leads to death, as set out in Genesis) is the fundamental issue to be addressed in humans.

He says:

“Jews and Gentiles alike are *all under sin*.” (Rom. 3:9)

“Therefore, just as *sin entered the world* through one man, and death *through sin*, and in this way death came to all people, *because all sinned*.” (Rom. 5:12)

“For the *wages of sin* is death.” (Rom. 6:23)

“All of us lived among them at one time, *gratifying our sinful nature* and following its desires and thoughts. Like the rest we were by nature *objects of wrath*.” (Eph. 2:3)

It was sin which Jesus overcame in his life, and in his death. He was “tempted in every way, just as we are, yet was without sin.” (Heb. 4:15) We are also told that “he himself suffered when he was tempted.” (Heb. 2:18) This makes *sin* the real issue for Jesus, who would not have suffered when tempted, unless there was the possibility that he could succumb to those temptations, and sin.

He was subject to temptation because, as descended from Adam, he came “in the likeness of sinful man” (Rom. 8:3), and was “made like his brothers in every way.” (Heb. 2:17) As a consequence, therefore, he was subject to death, not because of his own sin, but because “by the trespass of one man (Adam), death reigned through that one man.” (Rom. 5:17).

The total obedience of Jesus to the will of his Father, even to the “laying down of his life” (John 10:17), required him to have total control over the sin/temptation within him. That power was finally destroyed when he gave up his spirit on the cross (John 19:30).

We read:

“Since the children have flesh and blood, he too shared in their humanity so that *by his death he might destroy him who holds the power of death* – that is the devil.” (Heb. 2:14)

It is sin that holds the power of death and Jesus has “*done away with sin* by the sacrifice of himself.” (Heb. 9:21)

In summary, this is the doctrine of the atonement,<sup>35</sup> which explains how the historical event of the death and resurrection of Jesus solves the universal and self-evident problem of sin and death. For death to have

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come as a consequence of sin, an actual, historical Adam must have existed as described in Genesis 2–3.

To deny that sin and death come to all humanity, including Jesus, through a historical Adam, is also to deny the parallel, that for all those 'in' a historical Christ, sin is atoned by his death, and death is destroyed in the way set out above. Theistic evolution is therefore incompatible with the biblical teaching about the atonement.<sup>36,37</sup>

### The Inspiration of Scripture

We have spent considerable effort examining how Enns understands Paul's use of the OT Scriptures in his writings because Enns' approach to Scripture is common among Theistic Evolutionists. Their view of inspiration throws into doubt what we can regard as 'truthful' and reliable teaching in Scripture, and what is just the opinion of the writer.

We believe that the entire way in which Enns approaches Scripture is flawed. His belief about the authorship of the Pentateuch, his views about the construction of the OT, and his belief that, as "an ancient man with ancient thoughts", Paul's writings about the OT cannot be relied upon, all reflect how he believes the Scriptures were written. He expresses his understanding of inspiration as follows:

"Many Christian readers will conclude, correctly, that a doctrine of inspiration does not require 'guarding' the biblical authors from saying things that reflect a faulty ancient cosmology. ... when we allow the Bible to lead us in our thinking on inspiration, *we are compelled to leave room for the ancient writers to reflect and even incorporate their ancient, mistaken cosmologies into their scriptural reflections.*"<sup>38</sup> (emphasis added)

And again:

"A proper view of inspiration will enhance the fact that God speaks by means of the cultural idiom of the authors – whether it be the author of Genesis in describing origins or how Paul would later come to understand Genesis. *Both reflect the setting and limitations of the cultural moment.*"<sup>39</sup>(emphasis added)

This is "cultural relativism", to which we have referred in Chapter 3. This is not our view of inspiration, which is that the Bible is "without error in all parts of them, except such as may be due to errors of transcription or translation."<sup>40</sup> This view is based, along with other Scriptures, on the words of the apostle Peter: "For prophecy *never had its origin in the will of man*, but men spoke from God as they were carried along by the Holy Spirit." (2 Pet. 1:21)

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The views of all Theistic Evolutionists are at variance to a greater or lesser extent with a belief in the inerrancy of Scripture, especially when it comes to the historical reading of Genesis 1–3 and the supporting texts in other parts of the Bible.<sup>41,42</sup>

## Conclusion

We have considered in some detail how Professor Peter Enns understands Paul's use of OT passages and conclude that this is not consistent with the teaching of the inspired Scriptures as a whole. His understanding of inspiration leads to the conclusion, common among Theistic Evolutionists, that scriptural history cannot be relied upon.

His individual theistic evolutionary belief that the creation of Adam is not a historical reality, but *only* an allegory of the nation of Israel, is not supported by the evidence he presents. While there are several parallels between Adam and Israel,<sup>43</sup> all allegories used by Paul are based on historical realities.<sup>44</sup>

Just as with the theistic evolutionary views we examined in previous chapters, Enns' use of Scripture to support his argument is not confirmed by the Scriptures themselves. His exposition of OT Scriptures shows that a) he doesn't understand the theology of the Gospel, and b) he has a very different understanding of inspiration to those of us who believe in the inerrancy of Scripture.

Summing up Enns' views on Adam, Guy Prentiss Waters, Professor of New Testament, says:

“Enns's explanation of sin and correspondingly, redemption, stands at odds with the testimony of Scripture. In an effort to reconcile Scripture's teaching about Adam, sin and salvation with evolutionary theory, Enns effectively dehistoricizes [removes from history] a core element of the biblical gospel, namely its testimony about sin. ... Enns's proposal raises serious and foundational questions about the integrity of the biblical gospel.”<sup>45</sup>

In the next chapter we will consider the last of our examples of theistic evolutionary ideas. In this version, proposed by Denis Alexander, Adam and Eve are not a special creation, but two of an evolutionary species of humans to whom God reveals himself. We will pay particular attention to Alexander's understanding of death.

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### Notes and references

- 1 Enns, P., *The Evolution of Adam – what the bible does and doesn't say about human origins*, Brazos Press, Grand Rapids, Michigan, 2012, p. 137.
- 2 Ibid, p. 25.
- 3 Ibid, p. 26.
- 4 Ibid, p. 66.
- 5 Ibid, p. 70.
- 6 Ibid, p. 150n10.
- 7 Ibid, p. 80.
- 8 Ibid, p. 94.
- 9 Ibid, p. 102.
- 10 Ibid, p. 122.
- 11 Ibid, p. 103.
- 12 The five NT passages and Paul's OT quotations that Enns considers are: 2 Corinthians 6:2 and Isaiah 49:8; Abraham's seed in Galatians 3:16,29; Galatians 3:11 and Habakkuk 2:4; Romans 11:26–27 and Isaiah 59:20; and Romans 4 and Genesis 15:6.
- 13 *The Evolution of Adam*, p. 106.
- 14 Ibid.
- 15 This is supported by C John Collins in his article on Paul's use of 'seeds' and 'seed in Galatians 3:16 in which he concludes, "This would mean that Paul, in alluding to this text [Gen. 22:18], was drawing out the meaning that was already there in the Hebrew of Genesis. This is a startling result. I do not have a 'theory' of how Paul (or other NT writers) used the OT; but it does seem that we should give more room to the possibility that he saw things that are really there — things that we have not yet found." Tyndale Bulletin 54.1, 2003, 75–86.
- 16 It is also significant that the promise in Genesis 22:18 is given in the context of Abraham 'offering' his son on the mountain in obedience to God's command, a place he then named, "The LORD will provide" (Gen. 22:14). Most modern versions (ESV, NASV, NIV, NKJV, RSV) follow this translation. The Hebrew *ra'ah* translated here and in 22:8 as "provide(d)" is a primitive root meaning 'to see', literally or figuratively. The verb is the same as in Moriah ('Seen of Yah', *Strong's Hebrew Lexicon*). Of the 1313 times *ra'ah* occurs in the OT, it is translated "provide" (NIV) only in Genesis 22:8 and Genesis 22:14 (x2). The KJV more correctly has, "In the mount of the LORD it shall be seen." What is to be seen on Mt Moriah is the provision of a lamb by God (v 8) (Whittaker, H.A., *Abraham, Father of the Faithful*, The Christadelphian, 1966, p. 19). This is the answer to Isaac's question, "Behold/Look the fire and the wood: but where is the lamb ...?" This question is finally answered by John the Baptist when he sees Jesus, "Behold/Look the Lamb of God which takes away the sin of the world" (John 1:29) (Perry, A., *Story and Typology*, Willow Publications, 2012, p. 47.)
- 17 It is true that Genesis 22:17a also promises, "I will surely bless you and make your descendants [seed] as numerous as the stars in the sky and as the sand on the seashore". However the "grammatical flexibility" of this word allows there to be reference in this passage to both plural and singular applications. That flexibility is illustrated in v 17b which in some versions reads, "Your descendants [seed plural] will take possession of the gates of their enemies." while several other versions, including ASV, ESV, Darby, KJV and Tyndale translate it as, "Your seed [singular] will possess the gate of his enemies." The singleness of this links appropriately to the promise of salvation through the 'seed' singular, of the woman in Genesis 3:15, "he will crush your head". This promise is often referred to as 'protoevangelium' or 'first gospel'. In his kingdom Jesus will rule until all enemies are subdued under his feet and "the last enemy to be destroyed is death" (1 Cor. 15:25–26). Paul uses the flexibility of the word "seed" when he says that as the "father of many nations", Abraham's many offspring [*sperma*] (Rom. 4:16–17) are one seed [*sperma*] in Christ, through their baptism into him (Gal. 3:26–29).
- 18 *The Evolution of Adam*, p. 107.
- 19 Ibid, p. 103.
- 20 Ibid, p. 112.

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- 21 Ibid.
- 22 Hays, R.B., *Echoes of Scripture in the Letters of Paul*, Yale University Press, New Haven and London, 1989, p. 55.
- 23 Ibid, p. 54.
- 24 *The Evolution of Adam*, p. 116.
- 25 Ibid, p. 117.
- 26 Ibid, p. 120.
- 27 Ibid, p. 122.
- 28 Ibid, p. 123.
- 29 *Echoes of Scripture in the Letters of Paul*, p. 34.
- 30 Gage, W.A., *The Gospel of Genesis – Studies in Protology and Eschatology*, Wipf and Stock Publishers, Eugen, Oregon, 1984, p.3. When the Pharisees and Sadducees asked for a sign from heaven, he said, "You know how to interpret the appearance of the sky, but you cannot interpret the signs of times" (Matt. 16:1–4).
- 31 *The Evolution of Adam*, p. 122,
- 32 Ibid, p. 131.
- 33 Alexander, D., *Creation or Evolution: Do We Have to Choose?* Monarch Books, 2nd Ed, 2014, p. 283.
- 34 For a critique of theistic evolutionary views on morality see Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 731–753.
- 35 *A Statement of the One Faith, forming the 'Dawn' Christadelphian basis of Fellowship*, and the *Birmingham Amended Statement of Faith (BASF)*, Clauses 8, 9, 10, 12 and 13.
- 36 Allfree M., Davis, M., *'The Deception of Theistic Evolution'*, Bible Study Publications, 2017, p. 163.
- 37 *Theistic Evolution*, p. 835.
- 38 *The Evolution of Adam*, p. 94.
- 39 Ibid, p. 143.
- 40 *A Statement of the One Faith*, Foundation Clause.
- 41 *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, p. 821, 825n63, 826–827.
- 42 *The Deception of Theistic Evolution*, p. 165.
- 43 Perry, A., *The Doctrine of Salvation*, Vol. 1, Willow Publications, 1992, p. 204.
- 44 For example: 1 Corinthians 10:6, 11 where the Apostle Paul refers to the historical events of Israel crossing the Red Sea and the wilderness journey and calls them 'types' (Gk *typos*). Also Galatians 4:21–31 where Paul explains the figurative (Gk *allegoreo*) importance of the historical events surrounding Hagar, Sarah and their two sons.
- 45 *Theistic Evolution*, p. 924.

# CHAPTER 8: A THEISTIC EVOLUTIONARY UNDERSTANDING OF ADAM AND BIBLICAL DEATH

## Summary

In this chapter we consider the views of Denis Alexander, who believes very firmly in the evolution of humans from other primates. As a consequence he dismisses the notion that Genesis is a historical account, because in his opinion it is incompatible with science. He puts forward two speculative explanations of how evolution might have eventually led to either a general growing awareness of God, or the selection by God of two or more humans to fellowship and represent Him on earth. For him the 'fall' is not about breaking a specific command, but a way of describing a broken relationship with God which might also have been a long process.

Most importantly, for Alexander death in Genesis is spiritual, not physical, because physical death is present throughout evolution. He states that the Bible describes three types of death, Physical, Spiritual and Eternal Spiritual death, or 'the second death'. We examine his scriptural evidence for stating that Physical death in the OT is not the result of sin, but is the normal expectation at the end of a full life, and his belief that the OT Scriptures contain little evidence of teaching about resurrection. We use evidence in the NT to show that, as part of the gospel, the OT does teach the resurrection. We may not always be aware of this just as the disciples were not aware that the OT taught about the resurrection of Jesus. We show that Alexander's assertion that 'death' in the NT is spiritual and not physical is an over-generalisation of a metaphor, one that is not supported by the Scriptures he quotes. We analyse Paul's references to death, especially through Adam, and show how Paul is clearly stating that, as the result of Adam's sin, the judgment of God was the condemnation of physical death.

Alexander concedes that his two explanations of the meaning of Genesis 1–3 are a work in progress, and a better alternative might

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become available. This lack of clarity among Theistic Evolutionists as to the true meaning of Genesis is a major weakness in their argument.

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Our final example of a theistic evolutionary explanation of Adam and Eve illustrates how uncertain Theistic Evolutionists are when they propose alternatives to accepting the Genesis account as historically reliable.

In his book, *Creation or Evolution: Do We Have to Choose?*, Alexander proposes five possible models for understanding who Adam and Eve were. Model A describes Genesis 1–3 as a myth to teach eternal truths without any historical basis; B and C are summarised below, and D and E both involve the special creation of Adam and Eve.

He rejects models D and E saying they are:

“... incompatible with the current scientific understanding of human evolution, *since they deny any continuity between the animal world and humanity*. One problem amongst many with both models (D and E) is that the scientific evidence for our shared ancestry with the apes is so overwhelming.”<sup>1</sup> (emphasis added) (See also his view of Noah in the light of genetic studies.<sup>2</sup>)

Of the two models B and C summarised below he favours model C, a view of Adam and Eve also supported by N. T. Wright, St Mary’s College, University of St Andrews.<sup>3</sup> Writing about his preference for this model, Alexander states:

“It provides, I believe, a reasonable working model for bringing contemporary anthropology into conversation with the inspired, *figurative, theological essay that Genesis 1–3 provides*, and I for one am happy to hold to this model until a better one comes along.”<sup>4</sup> (emphasis added)

Like almost all Theistic Evolutionists, Alexander’s understanding of Genesis 1–3 is determined by his acceptance of the conclusions of “*contemporary anthropology*” and the “*continuity between the animal world and humanity*” through biological evolution. By the latter he means Universal Common Descent (UCD) (See Chapter 12, Fallacy 8), about which Stephen Meyer says, “Too many Christians in the sciences have accepted the alleged consensus in support of UCD without critically scrutinizing it.”<sup>5</sup>

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Alexander sees the connection between the evolution of humans and the emergence of the biblical Adam and Eve as a very gradual process over a very long period until eventually, “*At some stage humanity began to know the one true God of the Scriptures.*”<sup>6</sup>

On the basis of this belief he presents the following models as possible explanations of how this growing awareness of God might have arisen within ‘modern humans’.

Alexander describes Model B, which he calls ‘Retelling’, as follows:

“The model suggests that as anatomically modern humans evolved in Africa from 200,000 years ago, or during some period of linguistic and cultural development since then, there was a gradual growing awareness of God’s presence and calling upon their lives to which they responded in obedience and worship.”<sup>7</sup>

And further:

“In this model, the early chapters of Genesis represent a re-telling of this early episode, or series of episodes, in our human history in a form that could be understood within the Middle Eastern culture of the Jewish people of that time ... the Fall is interpreted as the conscious rejection by humankind of the awareness of God’s presence and calling upon their lives in favour of choosing their own way rather than God’s way. The Fall then becomes a long historical process happening over a prolonged period of time, leading to spiritual death. The Genesis account of the Fall in this model becomes a dramatised re-telling of this ancient process through the personalised Adam and Eve narrative placed within a Near Eastern cultural context.”<sup>8</sup>

Alexander describes Model C, which he calls *Homo divinus*, as follows:

“According to this model, God in his grace chose a couple of Neolithic farmers in the Near East, or maybe a community of farmers, to whom he chose to reveal himself in a special way, calling them into fellowship with himself – so that they might know Him as the one true personal God. ... *Homo divinus* were the first humans who were truly spiritually alive in fellowship with God, providing the spiritual roots of the Jewish faith.”<sup>9</sup>

And further:

“Adam and Eve, in this view, were real people, living in a particular historical era and geographical location, chosen by God to be the

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*representatives of his new humanity on earth*, not by virtue of anything that they had done, but simply by God's grace. When Adam recognised Eve as 'bone of my bones and flesh of my flesh', he was not just recognising a fellow *Homo sapiens* – there were plenty of those around – but a fellow believer, one like him *who had been called to share in the very life of God in obedience to his commands.*"<sup>10</sup> (Emphasis added throughout.)

### Alexander's understanding of 'death'

In presenting these models Alexander adopts a popular view of Genesis 1–3 among Theistic Evolutionists, that it is a figurative and theological account and was not written as historical truth.<sup>11,12</sup>

They adopt this view of Genesis 3 in particular in order to explain how the sentence of death described there fits with the millions of years of death in evolutionary history (See Chapter 12, Fallacy 9, that rocks can be accurately dated). Alexander explains that in his view death in Genesis is spiritual not physical. He states that:

"The picture painted for us of the casting of Adam and Eve out of the Garden of Eden in Genesis 3 provides for us *one of the most vivid pictures of spiritual death anywhere in the Bible*, ... It is as seen from the theological perspective of the New Testament that it seems most appropriate to understand this chapter in Genesis as *referring to spiritual death.*"<sup>13</sup> (emphasis added)

He says that the Scriptures describe three types of death as summarised below<sup>14</sup> (we will comment on these subsequently):

### Physical death

Alexander asserts that physical death is described in the OT as a part of everyday experience, stating:

"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 pattern ordained by God for this earth.*"<sup>15</sup> (emphasis added)

As an illustration of the normality of death in the OT, after "a long and useful life obeying God's will", he quotes Genesis 25:8: "Then Abraham breathed his last and died at a good old age, an old man and full of years; and he was gathered to his people."

He concludes that death in these circumstances, is not caused by sin.<sup>16</sup> He also believes "*there is no developed resurrection teaching within the old covenant.*"<sup>17</sup> (emphasis added)

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### Spiritual death:

Alexander acknowledges that the phrase 'spiritual death' is not found in the Bible, but says that it "provides a handy way of describing alienation from God caused by sin."<sup>18</sup>

He claims that in the OT 'spiritual death' is an embryonic idea but that it comes to the fore in the NT. He states:

"The notion of spiritual death is so intrinsic to the New Testament that it is often only by the context that it is possible to distinguish it from physical death."<sup>19</sup>

In support of his emphasis on spiritual death he quotes the words of Jesus recorded in John 8:51 and the words of Paul in Romans 8:2. We will examine the meaning of both of these passages later in the chapter.

### Eternal spiritual death:

Alexander believes that:

"There is a third type of death introduced to us in the New Testament, and *that is the spiritual death that continues on after this life*, the permanent death that is sometimes called the 'second death'. Jesus speaks of it in Matthew 10:28: 'Do not be afraid of those who kill the body but cannot kill the soul. Rather, be afraid of the One who can destroy both soul and body in hell.' The actual phrase 'second death' appears only in the book of Revelation, where it occurs four times ... What is striking about the notion of the 'second death' is that it is this kind of death, and this alone, of which we should really be afraid according to Jesus."<sup>20</sup> (emphasis added)

After setting out these three types of death as he sees it, Alexander says that:

"With this background survey on the Bible's understanding of death complete, we are now in a better position to address the biblical teaching about the fall. What is the connection between death and the fall?"<sup>21</sup>

With physical death throughout evolutionary history as a background, Alexander believes that the sin of Adam and Eve was not the transgression of a specific command by two uniquely created people, but a "broken relationship between humankind and God, ... bringing spiritual death in its wake."

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He says:

“For the first time in human history there is a broken relationship with God, a state of being sinful, which could never have existed before for the simple reason that sin entails a broken relationship with God, and you cannot break a relationship unless you have one in the first place.”<sup>22</sup>

In the light of Alexander's views about the sin of Adam, it is reasonable to ask the question, if Adam and Eve were just two *Homo sapiens* to whom God revealed himself and who brought spiritual death as a consequence of their sin, was there any awareness of sin among all the other 'evolutionary humans'?

Alexander says:

“... the spiritual death that then cast its dark shadow over the world [as a result of Adam and Eve's 'sin'] would not have been realised by the vast majority of its people.”

until that is:

“God began to send spiritual leaders who alerted people to their status as sinners before a holy God ... And once the concept of sin began to be understood by some, at least, then the remedy for sin ... began to make sense as well.”<sup>23,24</sup>

Alexander believes that “a universal status of sin” entered the world through Adam, but did not result in all humans being aware of sin. He says that this awareness was a process taking place over a period of time.<sup>25</sup> In response to this we would point out that there is no evidence in Scripture to support this idea. On the contrary in Genesis 4:7 God reminds Cain, the firstborn of Adam and Eve, about *doing* what is right or *not doing* what is right, which is sin.

God says:

“If you do what is right, will you not be accepted? But if you do not do what is right, sin is crouching at your door; it desires to have you, but you must rule over it.”

In these words there is an expectation from God that, a) Cain knew what was "right", and b) that he should do what was "right". The Scriptures do not support the idea of a long time for the awareness of sin to become known, that is if we regard Genesis as historically reliable.

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Commenting on Paul's references to Adam, Alexander sees no reason to doubt that Paul believed Adam was a real person.<sup>26</sup> However he believes that when Paul writes about death in Romans 5 and 6 he means spiritual death not physical death.

For example, commenting on Romans 5:12 (NKJV), he says:

“Therefore, just as through one man sin entered the world, and death through sin, and thus death spread to all men, because all sinned... .’ So Paul is saying here that *spiritual death spread to all people on account of their own sinning.*”<sup>27</sup> (emphasis added)

And about Romans 5:14–16 he says:

“Paul’s use of Adam as a type or pattern of Christ is rather limited in its scope, making the point that as sin and *consequent spiritual death* came through one man, so also did salvation come through the one man, Christ.”<sup>28</sup> (emphasis added)

Alexander quotes Romans 6:21:

“What benefit did you reap at that time from the things you are now ashamed of? Those things result in death!”

He then concludes:

“Again *these passages refer to spiritual death* and make sense only within that understanding. *They do not support the idea that Adam’s sin brought physical death into the world.*”<sup>29</sup> (emphasis added)

### **An examination of Alexander’s reasoning.**

The first thing to observe is that Alexander’s scriptural evidence provides no credible support for his ideas about death in Genesis. He presupposes that evolutionary theory is correct, and as a consequence there is “continuity between the animal world and humanity.” Like all Theistic Evolutionists his conviction about biological evolution is the clear driver for seeking to read Genesis 1–3 as something other than a historical account. We have sought to demonstrate in previous chapters the consequences of using this starting point for understanding the Word of God.

We do not deny the importance of figures and types in Genesis 2–3, for example the creation of Adam from dust, the role of the serpent, nakedness, the curse on the serpent and the curse on the ground, etc. However the structure of the language of Genesis is historical. There is no indication in Scripture that Genesis 1–3 is only figurative language

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and not first and foremost chronological history.<sup>30</sup> The first three chapters are structurally tied into what follows in Genesis 4, and the genealogy of Genesis 5 leads to the historical record of Noah and the flood. The genealogies in Genesis 10 and 11 provide evidence of family continuity from Adam until we reach Abraham and his family in Genesis 12–50.

The early chapters of Genesis are profoundly important to the message of the entire Bible, whose overall structure is historical.<sup>31,32</sup> In addition, the attitude of Jesus, Paul, Peter, James, John, Jude, and the prophets towards this account is that it was historical and not just figurative or theological, as Alexander supposes.<sup>33</sup>

## Death and Resurrection in the Old Testament

As we have already stated, Alexander believes that death in the OT is “*the normal pattern ordained by God for this earth*” for animals and humans.<sup>34</sup> To build his argument that physical death is a normal occurrence and not a consequence of sin, he points to OT teaching that the lives of all are in the hands of God who provides for all (Ps. 104:27–28), but when God takes away their breath they “return to the dust” (v. 29). He says that this “matter of fact” type of death, at the end of a “long and useful life obeying God”, is the Old Testament ideal. In contrast to this ideal he says that:

“The kind of death in the Old Testament that was seen as abnormal was an unusually early death, or death due to the punishment of God.”<sup>35</sup>

While Alexander denies that death came “to all men” through Adam’s sin, he believes that an *early death* can certainly be caused by sin. To support this idea he cites the death of the son that Bathsheba bore to David and the words of God to Hezekiah recorded in 2 Kings 20:1. From these examples Alexander concludes:

“It is not death per se which is caused by sin, but rather premature death which is seen as specific punishment for specific sins.”

However his view of premature death is contradicted by the example of the death of the son of Jeroboam (1 Kings 14). God said he would die prematurely, not as a specific punishment for specific sins, but on the contrary because:

“... he is the only one in the house of Jeroboam in whom the LORD, the God of Israel, has found anything good.” (1 Kings 14:13)

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The premature death of this son is an illustration of what is recorded by Isaiah,

“The righteous perish, and no-one ponders it in his heart: devout men are taken away, and no-one understands that the righteous are taken away to be spared from evil.” (Isaiah 57:1)

Neither is Alexander’s view supported by what Jesus says in Luke’s gospel:

“Now there were some present at that time who told Jesus about the Galileans whose blood Pilate had mixed with their sacrifices. Jesus answered, ‘Do you think that these Galileans were worse sinners than all the other Galileans because they suffered this way? I tell you, no! But unless you repent, you too will all perish. Or those eighteen who died when the tower in Siloam fell on them—do you think they were more guilty than all the others living in Jerusalem? I tell you, no! But unless you repent, you too will all perish.’” (Luke 13:1–5)

Jesus is saying that although these were premature deaths, they were not a punishment for specific sins. Rather they died as a consequence of sin “per se”, and the only remedy for that fate is repentance (cf. Acts 2:38; Acts 20:21).

We can conclude that Alexander is presenting an understanding of physical death in the OT based on flimsy evidence which is also contradicted by the teaching of Jesus.

Alexander’s presentation of OT teaching about resurrection is also at variance with what Scripture actually teaches. He states:

“Although there are hints of the *possibility of resurrection* in the later books of the Old Testament, there is no developed resurrection teaching within the old covenant...”<sup>36</sup> (emphasis added)

In saying this Alexander is ignoring David’s prophecy about the resurrection of Christ, in the words:

“Therefore my heart is glad and my tongue rejoices; my body also will rest secure, because you will not abandon me to the grave, nor will you let your Holy One see corruption.” (Ps. 16:9–10)

And the words of Isaiah:

“But your dead will live; their bodies will rise. You who dwell in the dust, wake up and shout for joy. Your dew is like the dew of the

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morning; the earth will give birth to her dead.” (Is. 26:19, cf. Dan. 12:2)

And the promise of God to Abraham about his future eternal inheritance of the land of Canaan:

“The whole land of Canaan where you are now an alien, I will give as an everlasting possession to you and your seed after you.” (Gen. 17:8)

This promise was repeated to Isaac (Gen. 26:3) and then to Jacob (Gen. 28:13). Are we to assume that when they died without receiving “what had been promised” (Heb. 11:39), they thought God had lied to them? This is not the view of the writer to the Hebrews who says: “They did not receive the things promised; they only saw them and welcomed them from a distance.” (Heb. 11:13) From this we can reasonably conclude that they understood and believed in their future resurrection, a resurrection confirmed by Jesus (Lk. 20:37) quoting the words of God to Moses at the burning bush (Ex. 3:6).

The writer to the Hebrews states that when God tested Abraham by asking him to sacrifice his son, Abraham complied, believing “that God could raise the dead”. The same writer also states that Gideon, Barak, Samson, Jephthah, David, Samuel and the prophets (and unnamed “others”) were all commended as faithful, “yet none of them received *what had been promised*”. Although we are not given the circumstances of God’s promise to all of these individuals, we are told that they all died in the expectation that it would be fulfilled, which requires their resurrection.

Alexander says that the teaching about the resurrection is not “*developed*” in the OT under the old covenant. But the evidence in the NT shows that any *apparent* lack of evidence in the OT does not mean that evidence is actually absent. What may be lacking is our perception of the evidence, as demonstrated by the preaching of the gospel by Jesus and the apostles, which included resurrection from the dead based on the OT (Lk. 20:27–38; Acts 2:29–32; Acts 24:14–15 and 1 Cor. 15:1–4).

Belief in a resurrection is a fundamental aspect of the gospel of salvation, as most if not all Theistic Evolutionists would agree. How is it then that God could announce “the gospel in advance to Abraham” (Gal. 3:8), but not include in this a revelation about resurrection? Any lack of awareness of the teaching about the resurrection in the OT on our part does not permit us to assume that it is absent. The lack of awareness among the disciples of OT teaching about the resurrection

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of Jesus was chided by him. He made it clear that the teaching was there if only they could see it.

He said:

“How foolish you are, and how slow of heart to believe all that the prophets have spoken! Did not the Christ have to suffer these things and then enter his glory?” (Luke 24:25)

The evidence of Scripture shows that Alexander is making an unfounded assumption when he says that there is only the “hint of the possibility” of resurrection in the OT.

### Death in the New Testament

Much of what Alexander writes about the NT teaching at the end of the section entitled ‘Physical death’ in Chapter 11 we agree with, including his statement:

“Unless we first die physically, we cannot obtain our resurrection bodies by which means we inherit God’s fulfilled kingdom. The only exception to that would be if Jesus comes again while we are still alive.”<sup>37</sup>

However his assertions about the NT teaching regarding “spiritual death” are very misleading, and his interpretation of the passages he quotes is not supported by the scriptural evidence he puts forward.

It is true that there are references in the NT to death, dying and being dead that are not about physical death. For example the words of Jesus, “Let the dead bury their own dead” (Lk. 9:60), do not make sense if we assume the “dead” in both cases are physically dead. We would agree that the first of those who are dead are those who are spiritually dead, described by the apostle Paul as “dead in transgressions and sins ... by nature objects of wrath.” (Eph. 2:1–3)

But the use of the metaphor of ‘death’ to describe those “without hope and without God in the world” (2:12) does not justify Alexander’s application of “spiritual death” to those passages where the plain meaning is physical death, especially where those passages relate to death through Adam as the consequence of sin.

In support of his idea that death in Eden was ‘spiritual death’ Alexander quotes the words of Jesus, “... if anyone keeps my word, he will never *see death*.” (John 8:51) He says that Jesus is not describing physical death but contrasting ‘*spiritual life*’ with ‘*spiritual death*’.<sup>38</sup> It is unclear how Alexander has reached this conclusion, since a cross-reference to the words of Jesus to Martha explains what he meant.

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Jesus told her:

“I am the resurrection and the life. He who believes in me will live *even if he dies*; and whoever lives and believes in me *will never die*.” (John 11:25–26)

Given Jesus' reference here to "resurrection" and "life" it is reasonable to assume that he is contrasting these with *physical* death and not *spiritual* death. He is making the promise to all who believe in him and keep his word, that even if they die they will be resurrected to have eternal life (John 6:40 cf Rev. 20:6). Currently those who believe and have died “sleep in the dust of the earth” (Dan. 12:2), about whom Paul writes: “We believe that God will bring with Jesus those who have fallen asleep in him.” (1 Thess. 4:14) Paul also addresses what will happen to “whoever lives” and “will never die” when he says:

“According to the Lord's own word, we tell you that we who are still alive, who are left till the coming of the Lord, will certainly not precede those who have fallen asleep. ... the dead in Christ will rise first. After that, we who are still alive and are left will be caught up together with them in the clouds to meet the Lord in the air. And so we will be with the Lord for ever.” (1 Thess. 4:15–17)

Likewise when we examine Alexander's assertion that Paul is referring to 'spiritual death' when he uses the phrase “the law of sin and death” (Rom. 8:2)<sup>39</sup>, we find it is not supported by the context. Earlier Paul wrote: “... the sinful passions aroused by the law were at work in our bodies [spiritual death], so that we bore fruit *for death*.” (Rom. 7:6) And again: “Who will rescue me from this *body of death*?” (Rom. 7:24), and “... if you live according to the sinful nature [spiritual death] *you will die*.” (Rom. 8:13) These passages all refer to physical death.

Earlier in this chapter we quoted Alexander writing about what he believed Paul meant by death in Romans 5. Quoting the words of Paul in Romans 5:12 he inserts the word '*spiritual*' in phrases like, “sin and consequent *spiritual* death through one man”, and states, “*spiritual* death spread to all people on account of their own sinning.” However if we look carefully at the words of Paul in Romans 5:15–19 we shall see that he is making several important statements which explain that he understood the 'death' that resulted from Adam's disobedience to be physical not spiritual.

He wrote:

“But the gift is not like the trespass. For if the *many died by the trespass* of the one man, how much more did God's grace and the

## Chapter 8: A TE understanding of Adam and biblical death

gift that came by the grace of the one man, Jesus Christ, overflow to the many! Nor can the gift of God be compared with the result of one man's sin: *The judgment followed one sin and brought condemnation*, but the gift followed many trespasses and brought justification. For if, *by the trespass of the one man, death reigned through that one man*, how much more will those who receive God's abundant provision of grace and of the gift of righteousness reign in life through the one man, Jesus Christ! Consequently, just as *one trespass resulted in condemnation for all people*, so also one righteous act resulted in justification and life for all people."

If we extract from this passage the words relating to death and the sin of Adam we shall be able to see what sort of death Paul is referring to, by comparing the language he uses. By removing other parts of Paul's reasoning we are left with the following:

For if the many *died by the trespass* of the one man;

The judgment followed *one sin* and *brought condemnation*;

For if, *by the trespass* of the one man, *death reigned* through that one man;

Consequently, *one trespass resulted in condemnation* for all people.

In these verses Paul is saying that the one trespass, sin or disobedience of Adam, has resulted in condemnation and death. We will assume there is general agreement that the one trespass/sin/disobedience of Adam is his eating of the tree of the knowledge of good and evil. The issue which we need to resolve however is this: is the condemnation and death that Paul writes about, *spiritual* as Alexander believes, or is it *physical*?

The answer to this question is extremely important because like all Theistic Evolutionists Alexander believes physical death existed in the human population long before the 'Adam' introduced in Genesis. This means that 'Adam' (see earlier for who Alexander thinks he might have been) was a mortal, dying creature when we first read about him in Genesis 2. Therefore, according to Theistic Evolutionists, physical death cannot be what God meant when he said to 'Adam', "But you must not eat of the tree of the knowledge of good and evil, for when you eat of you will surely die."(Gen. 2:17)

The Greek word Paul uses, translated 'condemnation', only appears here (Rom. 5:16–18) and in Romans 8:1. It is the word *katakrima*, which according to the Vine's Expository Dictionary means:

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“... the sentence pronounced, the condemnation” with a suggestion of the punishment following.”<sup>40</sup>

It is closely related to the word translated ‘judgment’ (v16) (Gk *krima*), and to another Greek word (*katakrino*) also translated ‘condemn’ and ‘condemned’. A brief review of the use of these words shows that they are used in the context of death which is physical, not spiritual:

“The Son of Man will be delivered over to the chief priests and the teachers of the law. They will *condemn* him to death.” (Matt. 20:18)

“Jesus straightened up and asked her, ‘Woman, where are they? Has no one *condemned* you [to death by stoning]?’ ‘No one, sir,’ she said. ‘Then neither do I *condemn* you,’ Jesus declared.” (John 8:10–11)

“By faith Noah, when warned about things not yet seen, in holy fear built an ark to save his family. By his faith he *condemned* the world [to death by flood].”

“If he [God] *condemned* the cities of Sodom and Gomorrah by burning them to ashes, and made them an example of what is going to happen to the ungodly...” (2 Pet. 2:6)

“Now we know that God’s *judgment* against those who do such things is based on truth. So when you, a mere human being, pass judgment on them and yet do the same things, do you think you will escape God’s *judgment*?” (Rom. 2:2–3)

What is the “judgment” that Paul refers to in Romans 5:16 that brought “condemnation”? Is it the removal of Adam and Eve from the Garden of Eden with its tree of life (Gen. 3:22–24), which Alexander describes as “one of the most vivid pictures of spiritual death anywhere in the Bible”?<sup>41</sup> Or is it what precedes that action, when God speaks to the serpent, the woman and then the man following his question: “Have you eaten from the tree from which I commanded you not to eat?” (Gen. 3:11)

What follows is a series of pronouncements or judgments by God culminating in his words to Adam:

“By the sweat of your brow you will eat your food *until you return to the ground*, since from it you were taken; for dust you are and to dust you will return.” (Gen. 3:19, cf Ps. 90:3)

However Alexander doesn’t think these words of God to Adam are a consequence of his sin. He says:

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“The reminder to the man that he will return ‘to the dust’ (verse 19) seems not to be a consequence of his disobedience, but rather a reminder that sweating away to extract crops from the earth is actually quite appropriate *when we recall that Adam is destined to return to the earth anyway.*”<sup>42</sup> (emphasis added)

This conclusion is not being argued from scriptural evidence, but is an example of Alexander imposing on Scripture his presupposition that Adam was already dying because death was part of Adam’s evolutionary history. For him ‘spiritual death’ is the primary consequence of Adam’s sin, whereas we believe Scripture teaches that although sin brings alienation from God (Col. 1:21), the judgment of God that brought condemnation was the sentence of physical death.

From examining the context of other uses of ‘condemnation’ and ‘judgment’, we can be confident that when Paul writes about death in Romans 5:12–19, he is writing about physical death. This is also confirmed by Romans 5:21 where he says:

“Just as sin reigned in death, so also grace might reign through righteousness to bring eternal life through Jesus Christ our Lord.”

Here he is drawing two comparisons:

1. Spiritual – between sin, and grace through righteousness;
2. Physical – between death, and eternal life.

There is no obvious comparison being made here between *spiritual* death now and *physical* eternal life in the future at the resurrection. We might add that the physical death Paul is writing about here is eternal death, contrasting with eternal life through Christ.

A straightforward reading of Paul’s use of death, die and died in relation to Adam and sin is that he means physical death, that is, the cessation of life, not spiritual death.

For example:

“Christ died for the ungodly.” (Rom. 5:6)

“Nevertheless death reigned from the time of Adam to the time of Moses, even over those who did not sin by breaking a command, as Adam did.” (Rom. 5:14)

“... death reigned through that one man.” (Rom. 5:17)

“What benefit did you reap at that time from the things you are now ashamed of? Those things resulted in death.” (Rom. 6:21)

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“For the wages of sin is death...” (Rom. 6:23)

At the risk of repeating ourselves, the reason the true meaning of death in these passages is so important is that these, and others, confirm that Paul believed physical death was a direct consequence of Adam’s disobedience. Alexander, however, wants us to accept that when death is attributed to Adam’s sin, the Scriptures allow for the *possibility* that that death is spiritual and not physical. He argues this because he believes there was a long period of evolutionary development during which humans were already dying, and not conscious of any moral responsibility until the “concept of sin began to be understood by some.” This theistic evolutionary idea has no basis at all in the whole of the Scriptures. (See also Chapter 6, Walton’s view of sin and death.)

Finally, Alexander’s views on the second death need not be examined in the scope of this study except to comment that the description of the second death as “the lake of fire” (Rev. 20:14), suggests something rather more destructive than “*the spiritual death that continues on after this life.*”

## Conclusion

Alexander’s understanding of Adam (and Eve) is founded on the assumption that the natural sciences have proved that modern humans originated from a very large population of humans through common descent, and not through the creation of a special and unique original pair. From this belief he has sought in particular to explain what both testaments mean by death in order to resolve any conflict between the Bible and evolution. However we have shown that his views demonstrate a lack of understanding about the hope of the gospel in the OT, and that they stretch the clear meaning of NT teaching beyond credibility.<sup>43</sup>

We conclude our consideration of this version of theistic evolution with Alexander’s own acknowledgement:

“The two tentative models presented here may be seen as a work in progress. ... Both models might be false and a third type of model might be waiting in the wings ready to do a much better job; let us hope so.”<sup>44</sup>

His uncertainty about his own alternatives to the historical reliability of Genesis 1–3 demonstrates the weakness of his argument. If the Scriptures taught a creation theology that was consistent with evolution

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then it should be possible for at least one writer to explain that theology lucidly and with conviction. On the contrary, Theistic Evolutionists are unable to articulate any agreed model of creation through evolutionary processes that is consistent with the whole of God's revelation in Scripture.<sup>45</sup> To compensate for the significance of this uncertainty they frequently claim that what one believes about Genesis doesn't really matter.<sup>46</sup> This is a position we reject.

### Notes and references

- 1 Alexander, D., *Creation or Evolution: Do We Have to Choose?* Monarch Books, 2nd Ed, 2014, p. 300
- 2 Ibid, p. 303. Alexander does not believe that there were only 8 left on earth after the flood. He says, "It was the people of God who were saved in the ark, just as today baptism continues to symbolise salvation for every believer (1 Pet. 3:20–21). And those who were saved and eventually emerged onto dry ground to experience a renewing of their covenant with God (Gen. 9:11–17) were not the genetic progenitors of the world's population, but the spiritual progenitors of all those who since that time have experienced God's saving grace. Once again, seeking to impose a scientific (in this case genetic) account upon an ancient, theological text is simply barking up the wrong tree." This contradicts the words of God "I am going to put an end to all people ... to destroy all life under the heavens, every creature that has the breath of life in it. Everything on Earth will perish" (Gen. 6:13–17), words which clearly Peter believed were true when he wrote, "By these waters also the world of that time was deluged and destroyed" (2 Pet. 3:6). Because human genetic studies have not until recently supported the idea of there being such a small number, Theistic Evolutionists do not accept the historical reliability of the Genesis account.
- 3 Wright, N.T., 'Excursus on Paul's Use of Adam' in *The Lost World of Adam and Eve, Genesis 2–3 and the Human Origins Debate*, InterVarsity Press, 2015, p. 177.
- 4 *Creation or Evolution*, p. 358.
- 5 Ham, K., Ross, H., Haarsma, D.B., Meyer, S.C., Stump, J.B., *Four Views on Creation, Evolution, and Intelligent Design*, Zondervan, Grand Rapids, Michigan, 2017, p. 113.
- 6 <https://biologos.org/articles/genetics-theology-and-adam-as-a-historical-person>, Alexander, D., 2010.
- 7 Ibid.
- 8 Ibid.
- 9 Ibid.
- 10 Ibid.
- 11 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 856.
- 12 *Creation or Evolution*, p. 198.
- 13 Ibid, p. 312.
- 14 Ibid, p. 306.
- 15 Ibid, p. 308.
- 16 Ibid, p. 310.
- 17 Ibid, p. 306.
- 18 Ibid, p. 312.
- 19 Ibid, p. 313.
- 20 Ibid, p. 315.
- 21 Ibid.
- 22 Ibid, p. 318.
- 23 Ibid, p. 362. Celia Deane–Drummond, Professor in Theology at the University of Notre Dame, agrees; "Recognition of that religious dimension in all things and particularly the capability for divine awareness as such would have dawned very slowly on human

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- beings". *Evolution and the Fall*, p. 42. Also p. 83; "Did the first humans who began to develop moral and religious consciousness ..... "fall" into sin?" Richard Middleton Professor of Biblical Worldview at North–Eastern Seminary, Rochester, NY. Both writers are Theistic Evolutionists.
- 24 Views very similar to Alexander's were put forward by Christadelphian Ralph Lovelock in 1964 in a series of talks entitled "The Origin of Man". He stated that Adam was a representative of other human–like creatures that pre–existed him, who were ignorant of God and to whom he made known his way of life after he sinned, and with whom he subsequently intermarried. As with the views of Alexander, Lovelock's views were pure speculation, having no basis in Scripture at all.
- 25 *Creation or Evolution*, p. 361.
- 26 *Ibid*, p. 330.
- 27 *Ibid*, p. 343.
- 28 *Ibid*, p. 348.
- 29 *Ibid*, p. 331.
- 30 In considering this issue Collins asks, "How would we access the presence of historical truth claims in a narrative? ... Does the book show an interest in historical people and events? At the very least we can say that the genealogies of Genesis show the link between the original pair and the generation that entered Egypt, and Genesis is part of the larger narrative of the Pentateuch, which has an interest in historical events. ... We would further consider how competent readers from the same culture have taken the narrative. In the case of the Bible this would include the rest of the Old Testament, extrabiblical Jewish material, and the New Testament. All of these take the material as history." Collins, C.J., *Genesis 1–4 – A Linguistic, Literary, and Theological Commentary*, P&R Publishing Company, Phillipsburg, New Jersey, 2012, p. 251–252
- 31 *Theistic Evolution*, p. 861. In Chapter 28, Section III entitled, "Figurative and Theological Literature", p. 856–863, John Currid, Professor of Old Testament, provides evidence for the historical reading of Genesis.
- 32 We repeat the belief which we stated earlier, that Genesis 1–3 should not be categorised solely as historical, since as Scripture it communicates many other aspects of divine revelation through its literary styles.
- 33 Perry, A., *The Doctrine of Salvation*, Willow Publications, 1992, p. 12. In the section entitled External Coherence, Perry comments, "The motivation for doubting the early chapters of Genesis stems from the surrounding contemporary scientific culture. This has overturned the historical frame of reference within which Jewish and Christian theology is placed as a whole", p. 14.
- 34 *Creation or Evolution*, p. 308.
- 35 *Ibid*, p. 310.
- 36 *Ibid*, p. 306.
- 37 *Ibid*, p. 312.
- 38 *Ibid*, p. 313.
- 39 *Ibid*, p. 314. This view is also supported by Deborah B Haarsma *Four Views on Creation, Evolution, and Intelligent Design* p.150
- 40 Vine, W.E., *An Expository Dictionary of New Testament Words*, Marshall Morgan Scott, 1981, p. 222.
- 41 *Creation or Evolution*, p. 312.
- 42 *Ibid*, p. 326.
- 43 Commenting on Alexander's models and his view of Biblical death, Collins states, "The difficulty with his position is twofold, however: first he has assumed too easily that human capacities could arise in the natural course of evolution. As I have already argued, one need not be a Christian to see how hard it is to get a human being; in my conversations with evolutionary biologists who are not Christians, I have found those who readily acknowledge this point. The second difficulty is that, not being a Bible specialist, he is at the mercy of whatever sources he chose to use, and his Biblical sources have, in my judgement, misled him." Collins, C.J., *Did Adam and Eve really exist? Who they were and why it matters*, Inter–Varsity Press, Nottingham, England,

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2011, p. 126–127.

44 <https://biologos.org/articles/genetics-theology-and-adam-as-a-historical-person>.

45 For example, commenting on interpretations of Adam and Eve as spiritual hominids such as expressed by Alexander, Enns completely disagrees stating, "That way of thinking allows evolution and Genesis to coexist somewhat but eventually proves inadequate for me. One reason is that it does little to ease the tensions with the Bible, for a hybrid of modern and ancient accounts of human origins is hardly what the Bible depicts: two humans created specially by God. This hybrid view does not adhere to the Bible but rewrites it." Enns, P., *The Evolution of Adam – what the bible does and doesn't say about human origins*, Brazos Press, Grand Rapids, Michigan, 2012, p. xiv. Christadelphian Theistic Evolutionists argue that inconsistencies in their beliefs about Genesis 1–3 only mirror the differences that exist among traditional Christadelphian Creationists, e.g. between those who accept the earth is very old and who believe there may have been previous creations that were destroyed, and Young Earth Creationists who believe that the earth and universe are only about 6000 years old. However it is important to note that such differences held by Creationists do not challenge an acceptance that God created current life on earth in 6 days as described in Genesis 1, that Adam and Eve were the first humans created as described in Genesis 2, or that sin and death came into the world as described in Genesis 3. However these are disputed in some aspect or other by Theistic Evolutionists/Evolutionary Creationists, whether Christadelphians or not.

46 "Adam never existed, and this fact has no impact whatsoever on the foundational beliefs of Christianity. ... our faith is based only on Jesus Christ, his sacrifice on the cross, and his bodily resurrection from the dead – and not on a historical Adam." Lamoureux D. O., *Four Views on The Historical Adam*, Matthew Barrett, Ardel B. Caneday (Eds), Zondervan, Grand Rapids, Michigan, 2013, p. 38. "When at that 'great and terrible Day' we are called to give account of our lives, our precise beliefs about Adam and Eve will not, I suspect, be a major feature of the questions asked." *Creation or Evolution*, p. 287



## CHAPTER 9: CONCLUSION TO THE THEOLOGICAL ARGUMENTS

In the preceding chapters we have set out the beliefs about Genesis 1–3 held by a range of Theistic Evolutionists. Theistic evolution starts from the assumption that in the modern world the opening chapters of the Book of God’s Word can only be understood correctly by accepting that biological evolution is the appropriate understanding of the Book of God’s Works. In other words, in theistic evolution, science trumps Scripture.

As the evolutionary biologist Francisco J Ayala expresses it:

“... beliefs that transcend the proper scope of religion and make assertions about the natural world that contradict scientific knowledge; such statements cannot be true.”<sup>1,2</sup>

It is important to recognise the implications of this for the authority of the Bible as the Word of God. All who accept theistic evolution are in effect saying that there is a whole area of knowledge, especially regarding human existence, about which they do not allow the Bible to speak with authority. They will allow the Bible to speak with authority about the hope of salvation (NT), but not about the origins of those who are being saved, the origin of human death, the origin of human morality, and the foundations of that salvation through the life, death and resurrection of the ‘second’ Adam. Such a limitation on the authority of the Bible leaves the door wide open for further erosions of its teaching when it does not conform to the scientific thinking of the day. As one writer notes,<sup>3</sup> regarding the authority which is afforded to science but not Scripture, science is assumed to correct Scripture, but “the notion that Scripture might correct our scientific notions is never entertained for a moment.”<sup>4</sup>

We made it clear at the beginning of this book that we believe theistic evolution is not based on the Word of God. We stated that denying the historical reliability of Genesis 1–3 (and more) is like playing ‘biblical Jenga’, where removing pieces which impact upon essential biblical doctrines eventually undermines the whole truth of the Bible. On reflection, a better analogy for the inter-connectedness of Genesis and

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the rest of Scripture would be a wooden Chinese puzzle, in which the carefully intersecting pieces have to be assembled in the correct order, or a stable shape cannot be achieved. Using this analogy, those espousing theistic evolution are experimenting with the pieces in order to find a new method of construction. The variations proposed by Theistic Evolutionists demonstrate the absence of a coherent alternative to treating Genesis 1–3 as historically reliable. We have examined some of these alternatives and find that none of them ensures that all the pieces fit together as they were designed to do.

It is the inter-relationship between the Genesis account of creation and the rest of Scripture which is the cornerstone of our conviction. By our careful consideration of the words of Jesus and the writings of the apostles, we have shown that only the historical view of Genesis 1–3 is consistent with the message of salvation proclaimed in the whole of the Scriptures. Theistic Evolutionists however, do not believe this. For example Denis Lamoureux says:

“Adam never existed, and this fact has no impact on the foundational beliefs of Christianity.”<sup>5</sup>

Denis Alexander goes even further, saying that Christians who regard evolution as anti-God are “embarrassing and bring the gospel into disrepute.”<sup>6</sup> This opinion illustrates the strong desire among Theistic Evolutionists for unity regarding the understanding of Genesis, because they believe that theistic evolution makes the gospel message more accessible and relevant in the modern world. They believe that an acceptance of biological evolution encourages more people to come to faith and that conversely a conviction in the historical truth of Genesis discourages people, and young people in particular. This is the position taken, in particular, by those involved with BioLogos, as illustrated by Deborah B. Haarsma who says:

“At BioLogos, we present evolutionary creation as a faithful option for Christians and a reasonable option for scientists. ... Thus, evolution is not a world view in opposition to God but a natural mechanism by which God providentially achieves his purpose. Many people who encounter the BioLogos perspective have been brought to a *deeper* faith in Christ as they consider evolution and the Bible together.”<sup>7</sup> (emphasis original)

Concern that believing in the historical reliability of the Genesis account of creation negatively affects the appeal of the gospel message is utterly unfounded for the vitally important reason that it is not we who do the calling, but God. Our responsibility in that calling, however, is to be clear in our presentation of the truth of God’s Word,

## Chapter 9: Conclusion to the Theological Arguments

and that includes being clear about what we believe about Genesis and why. Modern attempts to harmonise science and the Bible are like the attempts of the early Christians to appeal to Greeks by adopting aspects of Greek philosophy. Both are attempts to make belief more appealing for the masses. But God is not concerned about numbers. He is concerned about faith based on truth.

Our appeal to those attracted to any version of theistic evolution is to recognise that it has serious implications for understanding biblical teaching about sin, death and the atonement through the death and resurrection of Christ, all of which are fundamental to the gospel.

In Part 1 of this book we have shown that the gospel message, which runs through the Bible, is based on the historical reliability of the Genesis account and demonstrates that it is the inspired Word of God. However the all-pervasive influence of ideas about evolution in the media and education may still lead some readers to be concerned that scientific 'evidence' appears to cast serious doubt on the Biblical account.

In Part 2 we will address these understandable concerns. We will show that although widely promoted, the evolutionary understanding of the Book of God's Works is seriously flawed. We will demonstrate that far from calling the Genesis account into question, science shows that there is no viable alternative to the Creation account, and in which, therefore, we can have absolute confidence.

### Notes and references

- 1 Ayala, F.J., *Darwin's Gift to Science and Religion*, Joseph Henry Press, 2007, p. 172.
- 2 The words of Augustine (354–430) Bishop of Hippo in his treatise, *On the Literal Meaning of Genesis*, are quoted by several Theistic Evolutionists (Christadelphian and others, e.g. Alexander, Francis Collins and John Lennox), as a warning to Christians who make assertions about the natural world that are seen as beyond the scope of their knowledge or the proper scope of religion and which will, in their opinion, make the message of the gospel less attractive to non-believers. The quotation from Augustine most often used in this way is, "Now, it is a disgraceful and dangerous thing for an infidel to hear a Christian, presumably giving the meaning of Holy Scripture, talking non-sense on these topics [aspects of the natural world]; and we should take all means to prevent such an embarrassing situation, in which people show up vast ignorance in a Christian and laugh it to scorn." Augustine, *De Genesi ad Litteram*, 1.19.39, Taylor, ref. 6 p. 42. However given that Augustine's views on Genesis have been interpreted in a wide variety of ways (Chaffey, T., *Answers Research Journal* 4 (2011):89–101) it would be unwise to critique historical creationism based on a particular interpretation of his writings. Andrew Sibley states, "Theistic evolutionists and progressive creationists should be more careful in how they use it [the quote from Augustine above] against creationists because there is a danger of taking it out of its own context. Superficially it seems an easy tool to use against opponents, but the wider context points in other directions that are distinctly challenging for all of us. It ought to be noted that those who hold to a literal reading of Genesis are closer to the heart of Augustine's teaching than opponents believe." *Lessons from Augustine's De Genesi ad Litteram—Libri Duodecim*,

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- Sibley, A., *Journal of Creation* 27(2) 2013, creation.com. Peter Harrison also concludes, "For Augustine, while knowledge of the natural world is a good thing, preoccupation with it is a clear example of a misplaced love ... Were Augustine to pass judgement on the priorities of our own age, he might suggest that our present veneration of scientific knowledge is a manifestation of the misplaced priorities that he constantly warns against ... the fetishizing of certain forms of highly regarded intellectual activities. This, perhaps, is something that we can learn from religiously motivated opponents of evolution, however mistaken we may believe they are in their views about creation and how it relates to science." Harrison, P., in *Evolution and the Fall*, Edited by Cavanaugh, W.T., Smith, J.K.A., Wm B. Eerdmans Pub Co., Grand Rapids, Michigan, 2017, p. 209–226.
- 3 Colin R. Reeves, [https://www.researchgate.net/profile/Colin\\_Reeves](https://www.researchgate.net/profile/Colin_Reeves), Emeritus Professor of Operational Research, Coventry University, UK and author of *Genetic Algorithms: Principles and Perspectives: A Guide to GA Theory* (with Jonathan Rowe) which was the first systematic treatment of evolutionary algorithm theory.
  - 4 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (eds), *Theistic Evolution, a Scientific, Philosophical and Theological Critique*, Wheaton, Ill., Crossway, 2017, p. 714.
  - 5 Lamoureux, D.O., *Evolutionary Creation: A Christian Approach to Evolution*, Wipf and Stock Publishers, Eugene, Oregon, 2008, p. 367.
  - 6 Alexander, D., *Creation or Evolution: Do We Have to Choose?* Monarch Books, Oxford, 2nd Ed, 2014, p. 462.
  - 7 Haarsma, D.B., *Four Views on Creation, Evolution, and Intelligent Design*, Ham, K., Ross, H., Haarsma, D.B., Meyer, S.C., Stump, J.B., eds., Zondervan, Grand Rapids, Michigan, 2017.





## **PART 2: THEISTIC EVOLUTION FROM A SCIENTIFIC PERSPECTIVE**



## CHAPTER 10: INTRODUCTION

As pointed out in Part 1, theistic evolution, or evolutionary creationism, is the belief that in some way God used biological evolution to create life on earth. Theistic evolution is a world view which claims that the modern view of evolution and the teachings of Scripture, particularly with regard to Genesis and the Gospel, are compatible.

There are many versions of theistic evolution, but the one thing all variants have in common is that they all subscribe, in one way or another, to evolutionary ideas. Theistic Evolutionists assume that scientific theories are the only way to interpret Scripture, and in an attempt to meld God's Word with modern ideas they propose a variety of ways in which God interacted with the universe, the Earth and life on it.

This means that the beliefs of individual Theistic Evolutionists vary in respect of how much God intervened, if he did at all. But as the first part of this book has made clear, all Theistic Evolutionists claim that the first few chapters of Genesis when considered as historical fact are inaccurate and should not be taken literally. Instead they prefer to believe that life came about by evolutionary means, and that man was not a special creation.

Therefore, since Theistic Evolutionists rest their faith on evolutionary ideas, it is important that we examine this area in some detail. Clearly, if evolutionary claims are wrong, then the claims of Theistic Evolutionists must be false. It is true that they might argue that this does not follow, since an all-powerful God could overcome the problems of evolution. But the fact is that He told us that He was the Creator and that He created. It seems reasonable, therefore, to believe that.

### **A road map**

In the next chapter we will give a simple definition of evolution, explain a little of the terminology, and then briefly explore the opinions of leading evolutionists about their own discipline and the fact that they themselves admit that there is an absence of evidence for evolution.

## A Challenge to Theistic Evolution

We explain why, in the face of this lack of factual support, evolutionists persist in their beliefs.

We then look at the variations of belief amongst Theistic Evolutionists, particularly in respect of how much they think God intervened in the production of living things, if he did at all, and we finally give reasons as to why we should not be afraid of believing in true science, provided we can separate it from human speculation.

In order to make this subject a little more relevant to people coming fresh to it we have looked at several popular websites purporting to offer proofs of evolution, and to begin with have examined the examples given there. One typical site is “Evolution: frequently asked questions.”<sup>1</sup> Writing on the first page Richard Peacock lists five ‘proofs’: the universal genetic code, the fossil record, genetic commonalities, common traits in embryos, and bacterial resistance to antibiotics. Another site added the direct observation of evolution as another ‘proof’.

To cover all the ‘proofs’ of evolution would require a very large book, which, incidentally, has already been written. This is *Theistic Evolution*,<sup>2</sup> already referred to in the first part, a very comprehensive compilation from about 30 authors, but which is rather technical. We have opted to limit our examples of claimed proofs to those more commonly used and have included an analysis of some others which we hope will be useful to those believing in a Creation.

Briefly looking at the examples as given on the website (we consider some of the issues more fully later):

1. **The universal genetic code** is supposed to be a strong indicator that everything developed from a single initial organism. The reality, however, is that this is no more an indicator of evolution, as it is commonly presented, than claiming that since most road vehicles are made from steel, run on tyres and have internal combustion engines they were all the product of spontaneous ‘evolution’. What common DNA powerfully indicates is design and planning by a Creator, an idea which is backed up by the immense complexity and efficiency of the DNA system of inheritance, something which could never have come about by chance.

2. **The fossil record** is claimed to show a smooth and gradual transition from one form of life to another. In point of strict fact this is exactly what it does not show, and why Nilas Eldridge, a very authoritative evolutionist, once lamented that “evolution always seems to be going on somewhere else”,<sup>3</sup> in other words not where

palaeontologists were searching in the rocks. The 'gradual transition' idea has never actually been proved, not even closely, and there are vast numbers of examples of the sudden arrival of organisms, long periods where nothing appears to happen and then abrupt extinctions, all of which explains Eldridge's comment.

3. **Genetic commonalities** are used to claim, for example, that since man has 96% of genes common with chimps, 90% with cats and so on, similar features have similar (evolutionary) origins in the DNA. To begin with, these figures of common genes are now being revised downwards. But if bones, skin, blood, muscles and the rest of what we are made turns up in other animals because they are the best materials to do the job, it is hardly surprising that the genetic instructions for making them are also present. However, as above, this is as much an argument for design as it is for undirected evolution.

Further, as Denton amply shows in his book, *Evolution, a theory in crisis*, the problem is that there are plenty of examples of very similar structures in apparently closely related animals which are not produced by the same DNA. This is very difficult to explain from an evolutionary standpoint. What is more, the 'genes' do not act as individual entities, each producing a single protein as was once thought, but are lengths of DNA which merely act as instructions for starting materials which are then cut up, rearranged, and spliced in a vast number of ways to produce all the substances which make up an organism.

4. **Common traits in embryos** is a claim that all 'higher' animals, in other words more complex ones such as birds and mammals, show identical structures in their embryos. Frankly, this is quite appalling. This myth was started by Haeckel in the 19th century, and was thrown out by serious evolutionists decades ago. One leading evolutionist actually labelled the idea as 'atrocious'. That it is still used by those trying to prove evolution indicates that they really do struggle for solid evidence and that they don't keep up with the literature.

5. **Bacterial resistance to antibiotics** is claimed to be an example of evolution, in that until quite recently it was believed that this resistance came about through mutational improvements in the DNA. In fact, quite remarkably, recent research has conclusively shown that such resistance comes about not because DNA is *improving*, but because it is being *lost*, and also that bacterial resistance has little if anything to do with mutations. The simple fact is that we have no examples where DNA is becoming more complex and 'improving the breed'.

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6. It is claimed that **evolution can be directly observed**. But this assertion depends on what is meant by evolution. Variation is a well-documented effect in many organisms, but true evolution would require major change in the DNA. The problem here, without getting too technical, is that the control in the organisms of the same pieces of DNA can vary, and we now accept that this variation can be inherited by succeeding generations. But this is not DNA *change* and is therefore not evolution in the commonly accepted understanding of that word.

Where individual mutations do change the DNA, the biochemical evidence that we now possess shows far more devolution than evolution, and the evolution which occurs is very limited in scope. The crucial point is that the variation which we can observe would never produce new organisms, which is what would be required to prove the theory.

All the above are dealt with in more detail later, but are typical of the examples put forward to prove, or at least support, the idea of spontaneous, undirected evolution. However, before we more carefully analyse some evolutionary claims, we give a summary in chapter 11 of some basic issues. This chapter can be skipped if necessary, but might prove useful in providing a foundation for what follows.

We then look at a series of fallacies, claims really made in ignorance of important details, or those which are simply unsupported by the facts. Following these we give some examples from the living world, biological systems and organisms which show an incredible depth of design. These are examples which are very difficult if not impossible to explain if we assume that they came about without intelligent input.

Finally we look briefly at some philosophical and sociological issues, including that of faulty and fraudulent research, the mechanisms by which scientific research is published and how this process is used by unscrupulous individuals and institutions to suppress ideas. This is particularly relevant to our concerns, because this strategy on the part of evolutionists is a major contribution to the way they can shape the public's view of their subject.

Two final chapters cover the conclusion to the scientific arguments and an appeal. There are also a number of appendices, extending some of the topics covered in the main text, both theological and scientific, and which give a little more background to them.

## Notes and references

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- 1 <http://evolutionfaq.com/articles/five-proofs-evolution>
- 2 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, pp. 547–782.
- 3 Eldridge, N., *Reinventing Darwin*, Wiley, New York, 1995, p. 95.

## CHAPTER 11: SOME BASIC ISSUES

### Evolution: Change with Time

So first and foremost, what do we mean by this word evolution? Evolution in its simplest sense merely means change with time. With respect to living things, changes undoubtedly do occur over time, so in that sense evolution happens! But that statement, of course, has to be very carefully qualified.

We can talk about the evolution of the car, meaning how its design has changed over the years. Searching on the Web under 'Car Evolution' brings up many pages describing how, over time, the designs of cars have changed. Years ago the world's most prestigious science journal, *Nature*, actually published an article describing the evolution of the MG car. The article might have dealt with change, but such change certainly wasn't mindless and it had no connection whatsoever with the conventional belief in the evolution of living organisms.

Changes certainly occur in the living world, but the more crucial issues are firstly how *much* change occurs, secondly how *quickly* it occurs, and thirdly *how* it occurs, that is to say, what the mechanism is.

There are really two 'levels' of evolution in the living world. We have to distinguish between **micro-evolution**, which we would otherwise call variation and which undoubtedly occurs, and **macro-evolution**, which is claimed to produce much greater change over a much longer time period, leading to new living things. It is this sort of evolution for which there is no evidence.

It should be made clear from the outset that these terms, 'micro-evolution' and 'macro-evolution', are not found in evolutionary literature. They were coined by creationists to make clear the difference between documented variation and the claimed evolution of new organisms. It is hardly surprising that evolutionists do not use these terms since such people do not acknowledge any fundamental difference between variation and proposed full-blown evolution.

We need to have words to describe what we believe, and 'evolution' in this context is ambiguous. As we have not found and indeed are

unlikely to find anything else which serves, we have to fall back on the terms 'micro-' and 'macro-evolution'.

### Micro-evolution

Variation, or micro-evolution, is a very necessary part of life. An ability to change to a small extent is particularly important for plants. If environmental conditions change, say a drought in an area in which this was rare, animals can move, but plants cannot simply up sticks and find a more congenial place in which to live. So being able to change in a limited way could be vital for survival. But there is no scope here for the production of brand new living forms.

### Macro-evolution

Macro-evolution is very a different concept. Here we are faced with the claim that small changes in variation can be almost endlessly extended, producing new and very different organisms. But, as already stated, we have no evidence that this is possible. So why do we clearly see the evidence of *micro-evolution* or *variation*, but arguably have no evidence for *macro-evolution*? As we now know quite a lot about the mechanisms in the cell, we ought to be able, even if only in a simple way, to see why micro-evolution or variation can work, but macro-evolution cannot.

Considering the sort of pronouncements one comes across from time to time in the media, it might be thought rather surprising to claim that macro-evolution, that is the production of distinct new organisms, doesn't happen, but we give evidence for this in later chapters.

### Darwinism

Now in most people's minds, evolution these days is more or less the same as Darwinism. Charles Darwin was a biologist who, after much travel and observation, made his beliefs public in the middle of the 19th century in his book, *The Origin of Species*. Darwin wasn't the first to promulgate evolutionary ideas, and it isn't generally appreciated that Charles' grandfather, Erasmus Darwin, entertained ideas which we would today interpret as evolutionary.

Darwin had considerable help from people like Thomas Huxley. Huxley was a leading Victorian biologist and a Fellow of the Royal Institution, and has been called Darwin's Bulldog, because it was he who was really responsible for the promotion of Darwin's ideas. Darwinism describes Darwin's belief that all living things (or organisms, as they are generally referred to) started from just one that was very simple. It is important to note that he did not try to explain how the first living

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thing arose. He merely assumed that a very simple organism, a living thing, had just suddenly appeared.

He proposed that a huge number of very small changes over a very long period of time eventually produced organisms that are entirely different and more complex than their predecessors.<sup>1,2</sup> Darwin said that any tiny change, any that would have given the organism an advantage over those which did not have this change, would have made an organism more likely to survive and perpetuate that change. Central to Darwin's argument was that very small, advantageous changes improved the survival rates, and eventually changed the whole type of the organism.

Darwin based his ideas on breeding experiments. Careful breeding of plants and animals can indeed give rise to small variations, but Darwin assumed that these variations could be endlessly extended. He thought that this could explain the way in which completely new types of organisms had come into existence.

Darwin was strongly influenced by Thomas Malthus. Malthus argued that the human population would increase to the point where food shortages would hurt the poorer members. The lower classes would then suffer hardship and want, and they would have a greater susceptibility to famine and disease.<sup>3</sup> This would turn life into a prolonged fight, which only the fittest could survive. This was the 'Malthusian Catastrophe', associated with the famous idea that nature is "red in tooth and claw."

Darwin took up this idea and claimed that it applied to all organisms. The paradox is that this phrase, "red in tooth and claw", was used in Tennyson's famous poem<sup>4</sup> to illustrate his *doubt* about just that!

Darwin was also influenced by Charles Lyell, the 'Father of Geology', as he was once known, who wrote a book in 1830 called the *Principles of Geology*. Lyell was merely following another 18th century geologist called James Hutton,<sup>5</sup> who proposed the idea that the present is the key to the past. Hutton called his idea "uniformitarianism". Uniformitarianism is a belief that events occur at the same rate now as they have always done, and that there were no serious geological upheavals or changes in the past to interfere with changes. Darwin latched onto this idea because it supported his view that there were immense periods of time when living organisms could have slowly changed.<sup>6</sup>

Darwin combined these ideas from Malthus, Hutton and Lyell. Unfortunately for Darwin this came at the time when Malthus' gloomy

views were actually being overturned.<sup>7</sup> Malthus' ideas are now discredited because they are not supported by reality. Life is not a war. Used properly, the provisions of creation ensure enough for all. Although this may not have been true during the entire history of the Earth, even if we were to assume that the Earth has existed for much longer than 6000 years, there is no reason to suppose that there were any prolonged periods of food shortage during the Earth's history.

This means that Malthus' ideas cannot be used to support evolution. As the *Britannica* points out:

"At no point, even up to the final and massive sixth edition of [Malthus' work in] 1826, did he ever adequately set out his premises or examine their logical status. Nor did he handle his factual and statistical materials with much critical or statistical rigour."<sup>8</sup>

Equally, Hutton's and Lyell's ideas have fallen out of favour, and nearly all geologists now reject uniformitarianism as an explanation for Earth's geology.<sup>9</sup> This is partly because there is evidence of at least five huge meteor impacts or of massive volcanic eruptions. These caused enormous geological upheavals and their accompanying 'extinction' events on Earth,<sup>10,11</sup> which we look at later.

### Neo-Darwinism

When Darwin proposed his ideas he knew of no biochemical mechanism for the changes he was proposing, that is specifically how a cell or living organism could change so that its progeny could be better able to survive. Then, in 1953, Watson and Crick identified the structure of DNA, and they and others subsequently thought that they had found a mechanism which could justify their belief in macro-evolution. At first this view of evolution was known as the *synthetic theory of evolution*, but it later became generally known as 'new' Darwinism, or neo-Darwinism.<sup>12</sup>

It was believed that this new understanding of the mechanism of cell inheritance would pave the way to an understanding of how life evolved. Neo-Darwinians still claim, as did Darwin, that life evolved by many, very small changes, but they now claim that this was done by the *mutation* or change of the DNA. These mutations were then believed to have been acted upon by natural selection (explained later). The word 'evolution' these days is used as a synonym for macro-evolution and neo-Darwinism, and the term neo-Darwinism is now the most commonly accepted term for macro-evolution.

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### The absence of evidence

But it is a remarkable fact, and a well-kept secret, that evolutionists, and particularly neo-Darwinists, are not driven to believe what they do by the evidence. For example, palaeontologists, those scientists who study fossils, generally do not believe that the fossils support the ideas of neo-Darwinism. Some of the leading palaeontologists are quite clear about this.<sup>13</sup> It is also a fact that those who vigorously support neo-Darwinism in general admit that evidence isn't just lacking in a broad sense, it is more or less altogether *absent*. Indeed, according to some, it is a belief in the "wildly impossible".<sup>14</sup> Douglas Dewar quotes 22 assertions by Darwin, many disproved and none confirmed.<sup>15</sup>

Ehrlich and Birch, writing in *Nature* in 1967, made it quite clear that in their opinion neo-Darwinistic theory is a *dogma and unprovable*.<sup>16</sup> A dogma is defined as "a point of view ... put forth as authoritative without adequate grounds [reasons]."<sup>17</sup> De Vries, in his book *Species and Varieties: Their Origin by Mutation*, says that:

"A naturalistic [i.e. non-divine] explanation for living things, that is by evolution, is barren, and Darwin failed here as have all others since."<sup>18</sup>

Pierre-Alain Braillard says that evolutionary theory is of very little practical use in systems biology, and researchers actually use a design explanation.<sup>19</sup> Lynn Margulis, one time Distinguished Professor of Biology at Massachusetts University, has said that history will ultimately judge neo-Darwinism as "... a *minor twentieth-century religious sect* within the *sprawling religious persuasion* of Anglo-Saxon biology."<sup>20</sup> (emphasis added) Proponents of the standard theory, she says, "wallow in their zoological, capitalistic, competitive, cost-benefit interpretation of Darwin – having mistaken him. ... Neo-Darwinism, which insists on [the slow accumulation of mutations], is in a complete funk."

Niles Eldridge, mentioned above, and a previous curator in the Department of Invertebrate Paleontology at the American Museum of Natural History, has said that:

"No wonder palaeontologists shied away from evolution for so long. It never seems to happen. ... Evolution cannot forever be going on somewhere else, yet that's how the fossil record has struck many a forlorn palaeontologist looking to learn something about evolution."<sup>21</sup>

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These statements by leading evolutionists are just a few out of many which could be quoted.

Thomas Nagel, one of the world's foremost atheistic philosophers, has stated that the 'cultic' belief in neo-Darwinism represents "a heroic triumph of ideological theory over common sense."<sup>22</sup> A cult is defined by Merriam Webster's Dictionary as "a system of religious beliefs and ritual." This is pretty strong language for one who doesn't believe in a Creator. Thomas Nagel is 'one of their own', world renowned, here giving his frank opinion of neo-Darwinism.

As W R Thompson stated in his introduction to the 1958 reprint of *Darwin's Origin of Species*:

"Historical arguments are invoked [in evolutionary thinking] even though the historical arguments are lacking, fact and fiction intermingling in an inextricable confusion."<sup>23</sup>

That this hasn't changed is shown by the fact that sixty years later, in a podcast in 2018, biophysicist Cornelius Hunter stated that with Darwinism:

"The theory is always driving the ideas *in spite of the evidence*."<sup>24</sup> (emphasis added)

And when the fossil evidence seemed to contradict him, Darwin himself decided that the fossil evidence itself was at fault.<sup>25</sup> This illustrates just how shaky the foundation of Darwinism really was, even in the mind of its originator.

In 1976 Arthur C. Custance, Fellow of the Royal Anthropological Institute and Member of the New York Academy of Sciences wrote that:

"Virtually all the fundamentals of the orthodox evolutionary faith have shown themselves to be either of extremely doubtful validity or simply *contrary to fact*... so basic are these erroneous assumptions that the whole theory is now largely maintained *in spite of rather than because of the evidence*... As a consequence for a great majority of students, and for 'the public', it has ceased to be a subject of debate. Because it is both *incapable of proof* and yet may not be questioned, it is virtually untouched by data which challenge it in any way. It has become in the strictest sense *irrational*... Information or concepts which challenge the theory are almost never given a fair hearing. Evolutionary philosophy has indeed become a state of mind – one might almost say a kind of mental prison – rather than a scientific attitude... To equate one particular

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interpretation of the data with the data itself is evidence of mental confusion.”<sup>26</sup> (emphasis added)

To show that this opinion of leading evolutionists has not significantly changed, Dennis Noble, a senior figure in the biological world, writing in the journal *Experimental Physiology* in 2013, stated that:

“... all the central assumptions of the Modern Synthesis [often also called Neo-Darwinism] have been disproved.”<sup>27</sup>

These evolutionists are stating frankly that the evidence for neo-Darwinism does not exist. But if this is so, how can evolutionists claim that they are doing science? Science deals with provable evidence, that is to say unarguable facts, and if there are no real facts which support any form of evolution, then evolution itself is unscientific, and it becomes *scientism*.

And evolution gets very poor marks even from some of its other chief protagonists. University of Chicago evolutionary biologist Jerry Coyne once said that, “In science’s pecking order, evolutionary biology lurks somewhere near the bottom, far closer to phrenology than to physics.”<sup>28</sup> Phrenology was a study of the bumps on human heads, in the misunderstanding that something could be learned from them about personality.

It is significant that even Richard Dawkins gets himself in a bit of a tangle over the question of whether there is any evidence for evolution. On the website ‘www.edge.org’ he was asked: “What do you believe is true *even though you cannot prove it?*” His reply: “*I believe, but cannot prove, that all life, all intelligence, all creativity and all design anywhere in the universe is the direct product of Darwinian natural selection.*”<sup>29</sup> (emphasis added) If he cannot prove the point then he hasn’t arguable evidence for it.

But in his book, *A Devil’s Chaplain*, Dawkins advises his then 10-year-old daughter only to accept beliefs *supported by evidence*. He goes on to argue for clear facts in any belief in science, to accept only evidence rather than authoritarian claims for anything, (with which we would heartily agree). So he admits that his conviction of the truth of evolution is only based on faith, and that therefore evidence for evolution is lacking, but he is quite happy to tell his daughter not to do what he does. This exposes some deep contradictions in his mind.

Dewar makes the cogent point that evolutionists avoid arguments and works by anti-evolutionists, preferring the opinions of non-experts.<sup>30</sup> In

this he is implying that we should not be influenced in our thinking by authoritarian claims.

### **So why is neo-Darwinism believed?**

But if evidence for neo-Darwinism is badly lacking, why do people believe it? The simple answer is that it is a consequence of a refusal to believe in a God. D.M.S. Watson, writing in the foremost scientific journal *Nature* in 1929, quoted Thomas Huxley, a leading and highly intelligent Victorian biologist, who said that he did not believe in evolution because it was probable, or even because he thought it possible, but because the only alternative was *unacceptable*.<sup>31</sup> This is not a scientific stance or argument, but a faith-based one. If he had to frame his conviction in this way it shows that there was a lack of hard evidence, else he would have quoted it. So his conviction came from faith, not fact.

It is important to understand that this attitude began life quite innocently. Four centuries ago the philosopher Francis Bacon decided that, since the purpose of a thing couldn't be explained by an investigation of it, science would restrict itself purely to material discovery and pass the problem of purpose over to philosophy. As Michael Behe points out,<sup>32</sup> from this point science and philosophy sat uneasily alongside each other, until Darwin threw out purpose altogether. Darwin wrote:

“There seems to be no more design in the variability of organic beings and in the action of natural selection, than in the course which the wind blows.”<sup>33</sup>

Far from demonstrating the absence of design, and therefore of purpose, Darwin merely assumed it (“There seems...”). He certainly did not prove it. But this view has now become a controlling idea in science, to the point where Francis Crick, in his book, *The Astonishing Hypothesis*, can claim that our sorrows, memories, ambitions, personal identity and free will, are merely and solely the product of a lot of neurons.<sup>34</sup> Needless to say, purpose and design imply mind, and the sort of mind which has to be involved in producing the stunningly complex life forms which we see around us can only realistically be divine.

Arthur Eddington, the famous astrophysicist, once said that he found the idea of the ‘Big Bang’ “philosophically repugnant”, because it implied an act of creation (which was rather curious because Eddington was a Quaker). Before about 1930 the prevailing belief was that the universe was unchanging, neither expanding nor contracting.

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A number of discoveries from that time on pointed more and more to the idea that the universe had a beginning, and had expanded ever since, implying a point of creation.

Even the term the 'Big Bang' itself was coined by another astrophysicist, Fred Hoyle, as a derogatory label, because as an atheist he couldn't abide the inevitable implication of the existence of a Creator if the 'Big Bang' were to be proven true. In 1989 John Maddox, long-time editor of *Nature*, wrote an editorial entitled, "Down with the Big Bang."<sup>35</sup> Maddox decried the Big Bang theory as "philosophically *unacceptable*," saying that it gave aid and comfort to "Creationists." Shades of Thomas Huxley, no less. Maddox adroitly avoided committing himself on the scientific acceptability of the idea. The position of such people, then, is an arbitrary choice driven by faith, not an informed one.

If one refuses to believe in a God one is forced back to materialism, which is a belief that there is nothing in the universe except radiation, forces and particles of matter (atoms essentially) which are purely randomly affected. Therefore, as much as anything, the acceptance of materialism, and therefore neo-Darwinism, sits very comfortably alongside refusal to believe in a God. But it has to be said that materialism is self-contradictory, and this is dealt with in the philosophical issues in Chapter 14.

A Deity must be far more intelligent and powerful than ourselves, and there is good evidence that His rejection by man is basically due to man's pride. But paradoxically, a belief in neo-Darwinism appears to hurt man's pride as well. In their *Invitation to Biology*, Curtis and Barnes write:

"The real difficulty in accepting Darwin's theory has always been that it seems to diminish our significance... Evolution asked us to accept the proposition that, like all other organisms, we too are the products of a random process and that, as far as science can show, we are not created for any special purpose or as part of any universal design."<sup>36</sup>

Nevertheless, many evolutionists choose to reject the idea of a God, preferring to accept their apparent cosmic insignificance. The paradox here is that by accepting a God such people could eventually enhance their significance.

This refusal to believe in a God is the basis of all modern scientific thinking, or scientism. In his book, *The Fifth Miracle*, Paul Davies, a leading physicist, writes:

“I shall argue that it is not enough to know how life’s immense structural complexity arose; we must also account for the origin of biological information. As we shall see, scientists are *still very far* from solving this fundamental conceptual puzzle. Some people rejoice in such ignorance, imagining that it leaves room for a miraculous creation. However, it is the job of science to solve mysteries *without recourse to divine intervention*.”<sup>37</sup> (emphases added)

In 1997 Richard Lewontin, a leading evolutionary geneticist, stated that:

“We take the side of science [naturalistic] in spite of the *patent absurdity of some of its constructs*, in spite of its *failure to fulfill many of its extravagant promises* of health and life, in spite of the tolerance of the scientific community for *unsubstantiated ‘just so’ stories*, because we have an a priori commitment to materialism ... and ... materialism is an absolute for we *cannot allow a divine foot in the door*.”<sup>38</sup> (emphases added)

These claims, that ‘it is the job of science to solve mysteries without recourse to divine intervention’, and that ‘we cannot allow a divine foot in the door’, illustrate a stance adopted by most scientists simply because they are not prepared to believe in a God.

It doesn’t have to be that way. To begin with it is the very opposite of the attitude and position taken by many of the ‘naturalists’ of preceding centuries, all of whom were highly intelligent and most of whom were committed creationists. It is a very modern constraint imposed by a few influential and powerful figures, and it is used as a demarcation argument, a means whereby perfectly sound arguments are sidelined to prevent serious discussion.

Both of these last two quotations are illuminating in the context of the way people think and what drives them. They reject the concept of a God, which means that for them we are the most intelligent beings in the universe. They then further argue from this that we are logically not responsible to any higher power and that we can make our own rules for life. This is a very seductive idea, and let it be said, a very dangerous one.

### **The fear of religion an additional driving force**

Another reason given for a belief in neo-Darwinism is the fear of religion. This surfaces as a claim that religious people are responsible for all the ills of the world.<sup>39,40</sup> It appears to be why Richard Dawkins

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holds neo-Darwinistic ideas, and it comes out very clearly in his book, *The God Delusion*. In this book he blames most of man's grievous wickedness on religion, and specifically on Christianity.<sup>41</sup>

He quotes the case of the police strike in Toronto in 1969 in which over 100 people were eventually arrested for arson and theft. He then makes the assumption that Toronto was a basically Christian city, and that it was, therefore, Christians who committed the offences. Toronto at the time housed approximately 3 million inhabitants, but according to Dawkins the only sinners, the only ones who happened to be caught and prosecuted, were 100 Christians. We have to ask whether this opinion is not rather biased.

In his book he unaccountably misses Hitler's responsibility for the death of at least 11 million civilians, and many soldiers, or Stalin's for at least as many, or Mao's for 20 million. None of these leaders were remotely religious in a Christian sense, and it has been shown that Hitler's actions almost certainly stemmed from an acceptance of Darwinism.

It should be pointed out that the numbers of deaths quoted here are all very conservative. The authors of *The Black Book of Communism* state that between Hitler, Lenin, Stalin and Mao Tse Tung, Darwin's corrosive principles laid the foundation for the murder of more than *125 million people* in the 20th century.<sup>42</sup> Other estimates are even higher. This argues far more for atheistic evil than for religious wrongdoing. Admittedly in past centuries much blood was shed in the name of religion, but this actually had very little if anything to do with religion and was in pursuit of naked power, which is emphatically *not* what true Christianity is about.

### **Those who reject neo-Darwinism do not necessarily use religion as their reason**

One of the accusations of neo-Darwinists against any who don't believe the current dogma is that the anti-evolutionary position is driven by a belief in a God. That this is false is shown by the fact that there are many anti-Darwinian scientists who are not religious in that sense, or weren't when they became disillusioned with neo-Darwinism, even if some have become deists or theists since.

An example is Michael Denton, referred to elsewhere in this book, whose disillusion with neo-Darwinism came when he was studying at London University for his PhD. His particular problem was the mammalian red blood cell's ejection of its nucleus (see later), a process which defies any explanation in terms of evolution by many

minute, progressive stages. He remains a committed evolutionist, but not a neo-Darwinist. For the record there is no evidence that he is a believer in a Christian (or any other) God.

Douglas Dewar was another who gave the lie to the myth that Creationists are bound to church indoctrination of their youth and cannot accept evolution for religious reasons. Here was a man who was an esteemed scientist and evolutionist, with a long scientific and publishing career, authoring a number of books *supporting* evolution, before he turned against Darwinism when he was about 50. He was so adamant in his subsequent scientific objections to evolution that he devoted himself to the formation of the British Evolution Protest Movement and helped lead it for 12 years in his 70s and 80s. In addition, he debated leading evolutionists, and wrote books that are still highly regarded today.

### **The power of the paradigm**

Paradigms are ruling ideas, ideas which, for one reason or another, have been adopted by the majority and which colour much of the thinking which goes on in a subject. As Michael Behe points out, this has happened in the past over concepts which seem intuitively obvious to people, but which have been later proven to be quite incorrect.

The prime example he cites is that of the 'ether', a substance which, it was once supposed, was the medium in which electromagnetic waves moved. As soon as it was shown that radiation came as waves, it was 'obvious' that there should be something which 'waved', just as water supports waves. The person who proposed this was none other than James Clerk Maxwell, the greatest physicist of his age. He even calculated its density and stiffness, devoting numerous pages to his calculations in several issues of the *Philosophical Magazine* of 1861.<sup>43</sup> But in 1887 Michelson and Morley conducted their classical experiment which proved beyond a shadow of doubt that there was no 'ether'. What was so 'obvious' was completely wrong.

This is not the only major error in the history of even relatively modern science. In one way there is nothing wrong with this, if only because science progresses by this sort of path. Where it becomes unacceptable is when a paradigm is held against the evidence. And once the paradigm takes hold, and especially if there are other, more powerful reasons to espouse it, the idea becomes well-nigh impossible to shift or replace. This is essentially what has happened in the case of neo-Darwinism. To hold this particular paradigm and convince oneself

## **A Challenge to Theistic Evolution**

that it still has value, all one has to do is to ignore the details. This we hope to show.

### **The position of Theistic Evolutionists**

So we come to Theistic Evolutionists and where they stand in all this. Whether they realise it or not, the basis of modern science, and particularly of neo-Darwinism, is of great importance for Theistic Evolutionists. Modern science, or, as we have said above, *scientism*, is absolutely atheistic in its view. But here again is a paradox. How can anyone claiming to be a *theist*, a believer in any sort of God, subscribe to what essentially is an *atheistic* viewpoint? So what do Theistic Evolutionists believe?

We have found this a little difficult to nail down, but our difficulty really stems from the fact that there are several variants of theistic evolution.

### **The variants of theistic evolution**

Some Theistic Evolutionists contend that God set up the universe in such a way that life was possible, but in which He did not actually create life. In this version of theistic evolution there was no guarantee that life would appear, or, even if that happened, that man would eventually result.

The next 'level' of theistic evolutionary belief is that God produced very simple life, but then let the random forces of physics and chemistry take over to produce more complex beings, those which inhabit Earth now. This view admittedly sidesteps the monumental problems of life's beginning, but it still rests solidly on evolution for the production of life's complexity. The main page of the Biologos website says:

“We believe that the diversity and interrelation of all life on earth are best explained by the God-ordained process of evolution with common descent. Thus, evolution is not in opposition to God, but a means by which God providentially achieves his purposes.”

Theistic Evolutionists talk about 'evolutionary design',<sup>44</sup> but unfortunately when this is analysed carefully it is a contradiction in terms. Evolution, as espoused by most modern biologists, cannot be a product of design, because, as we shall see, it is essentially randomly driven, which logically rules out design. True design can only be a product of intelligence. 'Evolutionary design' is also an implied rejection of the belief that specific divine acts were the cause of creation.

Beyond this form of theistic evolution we have various levels of conviction. For example, some Theistic Evolutionists claim that God intervened in the evolutionary process in different ways to produce various types of animals and plants. This variety of theistic evolutionary thinking sometimes involves a belief that “God would never do it that way”, whatever “it” was, implying that we have some handle on the way God thinks and works, and that he wouldn’t do it as we might.<sup>45</sup> The possibility that He created us and imbued us with a modicum of His own intelligence seems to have been missed, somehow.

Another view is articulated by Francis Collins who, in his book, *The Language of God*, proposed that from God’s perspective the outcome of evolution could “be entirely specified ... while from our perspective” evolution “would appear a random and undirected process.”<sup>46</sup> Randomness might not be quite what we think it is, but this view still subscribes to the basic evolutionary idea. Fundamentally, Theistic Evolutionists see creation as an evolutionary process, largely or wholly unguided.<sup>47</sup>

### Science and the Bible

So theistic evolution is an attempt to reconcile materialistic, evolutionary ideas with the teaching of the Bible. In point of strict fact it is perfectly possible to hold both the Bible and *true* science as complements to each other, and to believe both without trying to strain any scriptural meanings. Indeed it would be surprising if this were not so. If God has made everything, it is inconceivable that true knowledge, real, unbiased and unadulterated science, could in any way be at odds with His Word.

The word ‘science’ comes from the Latin *scientia*, meaning ‘knowledge’, and therefore science is information about the world around us. In other words it is factual knowledge, pure and simple. Therefore we can have no quarrel with science as knowledge. True knowledge includes God and all that he has done and still does do. This is science in the fullest and most accurate sense of that word. We actually find that true science, embodying straightforward facts, wholly supports the biblical message which we have believed for many years.

But the modern view is that current knowledge and modern speculations and beliefs are the only reliable source of truth, rather than God. This, as we have said, is just scientism, and its protagonists specifically exclude any input from a Creator. Unfortunately it is therefore scientism to which Theistic Evolutionists appeal and upon which they rest their convictions. A modern evolutionist has to start

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with the belief that random effects at least partly if not wholly control the development of new creatures, including man. It is this view to which Theistic Evolutionists subscribe.

Most variants of theistic evolution present a picture of a heavenly Father as a very 'hands off' Deity, one who set everything up in the beginning and then at some point stood aside and just let things happen, or interfered minimally. But this presents a view of a God who is aloof and disinterested in his work. It is the complete opposite of the fatherly image of the Deity given us in the Bible. It is perhaps this aspect of theistic evolution which disturbs the present writer most, denying as it does God's intimate care, love and mercy.

### **The scope of our material**

As Theistic Evolutionists rest their case on a belief in evolution, and particularly in neo-Darwinism, it is clear that we need to address this subject. It should be made clear at the outset that what follows is not intended to be a definitive treatise against neo-Darwinism. This has been done more thoroughly elsewhere, for example in the book *Theistic Evolution*, as mentioned earlier.<sup>48</sup>

This second part of the present publication, then, gives those who do not have the advantage of a scientific education, or the relevant knowledge, some of the scientific arguments against evolution, and therefore against theistic evolution. References to relevant material are provided if any wish to follow up the scientific arguments.

### **The limitations of our approach**

In this part we do not intend to give a primer for life's biochemistry and the precise details of DNA action. There are several very good publications listed at the end of this book which deal with the biochemistry in detail, and to which readers are referred if they require more information. We shall include arguments which involve DNA mutations, but only in a general sense. We would like to make it absolutely clear that this is merely a problem of detail and not because the biochemistry does not support Creation.

In point of strict fact, when understood clearly, biochemistry provides very powerful proofs against any form of evolution. It has disproved evolutionary claims in several crucial areas. But there are some very potent arguments against evolution which do not involve a detailed knowledge of cell workings, at least not down to any detail of the DNA chemistry.

It should be made clear that evolutionists have never justified their claims, either from the detailed biochemistry or from any other point of view. The biochemical evidence that we do have often refutes evolutionary hypotheses.

Many references in the text are drawn from main-stream journals and those of atheistic evolutionists. It was important to use these resources in order to show that the evidence we are presenting is unbiased. Even quotations taken from writers sympathetic to the Creation account are backed up in the quoted texts with many other references.

### **Conclusion**

In this section we have described what is meant by evolution and explained the main terms used. We have also given some indication that evolutionary ideas are not supported by any substantial proofs, to the point where even mainstream, leading evolutionists admit the absence of any real evidence.

We have also shown that the underlying reason for a belief in evolution stems directly from a refusal to accept that there is a God and that He created life in all its forms. We have defined the world view of materialists and shown how it is used to support the belief in neo-Darwinism.

The next chapters present some challenges to the generally accepted view of our origins. With such a huge subject, and it has many facets, the main problem was knowing both what material to present and the best way to present it.

We felt that a simple way was to confront the problems head-on, and deal with some of the claims made and a few of the fallacies held and used by evolutionists in their attempts to support their beliefs. Having done that, in subsequent chapters we shall look at some solid counter-arguments, and facts that don't fit in with the current evolutionary scenario, and also some cases which actually refute the neo-Darwinian idea. There is a somewhat arbitrary separation of examples here, but the more general ideas are dealt with first, and then we give some specific examples of challenges to neo-Darwinism. With literally thousands of possible examples we can only cover relatively few, but we hope we have given enough to make our point.

# A Challenge to Theistic Evolution

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# CHAPTER 12: COMMONLY ACCEPTED FALLACIES

1. That fossils show a steady increase in the complexity of organisms
2. That we can trace human 'origins' from apes
3. That all biologists accept that micro-evolution explains macro-evolution
4. That mutations provide changes which improve the organism
5. That natural selection makes organisms fitter for survival
6. That Vestigial Organs show evolution
7. That embryology recapitulates the evolution of the organism
8. That there was a Last Universal Common Ancestor (LUCA)
9. That rocks can be accurately dated
10. That biological (or any) information can be generated by random processes
11. That life could arise spontaneously
12. That the Galapagos finches and the Peppered Moth show macro-evolution

## Introduction

It is not generally realised that we only need one clear impossibility, just one, solitary, clear disproof of macro-evolution, of neo-Darwinism, to destroy that concept completely. For if we do find a clear disproof of neo-Darwinism, then another explanation for that particular object or process would have to be found, and we would have to start contemplating answers which are outside science as it is now practised.

We believe that we do have that disproof in the idea of the spontaneous generation of life, but it could be argued that this does

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not have anything to do with evolution, as the term is now generally understood. However there are many organic structures which evolution cannot explain, and which therefore act as disproofs.

We are not attempting to cover all evolutionary fallacies here, but to pick out some of those which are commonly used and which appear regularly in the media.

A typical case in point is human 'prehistory', as seen through an evolutionist's eyes. This appears in the media intermittently, but such reports are almost all promoted by a few scientists who like to showcase, and indeed have little choice but to do so if they wish to advance their careers. When these initial opinions are looked at critically by more mature academics they are almost always discredited, but their doubts and the frequent discarding of examples rarely if ever make it into the popular press. As a result, most people have a very distorted view of the subject.

Although it might appear somewhat arbitrary, we have separated the evidence against evolution into two parts. The first we have called fallacies, and the second called contra-evidence. A fallacy is "a deceptive, misleading, or false notion or belief, a misleading or unsound argument." There are many of these in neo-Darwinism, and a few of the most common are given below, with an explanation of why that particular argument or belief is false. The contra-evidence for the most part consists of examples of living organisms or structures within them which neo-Darwinism cannot explain.

For the purposes of our examination of evolution we will assume that the claimed time scales are correct, although whether the evidence supports this is debatable.

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### **Fallacy 1: That fossils show a steady increase in the complexity of organisms**

To start the ball rolling we will have a detailed look at the idea that the record in the rocks supports modern ideas of evolution, specifically neo-Darwinism. There are really several interconnected claims here, of which we will concern ourselves mainly with one.

The principal claim is that the position in rock layers (strata) of any fossil indicates its age, and that fossils in lower strata are older than those in higher strata. On the face of it this seems quite reasonable. However, this proposition at least partly depends on our ability to date rocks, which we will deal with later, and there are in any case serious anomalies and contradictions simply from the available fossil evidence. For example, large areas of rock strata are found crumpled up and apparently even overturned completely, which compromises and confuses any interpretation of anything embedded in them.

Neo-Darwinists also claim that simple organisms have produced the older fossils, and the more complex fossils are more recent. They also claim that fossils provide us with evidence of steady change from one organism to another over many millennia, and that these changes are smooth and consist of many tiny modifications which gradually build into new organisms.

However, each of these claims can be shown either to be extremely doubtful and the consequences of observer bias, or are diametrically opposed to observed facts. We shall look in detail at the last of these assertions, that smooth, steady changes can be seen in the rock strata.

Many people have been led to believe that the fossil record supports the idea that very small incremental changes eventually and steadily produced new organisms. But, if anything, the fossils show just the opposite. The fossil record shows a few, very large gaps between organisms, not very many small ones.

Further, when a change appears to have happened, the fossils provide abundant evidence that subsequently the organism did not change for many millions of years.<sup>1</sup> Even more significantly, those organisms then apparently vanish from the fossil record equally suddenly. This picture is the absolute opposite of what we would expect from Darwin's notion of gradual change. If the fossils support one principle at all, it is 'saltation', that is to say, sudden large change. This is the very opposite

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of neo-Darwinism. It was absolutely rejected by Darwin himself, yet this is the evidence in the rocks.

Three writers state quite unequivocally that:

“...the fossil record is ... of no help with respect to understanding the origin and early diversification of the various animal phyla [major groups] ...”<sup>2</sup>

Mark Ridley, writing in the *New Scientist* in 1981, stated that the fossil record is not used by real neo-Darwinists in favour of their theory.<sup>3</sup> Stephen Gould of Chicago University has stated that there is an absence of fossil evidence and that it is impossible to imagine intermediates.<sup>4</sup> Intermediates are the supposed missing links between groups of organisms.

The paradox is that some Theistic Evolutionists have accepted the mistaken idea that the fossil record supports evolution at the very time when the neo-Darwinists themselves are turning against it. The evidence from a mainstream evolutionist is that text books contain pure fantasy.<sup>5</sup>

### **The fossil record testifies to unchanging life forms**

According to the palaeontologists' dating claims, ants have been around essentially unchanged for at least 140 million years (my),<sup>6</sup> crocodiles for 50 my,<sup>7</sup> beetles for 100 my,<sup>8</sup> the basic insect body plan has been unchanged for 400 my<sup>9</sup> and coelacanths have survived for 390 my,<sup>10</sup> although it should be pointed out that the fossil record for this fish ends about 66 my ago. But this itself poses the rather pointed question of where it was between that time and 1938 when it was found swimming off the coast of East Africa.

According to neo-Darwinists, feathers have been around for about 200 my,<sup>11</sup> although the two-sided form has only been known from fossils in the last 135 my. The pentadactyl (five-fingered) limb, which is a characteristic of all vertebrates (fish, amphibians, reptiles, birds and mammals) appeared 400 my ago and has not fundamentally altered since. The basic vertebrate body plan appeared 600 my ago<sup>12</sup> and centipedes, all invariably with an odd number of segments and a unique poison claw, have existed essentially unchanged for 420 my, almost four fifths of the proposed time most life forms have been around.<sup>13</sup>

A fossil of a bat from the Eocene geological period, believed to be more than 50 my old, is the oldest full bat fossil we have, and is virtually indistinguishable from a modern bat.<sup>14</sup> The earliest ferns

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appeared about 360 my ago, and fossil ferns from 50 my ago look almost identical to the modern ones. The earliest water spider looks just like a modern one. There are literally scores of examples of this sort of stability, where animals and plants haven't changed over supposedly tens if not hundreds of millions of years.

Jerry Bergman, in his book, *Fossil Forensics*,<sup>15</sup> does a very thorough job of listing the statements of leading neo-Darwinists concerning the inadequacies of the fossil record with regard to theories of evolution. There are seemingly endless amounts of evidence for the shortcomings of the theory. Bergman includes such things as the fact that all so-called transitional fossils (intermediates) are almost indistinguishable from existing living or fossil types (p. 68).

Bergman goes on to show that insect palaeontology (palaeoentomology) is noted for its huge number of very well-preserved fossils, but there is a total absence of genuine intermediates or transitional forms. The insect complex eye, the wing, insect metamorphosis and body plan are unique and have no evolutionary history, that is to say they just appear abruptly in the fossil record.

The claims in published textbooks for the benefit of the public and students simply do not match the research literature in scientific journals. As a matter of strict fact, leading neo-Darwinists constantly bewail the lack of any indication of what 'happened', evolutionarily speaking, that is. The evidence is that all the complex insect systems appeared suddenly and from no previous simpler ones.<sup>16</sup>

This is a small part of Bergman's evidence, taken as it is from an immense number of references from leading palaeontologists, all experts in their particular fields. He works systematically through every one of the major classes of fossils. He particularly examines types and individual fossils which have been proposed as intermediate or transitional. He shows very effectively that, from the testimony of the neo-Darwinists themselves, much dissent and argument erupts between the believers in various schemes. This is an inevitable consequence of the lack of evidence. As Denton shows in chapter 5 of his book, *Evolution: a Theory in Crisis*, true intermediate or transitional forms, fossils and living, are arguably totally absent.

There are several problems which Bergman exposes. Firstly, there is no incontrovertible evidence for neo-Darwinian evolution. To begin with there is an almost universal absence of organisms which might even point generally to an evolutionary pathway. Secondly, it is not unusual to find that proposed ancestors are present *after* the appearance of the organisms that they are supposed to evolve into. Again, there is all too

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often an overlap in time between the ancestors and their proposed successors.

Incessant and often vitriolic arguments occur between believers in different theories, and it is not unusual for some very strange schemes to be put forward. This indicates some desperation on the part of researchers, which would be wholly unnecessary if the evidence was there. Virtually all fossils are recognisable as either organisms we see today, or are clearly in modern groupings with fully developed characteristics. Characteristics which are supposedly developing are simply not seen, either in fossils or in modern organisms. Finally, as more parts of a particular fossil are found, all too often the deductions change as to what it could have been.

### ‘Explosions’ and ‘radiations’

Alongside the incredible stability shown by living organisms is the evidence of large bursts of new life every so often. They are known as ‘explosions’ or ‘radiations’. The most well-known of these was the Cambrian explosion. Previous to the Cambrian geological period, and we are supposedly looking back about 600 million years, was the Ediacaran period. The most complex living things previous to that era appear to have been single-celled organisms, probably bacteria. There is no evidence that the basic animal and plant types which we see around us now existed at that point.

Then, in the Ediacaran period, just before the Cambrian, a number of very weird living organisms appeared. One of these looked so strange it was amusingly named *Hallucigensia*. They were quite bizarre, and we cannot connect them directly to anything which appeared previously or later, either fossil or living. Then just before the Cambrian era they all suddenly vanished. The Cambrian era was the time in which most of our well-known animal and plant types appeared, quite abruptly and apparently out of nowhere.

In 2019 there was argument about a curious Ediacaran fossil called *Dickinsonia*. The dispute was specifically as to whether it was ancestral to any animal in the Cambrian era which followed, or, indeed, whether it was even an animal. A careful examination of the evidence is on the Evolution News website.<sup>17</sup> The only consistent message from the neo-Darwinists’ camp is that of complete discord as to what it actually represents.<sup>18</sup>

Even assuming that the flawed dating scheme of the neo-Darwinists has any merit, the crucial point here is that the fossils do not show a steady increase in complexity, which is a foundational requirement of

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neo-Darwinism. If the fossils tell us anything at all it is that organisms were unchanging for very long periods of time, and then, on a number of occasions, there was a totally inexplicable bursting forth of new types of organisms. Below is a list of the officially accepted ‘explosions’ or ‘radiations’,<sup>19</sup> but do remember that this is merely using the neo-Darwinists’ own ideas of dates, and these change on a regular basis and largely depend on the palaeontologist to whom you are talking.

**The Origin of Life:** 4.1–3.8 billion years ago; the first cells appear very early in the earth’s life, at least, as dated by the systems in use.

**The Avalon Explosion:** 575–565 million years ago (mya); Ediacaran fauna. The Ediacaran animals were pretty weird, one way and another, but they had no ancestors and no obvious relationships to later life forms. The Ediacaran fossil *Dickinsonia*, put forward as an ancestor to some later animals, is now seen not to be a transitional species.<sup>20</sup>

**The Cambrian Explosion:** 540–515 mya, although this time period has been significantly shortened to about 10 my by discoveries in China; the sudden first appearance of animals representing twenty different phyla, which include almost all the major animal groups, subphyla and classes.

Difficulties for Darwinian evolution include the sudden appearance of a startling array of completely new animal forms with novel body plans, the absence of transitional, intermediate fossils which should connect to the very much simpler (and stranger) pre-Cambrian forms, and a pattern in which large and far-reaching differences in form arose before more minor, small-scale variations.

This last completely overturns the Darwinian mantra of small scale changes leading to larger ones. It’s the wrong way round. There is a total absence of all the modern major forms of life before the Cambrian; then in the Cambrian era they appear abruptly. There are clear gaps between these life forms in structure, but, according to Professor G.G.Simpson, the gaps between them will never be filled.<sup>21,22,23,24</sup>

**The Great Ordovician Biodiversification Event:** 485–460 mya; the explosive ‘diversification’ of marine life, called “Life’s second big bang” by O’Donoghue.<sup>25</sup>

**The Odontode Explosion:** 425–415 mya; tooth-like structures appear abruptly in the fossil record.

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**The Devonian Nekton Revolution:** 410–400 mya; an enormous expansion of actively swimming jawed fish and cephalopods (squids and octopuses).

**The Silurian-Devonian Radiation** of terrestrial plants: the sudden origin and diversification of land plants, described by one researcher as the “plant equivalent of the animal Cambrian explosion.”<sup>26</sup>

**The Carboniferous Insect Explosion:** 318–300 mya; a large range of winged insects suddenly appear without any known transitional forms.

**The Triassic Explosion:** approx 252 mya; many new orders and families suddenly appear.

**The Early Triassic Terrestrial Tetrapod Radiation:** 251–240 mya; the first representatives of major groups of modern tetrapod (four legged) animals appear suddenly.

**The Early Triassic Marine Reptile Radiation:** 248–240 mya; fifteen different families of marine reptiles appear abruptly, incidentally causing one expert in ichthyosaurs to seriously doubt the neo-Darwinian story, although he asked to remain anonymous.

**The Mid-Triassic Gliding Reptile Radiation:** 230–228 mya; the sudden appearance of gliding and flying reptiles.

**The Mosasaur Radiation:** last 25 my of the Upper Cretaceous; a huge expansion in these types of animals in size and occupation of ecological niches.

**The Radiation of Flowering Plants:** 130–115 mya. The seemingly sudden appearance and diversification of modern angiosperms (flowering plants, as distinct from ferns and conifers) deeply disturbed Darwin, who called it an “abominable mystery”.<sup>27,28</sup>

**The Radiation of Modern Birds or Avian Explosion:** 65–55 mya; 95% of modern bird types originated abruptly at the end of the Cretaceous period within 8 my, predated by only 4 types.<sup>29</sup>

**The Radiation of Modern Placental Mammals:** 62–49 mya; the first orders of placental mammals appeared abruptly without known precursors, and were already separated into their distinctive forms.

**The Origin of Genus Homo:** 2 mya: sudden origin of man with no gradual series of changes from earlier australopithecine species (Lucy), or any others, despite some modern claims.<sup>30</sup>

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I have listed all these to make the point that it isn't just the Cambrian 'explosion' which is believed to have shown a sudden burst of new life, although that one is probably the best known. It must be re-emphasised that all the above is based squarely on what could well be a flawed dating system. I repeat, we are merely using the neo-Darwinists' own convictions in this regard.

Darwin had no answer to the Cambrian explosion of the animals, or to that of the flowering plants. The new 'Cambrian animals' and the new plants needed huge amounts of new information in their DNA. Technically speaking the animals alone needed about *120 million* new bases of DNA. But if all this just popped into existence, which was necessary if the animals had enjoyed no ancestors, how did it happen? The mathematics of the change utterly defeats the idea that the Cambrian explosion came about solely by random means.

Rauff and Kaufman, in their book, *Embryos, Genes and Evolution*, confirm the above observations on the Cambrian 'Explosion'.<sup>31</sup> These include, "Highly complex animals ... all appeared in the Cambrian period without recognised ancestors", "Transitional forms are '*largely hypothetical*'", i.e. not found, "only by recourse to the fossil record do we gain a view of an organism's actual evolutionary histories", and "New morphological structures appear fully formed and are *not transitional*" (emphases added). There are so few facts about how the various multicellular body plans arose that there is little to restrain the imagination of neo-Darwinists. Equally, there is virtually nothing solid on which to base ideas. This, once again, is not science.

### So where are the transitional forms?

As Rauff and Kaufman make clear, what we don't find are genuine intermediates or transitional forms, the famed 'missing links'.<sup>32</sup> There is much argument about this business of intermediate or transitional forms, but it all turns on what any one person considers is transitional. Plenty of examples have been proposed in the past, and still are from time to time, but a transitional form remains very much in the mind of the proposer. It is usually a fossil which looks to a particular neo-Darwinist as if it might be a midway point between two groups of organisms. No attempt is made to analyse the proposal in any detail, and some fundamental mistakes have been made as a result. For this reason such proposals all tend to suffer from a rather short life in academia. Typical past proposals for intermediates were the *coelacanth* and *Archaeopteryx*.

### ***The coelacanth***

The *coelacanth*, before it was discovered swimming in the ocean off the coast of East Africa in 1938, was proposed as the transitional, 400 million-year-old, water-to-land-animal. We now know that it does *not* walk across the seabed on its admittedly rather strange fins. It also just happens to live at depths of between 100 and 500 metres, and when it was first caught and brought to the surface in 1938 it burst due to the lower surface pressure. This rather put paid to the idea that it was the first to climb out of its natural environment to occupy another considerably more forbidding one for a fish.<sup>33,34</sup>

The neo-Darwinists then had to rethink the ideas of how a fish became a land animal, and the replacement for the coelacanth at first was *Eusthenopteron*, another lobe-finned fish like the coelacanth. However, this has recently been demoted in favour of *Tiktaalik*, yet another, similar, oceanic denizen.

### ***Archaeopteryx***

*Archaeopteryx*, put forward as the reptile-bird link, was found, on more detailed and careful study, to be fully bird-like. It did have some unusual features, such as claws on its legs, but then so has the hoatzin, a South American bird, and the hoatzin is accepted by all authorities as a genuine bird.<sup>35</sup> Further, there is good evidence, on the neo-Darwinists' own time-scale, that clearly recognisable genuine birds lived some 75 million years earlier than *Archaeopteryx*.<sup>36,37</sup>

This, as mentioned earlier, is a common problem, where supposed ancestors are found living "too late." There is no evidence that birds could have descended from either theropods (dinosaurs) or reptiles, because the required changes would have been far too complex.<sup>38,39,40,41,42</sup>

Another example of an 'ancestor' appearing too late is that of *Eohippus*, the Dawn Horse. This, the supposed earliest horse type, has been found in strata considered more recent than those containing fossils of the Common Horse, *Equus*.

So there is a basic problem with all transitional or intermediate forms. Neo-Darwinists will search for a fossil animal or plant which they would propose as transitional between two different organisms. But they pay little or no attention whatsoever to habitat, physiology (body function) or biochemistry. The fossils don't exactly help us there, of course, because they only provide the skeletal structure. No in-depth studies are ever done to make sure that such an organism really does show

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transitional characteristics in all the important ways, and the *coelacanth* and *Archaeopteryx* are classic examples.

So when we hear that a transitional form between two fairly major groups has been 'found', or proposed, we should treat it with the utmost caution. The simple fact is that when everything is considered, no transitional forms are known between types beyond what we would understand as normal variation. That cannot be over-emphasised. Casey Luskin deals very thoroughly with this issue, particularly in regard to claimed ape-to-human transitions and the lack of credible intermediates, in chapter 14 of *Theistic Evolution*.<sup>43</sup>

The problem with the fossil record for neo-Darwinists is that we do not see many fine changes steadily appearing and disappearing. What we do see are distinct and long-lived types. Fossils attest, if anything, to sudden large changes and then long-term genetic stability, not steady genetic change. The features which define animal and plant types appear suddenly, stay around for a long time, and almost always vanish equally abruptly.

All the evidence that we have is that fossils do not show gradual change from one type of organism to another.<sup>44,45</sup> Further, there is an absence of major transitional forms. Stephen Gould, of Chicago University, made it clear that in his opinion the absence of any transitional forms is the "trade secret of palaeontology."<sup>46</sup> He and Niles Eldredge, both leading evolutionists, quite bluntly say:

"Phyletic gradualism [gradual evolution] ... was never 'seen' in the rocks."<sup>47</sup>

## Fallacy 2: That we can trace human ‘origins’ from apes

This subject is another one very commonly aired on the media and put forward as a ‘conclusive’ proof of evolution and of our origins as human beings. However, although one wouldn’t think so when following the media or reading textbooks, the ongoing debate about ‘human evolution’ is a very long way indeed from being settled. This subject also reveals much about the way in which science is conducted and the honesty or otherwise of its practitioners.

To give a typical example of the way in which some claim support for the theory, Theistic Evolutionist Ronald Wetherington, an anthropology Professor at Southern Methodist University in Texas, publicly stated in 2009 that human evolution has “... arguably the most complete sequence of fossil succession of any mammal in the world ...”, and “... is a nice clean example of what Darwin thought was a gradualistic evolutionary change.”<sup>48</sup>

However, when compared with the opinions of many of the more authoritative neo-Darwinists, this statement is rather surprising. In 2010 Bernard Wood of George Washington University stated in the *New Scientist* that:

“There is a popular image of human evolution that you’ll find all over the place... On the left of the picture there’s an ape ... On the right, a man ... Between the two is a succession of figures that become ever more like humans ... Our progress from ape to human looks so smooth, so tidy. It’s such a beguiling image that even the experts are loath to let it go. *But it is an illusion.*”<sup>49</sup> (emphasis added)

One wonders why people like Wetherington made the statement quoted above, for he must know of the present position. Chapters 13, 14 and 15 in Discovery Institute’s book, *Theistic Evolution*, give a thorough rundown of the modern state of play in this area, and exposes the conflicting nature of the evidence, the fragility of the arguments and the outright disagreements of the eminent palaeontologists themselves.

A piece by Günter Bechly on this subject, which is well worth looking up, is on the web at Evolution News, under the heading, “Fossil Footprints from Crete Deepen Controversy on Human Origins.”<sup>50</sup> His piece includes some of the newer finds of palaeontology that call

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established evolutionary ideas into question. Casey Luskin has also found that Wetherington's claims are without substance.<sup>51</sup>

Wetherington's claim is rarely supported by the academic literature, where the opposite opinion is very prominent. In 1995 Harvard zoologist Richard Lewontin spelled out the fact that one cannot put the fossils of apes and man into any sort of sequence:

“Despite the excited and optimistic claims that have been made by some palaeontologists, *no fossil hominid species can be established as our direct ancestor.*”<sup>52</sup> (emphasis added)

Incidentally, *hominids* are the group of primate animals which include the great apes and man, and *hominins* are the supposed near relatives of modern man, generally chimp-like creatures.

To put to rest any suspicion that a fossil hominin has been established as ancestral to man since Lewontin made that statement, or that Wetherington was party to new information, here is another quote, this time from 2016:

“... the fossil record bearing on the origin and earliest evolution of Homo is virtually undocumented ... the earliest populations of [man] ... emerged from *a still unknown ... species in Africa...*”<sup>53</sup> (emphasis added)

This amounts to saying, ‘We really haven't a clue’. Several other researchers state quite categorically that the favourite human ancestor in the eyes of many neo-Darwinists, *Australopithecus*, otherwise known as ‘Lucy’, is nothing of the kind.<sup>54,55,56,57</sup>

### ***Australopithecus* – ‘Lucy’**

In 1924 a fossil with supposedly humanoid features was discovered at Taung, South Africa, which was named *Australopithecus africanus* by Raymond Dart, who chose to believe that it was an early human ancestor. It was dubbed the ‘Taung child’.

*Ardipithecus ramidus*, one of the *Australopithecenes*, was discovered and named in 1994 by Tim White. The discoverer and his Ethiopian colleagues have since unearthed a nearly complete skeleton of the same creature. It can now be seen to be too chimp-like to be claimed as a human ancestor. It is no longer considered to be on the line from apes to humans. This animal was very similar to the pygmy chimpanzee.<sup>58</sup> There are a number of specimens of the previously named *Australopithecus*, and indeed a number of variants, but none come close to being human ancestors.

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In August 2019 *Nature* published a paper showing that two supposed species of *Australopithecus*, *A. anamensis* (now accepted as the earliest ‘version’) and *A. afarensis* were contemporaries for about 100,000 years and cannot therefore be used as an example of evolution of one species into another.<sup>59</sup>

As early as 1987, Richard Lewin, in *Bones of Contention*, said:

“[Lord Solly] Zuckerman had become extremely powerful in British science, being an adviser to the government up to the highest level. ... His Lordship’s scorn for the level of [in]competence he sees displayed by palaeoanthropologists is legendary, exceeded only by the force of his dismissal of the *Australopithecines* [‘Lucy’ and relatives] as having anything at all to do with human evolution. ‘They are just b##### apes,’ he is reputed to have observed on examining the *Australopithecine* remains in South Africa. ... While at Oxford, and then Birmingham universities, he had vigorously pursued a metrical and statistical approach to studying the anatomy of fossil hominids. ... It was on this basis that he underpinned his lifelong rejection of the *Australopithecines* as human ancestors.”<sup>60</sup>

The real problem with this subject, as indeed with evolution generally, was spelled out by W. Howells of Harvard in 1947:

“A great legend has grown up to plague both palaeontologists and anthropologists. It is that one of these wondrous men can take a tooth or a small and broken piece of bone, gaze at it, and pass his hand over his forehead once or twice, and then take a sheet of paper and draw a picture of what the whole animal looked like as it tramped the Tertiary terrain. If this were quite true, the anthropologists would make the FBI look like a troop of Boy Scouts.”<sup>61</sup>

That things don’t change in that regard, here is another quote, forty years later in 1987, from David Pilbeam of Harvard University:

“I am also aware of the fact that, at least in my own subject of palaeoanthropology, *theory – heavily influenced by implicit* [for which we can read preconceived] *ideas – almost always dominates data*. ... Ideas that are totally unrelated to actual fossils have dominated theory building, which in turn strongly influences the way fossils are interpreted.”<sup>62</sup> (emphasis added)

Lord ‘Solly’ Zuckerman again:

“We then move right off the register of objective truth into those fields of presumed biological science, like ... the interpretation of

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man's fossil history, where to the faithful anything is possible – where the ardent believer is sometimes able to believe several contradictory things at the same time. ... The *Australopithecine* ['Lucy'] skull is in fact so overwhelmingly simian [ape-like] as opposed to human that the contrary proposition [that apes and humans are very alike] could be equated to an assertion that black is white."<sup>63</sup>

In simple terms Zuckerman says that the idea that 'Lucy' was in any way human, or led up to humans, is the purest fiction. And that goes for many of the other proposals over the years for human ancestors. The Denisovans, *Homo erectus* and *Homo habilis* are now considered to be human, and the jury is still out on Neanderthal man, although most authorities accept that the Neanderthals were essentially human. But the gap between fossil human-like forms and true ape-like forms is very large. The current consensus is that there is no cross-over between the two.<sup>64</sup>

For an informed comment on the fossils, listen again to palaeoanthropologist David Pilbeam. He says, wryly:

"If you brought in a smart scientist from another discipline and showed him the meagre evidence we've got [to try to prove the connection between apes and humans] he'd surely say, 'Forget it; there isn't enough to go on.'"<sup>65</sup>

There are other references which could be quoted here.<sup>66</sup> And just to really set the evidence cat amongst the evolutionary pigeons, Richard Leakey, a leading anthropologist and the discoverer of several fossil apes in East Africa, in 1972 found remains which are unquestionably human but supposedly 2.5 million years old. This makes them older than some of their postulated ape-like ancestors.<sup>67</sup> Human remains, according to current neo-Darwinists, cannot be more than 2 million years old, and some of the possible 'ape ancestors' are believed to be more recent than this.

In April 2020, *Evolution News* carried an article showing that the previous decade had proved rather disappointing with respect to the 'evolution' of humans. The *Smithsonian Magazine* had published a report on the discoveries made between 2010 and 2019, headed: "These are the Decade's Biggest Discoveries in Human Evolution." Careful analysis revealed that things weren't quite as rosy as the *Smithsonian* writer implied.

As *Evolution News* pointed out: "... some of these big discoveries actually turn out to be instances where the evidence for human

evolution weakened, and the rest amount to slight revisions of previously held theories that don't say much about the core tenets of palaeoanthropology."<sup>68</sup>

### **Human-Chimp differences**

An associated area here, which supports the argument above, concerns the many differences between chimps and humans. The claimed similarities between them are "wildly overblown and highly misleading", according to Jon Cohen.<sup>69</sup>

It has been claimed that there is only about a 1.3% difference in gene content between humans and apes. In fact it is now known to be greater, but, even if that figure was true, this sort of comment is misleading anyway. The gene difference which supposedly makes us human as distinct from anything else is now being recognised as merely a small part of an immense and versatile 'construction kit' controlled from elsewhere. There is little or no evidence that the controls are the same or even similar in humans and apes, and the immense number of differences between humanity and the apes rather confirms this. The distinguished evolutionary biologist George Gaylord Simpson wrote in a 1949 classic, "It is not a fact that man is an ape, extra tricks or no."<sup>70</sup>

### **The Physiological and Anatomical Differences**

It should come as no surprise that our physiology and anatomy is profoundly different from that of chimpanzees, which are usually held up as being ancestral to us, or from a separate ancestor further back in time. We do not have the same reproductive biology. Our teeth develop more slowly after birth than chimpanzees' teeth do, and our young are born helpless and require prolonged maternal care. Our brains are larger and continue to develop long after birth, forming neurons (nerve cells) and connections at a rapid rate. In fact, new neurons continue to form throughout adulthood. Our musculature is weaker, with smaller bone insertion points. Our thyroid hormone metabolism differs. Our immune systems differ, and we get AIDS and malaria where chimpanzees don't. Our diets differ, and our intestines reflect that difference. We shed tears, but chimpanzees don't. We can swim and have a diving reflex, but chimpanzees can't swim. We have chins, chimpanzees do not.<sup>71</sup>

We walk and run upright. Our feet are different, ours being designed for walking and chimpanzees' for climbing. Our necks are longer, and the skull is set on top of the spine for balance and to enable us easily to look both forward and upward. Our rib cages move freely from side

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to side to accommodate our gait and expand to allow deep breathing during running.<sup>72</sup> Our shoulders are designed for throwing, while chimpanzees' are designed for climbing.<sup>73</sup> Our pelvis and hips are oriented so as to permit upright walking, our legs angling in so that our feet are underneath us. Our inner ear canals are oriented differently to increase our sense of balance. Our hands are designed for tool use, not knuckle walking. We have a poorer sense of smell but a greater tactile sensitivity in our fingertips. We have greater fine motor control, and our thumbs can touch the far side of our hands.<sup>74</sup> Bramble and Lieberman, in the journal *Nature*, list the changes necessary just for long-distance running. They include twenty-six anatomical and physiological differences.<sup>75</sup>

And then there are all the cultural and behavioural differences. We think about the past and plan for the future. We make intentional decisions. We can delay gratification for long periods. We engage in long-range trade. Adults play, dance and make music. We have mathematics and art. We domesticate animals and engage in agriculture. We wear clothing and engage in hospitality. We control fire and we measure time. We practise religion and bury our dead. We have empathy for others and altruism on a scale unknown in the animal world. We care for the infirm and the elderly.<sup>76</sup>

We see nothing like the human scale of behaviour in chimpanzees. Our culture is exceptional, even unique, by any standard of the animal kingdom. It is orders of magnitude more sophisticated than anything chimpanzees do. A paper by Ajit Varki and Tasha Altheide describes a hundred or more physiological and behavioural differences, some of which we have listed here.<sup>77</sup> Dewar also lists many human-ape differences in his small monograph, *Man: A Special Creation*,<sup>78</sup> and more in *The Transformist Illusion*.<sup>79</sup>

Above all, we have language and communicate symbolically,<sup>80</sup> and we write novels and poetry. Anyone who imagines that chimps' language skills get anywhere near our own really needs to read Steven Pinker's book, *The Language Instinct*, where he comprehensively demolishes that idea.<sup>81</sup> It should be made clear that Professor Pinker is a firm believer in evolution. Nevertheless he says that "most of the ambitious claims about chimpanzee language are a thing of the past." Chimps' sign language is mostly requests for food, and they do not, for example, distinguish between wanting a food item and where it is, or even make it clear that they are merely commenting on the food's existence. This is a world away from how even very young children use language, and even further from how children develop.

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There is no evolutionary explanation whatsoever for our intellect.<sup>82</sup> It has been asked how the ability to do complex mathematics helped hunters survive when chasing animals on the African plains. Neo-Darwinists don't even begin to address the so-called evolution of language, for which forty years of research have proved a total waste of time. In *Language Evolution*, a book published in 2003, the authors say that, despite rapid advances in many areas of science, we still know relatively little about the origins and evolution of this peculiarly human trait.<sup>83</sup> The book makes it clear that the experts in the field disagree very strongly with each other. In the first place they are unsure about what evolved (assuming that it did), which makes it very difficult to uncover how it may have happened. One of the fundamental problems is that so-called primitive languages are very complex, often considerably more so than supposedly 'modern' languages.

### Genetic differences

As was pointed out above, it has been claimed that there is only a 1.3% genetic difference between chimps and humans, and this figure is still quoted in the media. Even if this is correct, it is misleading, but in fact it is simply wrong. We now know that the genetic material of the DNA (the part of the DNA which codes for protein) is only a very small part of the total DNA anyway. So it is misleading to use *genetic* differences as a criterion for differences between any organisms. The rest of the DNA is almost certainly a highly complex control system. But in any case the figure of a 1.3% genetic difference is being seriously challenged by neo-Darwinists themselves. John Cohen, writing in *Science*, made this clear in 2007.<sup>84</sup> But the American Museum of Natural History was still using this figure of 1.3% as late as 2019!<sup>85</sup>

However, a year before Cohen published, another group was more specific, stating that the difference was at least 6%, that is about 1400 of 20,000+ genes.<sup>86</sup> But as indicated above, the percentage differences do not matter a great deal. It is the control system in the cell, extra to the protein-coding DNA, that is important and which significantly modifies the protein output, and it is this that alters the body form and the working of organisms.<sup>87</sup> This means that the same genetic material, the same DNA sequences, can be used to produce different proteins with very different functions in humans and chimps.<sup>88,89,90</sup>

On the *Evolution News* website there is an article summarising research reported in *Science Daily* in 2019 which adds emphasis to human uniqueness. Firstly even the (incorrect) figure of about a 1.3%

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difference between human and chimp genomes would involve literally millions of DNA mutations. Secondly: “Dozens of genes previously thought to have similar roles across species are in fact unique to humans.”<sup>91</sup> Unsurprisingly, the authors of the *Science News* research had to invoke ‘rapid evolution’ to justify their claim. Previously believed similarities between human DNA and that of fruit flies was also found to be overblown.

As Robert Melillo points out in his book, *Autism*, something like 85% of our genes are involved in the development and function of our brains.<sup>92</sup> It is true that a good proportion of these are also involved in the more basic properties and functions of cells generally. Despite that, this figure is extraordinarily high and illustrates the importance of our genetic make-up in brain formation and action. Apes do not have our mental abilities and even if their brains use 85% of their genes, they use them in very different ways.

So the idea that we are very similar to the great apes is simply false. There is no known, direct connection between them and human beings. The remarkable point is that, purely from a scientific standpoint, it is far more likely that we were created by an intelligent being than that we arose from a ‘lower’ form of life. As pointed out earlier, the favourite pictured sequence of a very bent ape figure evolving to an upright man is without the slightest foundation.

Appendix 5 contains a further exploration of the idea that DNA can be common to different organisms, and why this isn’t a problem from a creationist point of view.

Finally, in 2004, Robert Matthews, writing in *The Telegraph*, spelled out the results of the first comprehensive study of all the relevant humanoid fossils, which he says blows apart the accepted picture of man’s evolution.<sup>93</sup> He says:

“The number of human species claimed by fossil-hunters now stands at around 10, while the total number of human-like species exceeds 50. Such claims have long been based on supposedly significant differences in sizes and shapes of fossil bones. Now they have all been thrown into doubt by research showing that all the differences lie within the range expected for *just a single species*.”

“The findings have big implications for the often bitter debates between fossil-hunters about the significance of their finds. Experts have long bickered over the relationship between Australopithecines and early humans, and between Neanderthals

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and modern humans. Maciej Henneberg, of the University of Adelaide, a world authority on fossil human anatomy, told *The Sunday Telegraph* that the new results suggest such disputes are meaningless, as they ignore the possibility of huge differences within the same species.”

“Other authorities hailed Prof. Henneberg’s findings as a much-needed reality check. ‘Clearly there is a need to be more aware of the possibility of variation – but that is not the inclination today,’ said Geoffrey Harrison, Emeritus Professor of Biological Anthropology at the University of Oxford. ‘It has been a problem because the discoverers have usually put so much effort into finding the evidence, so they want it to be important.’”

“He added that the never-ending announcements of new species said more about those making the claims than about human evolution. ‘The problem is there are far more palaeontologists than fossil specimens’.”

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### Fallacy 3: That all biologists accept that micro-evolution explains macro-evolution

This argument is used really as peer pressure. If so many people believe in something, why don't you? It is another demarcation argument<sup>94</sup> and an attempt to exclude any who disagree with the majority. The fact is that there are thousands of very competent biologists, not to say physicists and chemists, who do not accept that micro-evolution can explain macro-evolution.

It was Darwin who publicly proposed the basic idea that the small variations we see in living things can lead to the much larger changes which produce new species. He saw the effects of breeding experiments and thought that these could explain the much greater and more fundamental differences between different types of animals and plants.

Up to a point Darwin was honest about the possible limitations of his idea. He stated that it would be disproved if anyone could show that any complex organ or body part could not have been formed by numerous successive slight modifications.<sup>95</sup> Increasingly this is exactly the picture we are getting.

In 1980 a conference was convened in the Wistar Institute in Chicago between leading neo-Darwinists and their counterparts in Mathematics and Engineering. Roger Lewin, reporting on the Wistar conference in *Science*, stated that:

“The central question of the Chicago conference was whether the mechanisms underlying micro-evolution can be extrapolated to explain the phenomena of macro-evolution. At the risk of doing violence to the positions of some of the people at the meeting, the answer can be given as a clear No.”<sup>96</sup>

This was a very measured comment considering the outright disagreements which surfaced in the discussions. The conference confirmed the beliefs of many that the ‘mutation-natural selection’ route fails as an explanation of macro-evolution. The conclusion of the majority was that there is no evidence for evolution by neo-Darwinian processes. There is no way of demonstrating that it is occurring now, or has ever occurred.

The following year, in 1981, another meeting of neo-Darwinists was held at the American Museum of Natural History in New York City.

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Many neo-Darwinists again expressed doubts and outright disagreement with the basic ideas of neo-Darwinism.<sup>97</sup>

In 2016 another meeting was convened, this time at the Royal Society in London. Here even more of the establishment entertained very serious doubts about neo-Darwinism, if they did not reject it outright. James MacAllister reported on this meeting in his piece entitled, “Why neo-Darwinism was the biggest mistake in the history of science.” The consensus of opinion was that:

“... Darwinian competition causes not the evolution of species but the destruction of species. ... Hence I’m surprised by calls for extending the neo-Darwinian Evolutionary Synthesis. You can’t extend something that is broken. Surely what is needed now, after 65 years, is using the empirical evidence to develop a new paradigm [idea] for biological evolution.”<sup>98,99</sup>

In 2016 Carl Zimmer did a write-up of the Royal Society meeting in *The Atlantic*.<sup>100</sup> He acknowledged a sense of strain between rival cliques of neo-Darwinists:

“Both sides offered their arguments and critiques in a civil way, but sometimes you could sense the tension in the room – the punctuations of tsk-tsks, eye-rolling, and partisan bursts of applause.” “The event would have benefited from someone in the wings with a hook restraining speakers who insisted on relying on the mantra of natural selection to fill in the blanks of their science. Repeated references to the term became almost comical. Chairman Sir Patrick Bateson finally came to the rescue, cautioning against overuse of the ‘metaphor,’ saying further that ‘*natural selection is not an agent*.’” (emphasis added)

This rather sinks neo-Darwinism without trace, because for most neo-Darwinists, natural selection is the *only* agent for change.<sup>101</sup> It’s worth remembering this statement by Patrick Bateson, a leading neo-Darwinist, when we look at natural selection later.

Jonathan Wells, a biologist at the Discovery Institute, recounts the frustration on the part of some of the biologists at the Royal Society conference. The majority of participants had doubts about the sufficiency of the neo-Darwinian position that relied on the effectiveness of natural selection. So the purpose of the meeting had been to explore new mechanisms for explaining macro-evolution. Their search for an ‘extended evolutionary synthesis’ (EES) failed. Wells says: “They could not explain macro-evolution.”<sup>102,103</sup>

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From this we can see that neo-Darwinism, far from being believed by all biologists, or even by most, is actually a failure in the eyes of an increasing number of main-stream neo-Darwinists. However, lest anyone should assume that its demise will lead to a recognition of Creation, it might be as well to sound a warning. Lamarkism (see Appendix 4) was consigned to the academic dustbin by Darwinism, and Darwin's beliefs based on the 'survival of the fittest' were upstaged by neo-Darwinism. So it is absolutely inevitable that present-day neo-Darwinists will propose another idea which gives them a reason, as they see it, for not believing in a Creator, although that idea will of necessity have another name. There are a number of proposals, including 'structuralism', the idea that the instructions for living organisms are either somehow buried within the organisms themselves or else part of the matter of the universe. The paradox is that, apart from the increasing evidence for Lamarkism, of all unlikely things, none of these ideas is remotely scientific, none of them having any real evidence to back them up.

### **Fallacy 4: That mutations provide changes which improve the organism**

Two of the key terms that neo-Darwinists use when talking about their subject are 'mutations' and 'natural selection'. We will deal with mutations first, and then examine the idea of natural selection in the next section.

According to a recent estimate you are made up of at least 30 trillion cells, some modern estimates reaching 100 trillion (100 million million). Most of these cells contain DNA, and a small part of that DNA, perhaps 6% or so, makes up our genes. The genes are basically a huge set of instructions for making all the substances needed in our cells. As the cells make up what we are, it is the DNA which defines us. This is also true of every living organism on Earth.

Without going into unnecessary detail, mutations are changes in the DNA. Neo-Darwinists tell us that these can improve and change the organism to the point where it becomes an entirely different one. According to Ernst Mayr, a leading evolutionist, mutations are the ultimate source of all genetic variation, which can then produce new organisms.<sup>104,105</sup> That said, it should be made clear right from the start that mutations are extremely unlikely events, usually come only singly when they do occur, and only very rarely in twos. As there are billions of places in any one cell which might suffer mutation, and billions of cells, it is easy to see that the scope for mutations changing an entire organism into another one is exceedingly limited. There are four references on p. 251 of *Theistic Evolution*, and Chapter 7 has a general discussion of the inadequacy of mutations to explain life.

While some readers will be aware of the issues here, others will not be, so some explanation is in order. Below is a simple analogy to show how mutations cannot change living things in the way neo-Darwinists would like us to think. Analogies are never perfect, of course, but from my position as both a biologist and a chemist I can assure you that the one I am going to use is a fair one.

#### **An analogy for mutations in the DNA**

With respect to the information it contains, the DNA in each of the 30,000,000,000,000 cells in your body can be likened to a very large cookery book. A comprehensive cookery book might run to, say, 600 pages, and this would typically contain around two million letters. Let's imagine that we had most of the recipes in the world in it, and it was

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about 1500 times bigger. In that case the DNA in every one of our cells would be like this much bigger book, each cell containing the equivalent of about three billion letters. If that is the number of 'letters' in just *one* cell, I'll leave you to calculate how many equivalent 'letters' of DNA you have in your whole body.

Why choose a cookery book for our analogy? The simple reason is that just as a cookery book specifies recipes for making things, and just as we need to follow a series of instructions to make those things, so does our DNA. It may do it somewhat differently, but that in essence is what our DNA does all the time. A cookery recipe is a fairly precise set of instructions, each one intended to produce a single item, and in this sense a single recipe in the book is very approximately analogous to one of our genes.

So, to illustrate the problem that neo-Darwinists have, let's play a mind game. Let's imagine that we have a recipe for a lemon cake, but the family prefers a fruit cake. Now in the normal way one would just turn the leaves of the cookery book and find another recipe. But let's assume that we only have one recipe for a cake, which just happens to be a lemon cake. The question is: how many letters would one have to change in order to convert a recipe for that lemon cake into one for a fruit cake? So no butter, but oil; flour instead of almonds and potato; dried fruit instead of lemons; no drizzle, and almost certainly plenty of method changes.

Now like all games we have rules, and the first one is that we have to change letters in our recipe randomly, rather as if we had a bag of letters as one does in Scrabble and selected letters from the bag by chance. The second rule is that the letters we replace on the page in the recipe must also be randomly picked. We cannot choose them. The third rule is that we are only allowed to change one, or at the very most two letters at a time, but the fourth rule is that *every* change we make must produce a better recipe, otherwise we throw that change away and start again.

Can you see that ever producing a better recipe? How many tries would we need, and how long would it take? How quickly would we get to a brand new, useful recipe, even if it wasn't specifically for a fruit cake? You may take my assurance that even if you had a million tries a second, you wouldn't get anything sensible, or edible, even if you worked for literally thousands of times the existence of our universe (which is believed to be many billions of years old).

Now, a single mutation in the DNA is very much like a change in a single letter in our bigger cookery book. But how much DNA would one

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have to change so that the instructions still produced something useful to the cell? We are now learning that a huge amount would have to change, just as in a book.

Mutations occur when either chemicals or high energy radiation manage to attack the DNA. But two points should be made clear here. The first is that mutations in DNA usually only affect the equivalent of single letters, and only very rarely two together. So in our cookery book analogy we are usually limited to changing an absolute maximum of two letters at a time. Secondly, the problem is that, to make any significant change in the DNA, many mutations are needed, and they must all happen together.

Mutations can only be useful, if at all, in single numbers, and that has been made clear by eminent evolutionists. In the 1970s John Maynard Smith wrote that evolution has to move literally one tiny step at a time, and in 2003 Allen Orr made essentially the same point.<sup>106</sup>

### **Mutations in Embryology**

It's now worth thinking about how these changes, if they occur, could become part of the cells, and, eventually, produce a new living thing.

The changes would have to be made either in the new single cell from which the organism grows, or extremely early in the life of that organism while it was in a very early stage of development. Otherwise new features are not going to appear anyway.

It's rather like making significant changes to the design of a car. If the designer waits until the car has been built he has the problem of half pulling the thing apart in order to make the necessary changes. No car designer will do this. He will redesign the vehicle, and then build it.

In a similar way, mutations that occur in the mature organism are not going to be much help to that particular living thing. A mutation in one cell out of millions isn't going to change a whole organism very much, certainly not sufficiently to give it any advantage in life. The mutation, if it is going to take hold, must affect the germ cells which will produce the next generation. But here we run into another, even more severe problem.

We now know that the developing organism, particularly in the early stages of growth, is extremely sensitive to changes in the DNA and genome. Although we may not be aware of the fact, this almost certainly is the reason for spontaneous abortions, and also may explain why some women fail to conceive. Either the egg of the woman, or the sperm of the man, has one or more genetic defects,

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and the woman's body somehow, and quite remarkably, detects this, and the foetus or embryo is rejected. It is now generally accepted that even relatively minor changes in the DNA are fatal to young organisms.<sup>107</sup>

So we are presented with a double problem. Changes in the adult life of an organism won't make it any better, and changes made early in an organism's life will all too often kill it. And while a few mutations are not lethal, we do not know of a single truly *advantageous* mutation which increases the complexity of the genome, one which would produce a genuine advance in 'the wild', giving an organism a reproductive advantage, and leading eventually to a new organism.

An argument which has been put forward against this is that there are a number of examples of speciation known, where apparently new organisms have been formed. However, as we learn more and more about cell processes, these examples, so far as we are aware, are not genuine cases of macro-evolution. This might appear surprising as a claim, but Appendix 14: Speciation gives some reasons for this view.

### Error correction

One of the interesting points here is how both we and the DNA deal with mistakes or errors. Mistakes can occur when cells divide and the DNA is copied. New cells are produced as we grow and when we are injured and repairs are needed.

In our analogy of the cookery book, when we scan a page we can pick out spelling mistakes. If we see one, indeed if we see many, we can probably still make sense of the instructions. We would mentally correct the mistakes in our heads. And amazingly this is what is physically done to the DNA. If mistakes are detected there is cell 'machinery' to correct them. Any text on DNA action will give the detail.

This illustrates another of the evolutionist's problems with mutations. If the DNA gets changed, the error-correcting systems of the cell almost always jump on it and return it to its pristine state. But what if a change does not get corrected? This does happen, but only extremely rarely. These changes are the mutations, and mutations are not only very rare,<sup>108</sup> but good mutations, those that might improve things appear to be non-existent. Well over 99% of mutations are now known to be harmful.<sup>109,110</sup> We do not know of a single beneficial mutation which increases the information in the DNA.

We now know of a number of mutations in which the DNA is lost, including those in goldfish, polar bears<sup>111</sup> and bacteria. Goldfish are

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carp where the DNA for the dark skin colouration has been lost. Polar bears have similarly lost the hair pigmentation DNA and also have lost genetic material so that they are now able to deal with a very fatty diet. And it now turns out that bacterial resistance is again actually due to broken and not additional DNA, see below. But this is hardly evolution. This last fact is crucial, for neo-Darwinism depends absolutely on changes in the DNA which increase the information in it. When challenged, Richard Dawkins was unable to give a single example where the genome's information had been increased.<sup>112</sup>

It had been thought for many years that errors in DNA, mainly due to faulty copying, could explain how new information became part of the DNA, but that idea has now been abandoned. Biologists meeting in Salzburg in 2018 recognised that errors cannot explain genetic novelty and complexity,<sup>113</sup> so other effects are now being proposed. Unfortunately they all run up against the basic problem of the spontaneous generation of information, as did the idea of copying errors, and they will therefore have to be abandoned in their turn.

### **Many simultaneous changes required**

If they happen at all, the vast majority of mutations happen singly, which is why the error-correcting machinery can usually sort them out. But to make an effective change from an evolutionary aspect, as was made clear earlier, many simultaneous mutations are needed. In cells an absolute maximum of three changes are likely to occur to a particular area of the DNA at any one time.<sup>114</sup> In our analogy, it is like only two to three simultaneous letter changes ever happening in one paragraph. Clearly this isn't anywhere near enough to make a new recipe in our book, and neither are a few mutations anywhere near enough in the DNA to produce a new and useful substance from it. All organisms, even very tiny creatures, have large amounts of DNA, so the argument applies across the board.

Yet further, according to the neo-Darwinist principle, DNA mutations in living things happened randomly.<sup>115,116</sup> You will probably now be able to appreciate the real problem. How long would one have to experiment with just one recipe by randomly choosing single letters and placing them at random in the recipe before a new recipe suddenly popped out of the page? Similarly, how long would it take mutations to change our DNA so that we became something superior to what we are now?

### **The effects of random selection**

There is yet another catch here which we might miss. When altering the letters in our recipe, the rules of the game don't allow one to know

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where one is going, so we can't fix a 'good' letter in place when we have found it. What we have to do is to wait until every letter that we need for the change suddenly appears. In the real process, of course, many perfectly appropriate letters might appear one at a time, but equally many would almost certainly be lost later, swapped out for wrong ones. So how long do you think it would take to change the recipe? If it ever could happen, many changes are necessary all at once, and they just don't happen like that.

Another problem is that if mutations are generally bad, which they are because they spoil the very precise and delicate mechanisms which run the cell, then just one or two wrong 'letters' will quite effectively destroy the entire mechanism. Although the cell is built so that other systems can usually take over, the cell is degraded as a result. As we show below, the so-called 'survival of the fittest' is often, if not always, about degradation, specifically that some information in the DNA is lost.

But the neo-Darwinist principle is that *every* tiny change, if it is to 'stick', must *improve* the survival of the organism. So every individual change must be useful. In our cookery book analogy, this would demand that every letter change, or every few letter changes, would have to produce a very slightly better recipe. Can you see that happening? I'm sure you can't, but this is effectively what neo-Darwinistic evolution demands. So now we are pretty sure that mutations cannot truly improve anything, certainly not in terms of the production of new organisms. Research proves this beyond reasonable doubt.<sup>117,118,119</sup> It is interesting that single character mutations are used in plant breeding, with colour being an important example, but this is hardly a survival issue unless the colour change makes the organism less likely to be destroyed or more likely to be fertilised. But this does not bring anything fundamentally new to the organism.

Wolfgang Pauli, a Nobel Prize-Winning physicist, commented on the problems of neo-Darwinism:

“While they [neo-Darwinians] pretend to stay completely 'scientific' and 'rational', they become actually very irrational, particularly because they use the word 'chance', not any longer combined with estimations of a mathematically defined probability, in its application to very rare single events more or less synonymous with the old word 'miracle.’”

Pauli was one of the principal scientists working on the USA's Manhattan Project in World War 2 to produce the atom bomb.

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Probabilities are what nuclear physics is all about, so Pauli, of all people, should have known about chance happenings. What he is accusing neo-Darwinists of is their claim that chance doesn't have any connections with probabilities. This claim exposes a serious misunderstanding by biologists of mathematics, for chance or random events are all about probability.<sup>120</sup> We measure chance or random happenings *by* probabilities, and the probabilities involved in evolution are so vanishingly small that they would be dismissed as completely off the scale in other scientific disciplines.

### **Bacterial resistance is loss of DNA**

It is commonly believed that advantageous mutations make bacteria evolve.<sup>121</sup> This has been one of the 'proofs' of how mutations can produce evolution, or at least, so it has been thought until quite recently. And on the face of it this seems to be an improvement for the bacteria. After all, it appears that by this means the bacteria survive the onslaught of antibiotics.

But new research has found that bacteria 'evolve' by mutations *spoiling* the DNA, which isn't quite what was expected.<sup>122,123</sup> It is actually all about DNA function being lost. We can illustrate what happens here by using our cookery book analogy again.

A good cookery book may have many recipes for making cakes, and with some we may find that the cakes we make with several recipes are very similar to each other. Exactly which recipe we choose becomes a matter of personal choice. In engineering terms this is known as redundancy. Redundancy doesn't mean that something has been hived off, or retired. It means that there are several ways to perform a particular task, one way being the best, but others being available if required. It's rather like having several routes by which to return home. One will probably be preferred, but there are others which can be used if that one is blocked.

Going back to bacteria, near the beginning of this section we stated that the DNA essentially contains the instructions to make things, the things needed to run the cell properly. So anything which interferes with the action of the DNA is going to make problems for the bacterial cell. Antibiotics do just this. Either they change a small piece of the DNA and mess up the instructions it contains, or they interfere with the way it physically does its job. Either way that biochemical pathway doesn't work properly any more, and the bacterial cell cannot make something that it needs. For one reason or another, the instructions of the DNA don't get implemented. As a result most of the bacteria die.

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But, like all living organisms, superbly designed, bacteria are built redundantly. The bacterial DNA will almost always contain instructions in other genes for making that substance in other ways. This method may not be quite so efficient, which is why the bacterium hasn't used it up to that point. But it is there, sitting quietly in the DNA, waiting to be used. The unused gene is known as a *cryptic gene*. A few of the bacterial cells manage to switch on this cryptic gene, this alternative set of instructions. These bacteria can then grow and reproduce again, and we have to use another antibiotic to try to deal with the new threat. And yes, as you have probably guessed, suddenly we have bacterial 'resistance' to an antibiotic. But this only occurs because information in the DNA has been lost.

On the *True Origin* website there is a list of bacteria which have found a secondary biochemical pathway which circumvents the initial anti-bacterial effect.<sup>124</sup> This, of course, implies that those bacteria have lost some DNA action and have had to fall back on another method of doing what they originally did.

### Bacterial resistance is devolution

So any 'evolution' here is actually devolution, a degrading of the DNA, the very opposite of improvement. Research has shown that supposed 'evolution' in bacteria *always* means some loss of DNA.<sup>125</sup> All single mutations that have been investigated at the molecular level turn out to reduce the information in the DNA and not increase it.<sup>126</sup> Christopher Wills, a Cornell University geneticist who has studied this for ten years, states quite plainly that all DNA, not just in bacteria, becomes corrupted over time, and this includes our own, of course. This means that the total effect of mutations is in fact harmful.<sup>127,128,129</sup>

While we are on the subject of bacterial 'evolution', it's worth noting several other things. In 1876 Robert Koch showed that anthrax was caused by a bacterium, specifically *Bacillus anthracis*, against which Louis Pasteur subsequently developed his vaccine. At the time of writing about 145 years have passed since that time. In ideal conditions bacteria have the remarkable ability to double their numbers every twenty minutes or so. As ideal conditions rarely exist we might lower this to an average of doubling every hour. This gives us the possibility that during that period of time over a million generations could have been produced from one anthrax bacterium. This is probably the equivalent to twenty or thirty million years of the postulated evolution of human beings.

Now bacteria are very complex, but their complexity pales in the face of the complexity of the human organism, so evolution should have

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been relatively easy for *Bacillus anthracis* during that time. But what, exactly, do we find? Two things, actually. The first is that there has been no evolution in the accepted sense of that word. *Bacillus anthracis* looks and acts today very much as it ever did, and Robert Koch and Louis Pasteur would have absolutely no difficulty in recognising it.

But the second point is more devastating. An analysis of a huge group of ancient bacterial genomes showed an interesting characteristic: "Thus far, all cells lack complete citric acid cycles and respiratory chains, and most have limited or no ability to synthesize nucleotides and amino acids."<sup>130</sup> These absolutely essential features for free-living organisms appear to have been lost long ago, which means that they are now parasites, depending totally on other living things for their existence. They have lost the DNA and the biochemical mechanisms which they presumably originally had in order to survive independently. This dovetails very neatly with the evidence given above for the loss of DNA in bacterial resistance.

### Sickle cell anaemia

Another mutational change which has been claimed as advantageous is sickle-cell anaemia. It makes the red blood cells sickle-shaped and the sufferer anaemic. This is caused by a single mutation in haemoglobin, the oxygen-carrying protein in the blood cells.<sup>131</sup> However, sickle cell anaemia also protects sufferers from malaria to some extent, because it prevents or seriously restricts the malarial parasite from reproducing in those cells. This is why it persists in malaria-prone areas. But this is hardly an advantage overall, because the condition is painful and makes the sufferer considerably weaker in consequence. Matti Leisola explains this clearly in his book *Heretic*.<sup>132</sup>

Michael Behe, in chapter 2 of his book, *The Edge of Evolution*, also spends some time on the biochemical changes involved, not just in sickle cell anaemia but on other body defences against malaria.<sup>133</sup> But in all these he shows very clearly that we are dealing with tiny changes in the human DNA, which although effective against this pernicious disease are actually deleterious in other ways, and come nowhere near explaining the much larger changes needed if new organisms are to appear. It is a remarkable fact that every one of the numerous defences that the body employs against the malarial parasite involves the disabling or loss of one or more human genes.

Behe also makes the point that the parasite, in billions upon billions of generations, has never come up with an answer to sickle cell, involving as it does a mistake in the production of the red cell's haemoglobin. In

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sickle cell disease the haemoglobin clumps together in the cell, which seems to smother the Plasmodium parasite and probably causes the spleen to remove and destroy the cell. He reasonably asks why, in that vast number of generations of the parasite, it hasn't devised a defence to this. This is one piece of evidence amongst many that evolution is very limited in its scope, and that there is definitely an 'edge' to evolution.

As quoted at the beginning of this section, according to Ernst Mayr, a leading evolutionist, mutations are the ultimate sources of all genetic variation and the only new material for natural selection to work on. Since the only real evidence we have is that mutations don't do what neo-Darwinists would like to think they do, then *evolution in its most comprehensive sense could not have occurred.*

### Fallacy 5: That natural selection improves organisms

Dictionary.com describes natural selection as a process by which:

“forms of life having traits that better enable them to adapt to specific environmental pressures, such as predators, changes in climate, or competition for food or mates, are believed to survive and reproduce in greater numbers than others of their kind, thus ensuring the perpetuation of those favourable traits in succeeding generations.”

As pointed out in the previous section, the neo-Darwinian belief is that mutations change the DNA in an organism to produce another organism which is better able to survive. The claim is that it will therefore reproduce better and eventually replace the organism from which it came. This is where natural selection is supposed to select out good mutations and preserve them for future generations. By this process, it is claimed, organisms eventually change into better ones and eventually into wholly new ones. Natural selection can apparently see into the future for what is wanted and selects the mutations which are useful. Needless to say, that isn't the way natural selection is sold to the public, but that is effectively what neo-Darwinists believe.

Natural selection is unquestionably a real effect. Although overblown as a concept, it can be seen in many wildlife films. Predators are regularly seen taking out weaker members of herds. But all natural selection does in reality is to keep the breeding line strong by weeding out weaklings. This is vital if the species is to survive at all. But this doesn't have to involve any significant improvement. It has been pointed out that natural selection is really a synonym for 'survival of the fittest'.

But 'survival of the fittest' is a tautology (a circular argument). This was first pointed out by C.H. Waddington, Professor of Animal Genetics at the University of Edinburgh, in 1960.<sup>134</sup> If you are fit then you tend to survive, but the only thing that survival proves is that you are fit. The problem is that it goes nowhere as an argument.

Crucially, as neo-Darwinists have themselves pointed out, natural selection can only select. It cannot innovate, that is, produce new and useful things. Natural selection works on what is already in the living world. Of itself it cannot produce or improve anything. Natural selection

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has to take what is on offer, so to speak, from the mutations. It has no power to generate anything new.<sup>135,136,137,138</sup>

This particularly came out in the 2016 Symposium at the Royal Institution between neo-Darwinists and mathematicians. As quoted earlier, apparently in the conference the phrase 'natural selection' was used so often to describe the driving force of evolution that the chairman, Sir Patrick Bateson, had to step in and say quite explicitly that this was not an explanation for evolution. (See Fallacy 3.)

This means that we are back to relying on random mutations to produce anything. This will be denied by those who believe that natural selection is an effect which somehow enables organisms to become more complex. The practical outcome of this view is that natural selection is somehow endowed with foresight, being able to predict what is required for new organisms. The reality is that changes, if they ever occur, are purely randomly driven by the environment, and such random effects cannot foresee anything.

In March 2011, the Evolution News website carried an article by David Klinghoffer on how Darwin perceived the role of chance in evolution. It is clear that Darwin entertained no doubts that random effects were its driving force.<sup>139</sup> One of today's most widely-used textbooks states that:

“evolution works without either plan or purpose ... *Evolution is random and undirected.*”<sup>140</sup> (emphasis added)

Another, earlier book said:

“Darwinian evolution was not only purposeless but also heartless – a process in which ... nature ruthlessly eliminates the unfit. Suddenly, humanity was reduced to just one more species in a world that cared nothing for us.”<sup>141</sup>

Many texts teach that evolution is purposeless and has no goal except to achieve brute survival. The “idea that evolution is not directed towards a final goal or state has been more difficult for many people to accept than the process of evolution itself.”<sup>142</sup>

One major text openly teaches that humans were created by a blind, deaf and dumb watchmaker, namely natural selection, which is “totally blind to the future”. If natural selection occurs at all, it rests wholly on mutations, and as we have shown that mutations lead nowhere, neither does natural selection.

An additional problem, never aired by neo-Darwinists, is that natural selection may work for animals in a very limited sense, but it doesn't

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work anything like as well for plants. J.C. Willis was an FRS who also had an honorary doctorate from Harvard. In his book, *The Course of Evolution*, he provides scores of objections to the neo-Darwinistic evolution of plants. He is even more trenchant in his opinion that “the name Darwinism became attached rather to the theory of natural selection, which became a cult”. This book, incidentally, is probably the only major attack on neo-Darwinism ever printed by the Cambridge University Press.<sup>143</sup>

For example, plants differ in form from one another often in only minor details which could not be critical to their survival. He also points out that even if plants did change, for example from drought-resistant to water-loving as an area became wetter, this would be a death sentence if there was a sudden reversal in the conditions, a chance water shortage. Animals can move to survive, but plants cannot. ‘Survival of the fittest’ rarely applies in the plant world. It is more, he says, about survival of the luckiest.<sup>144</sup>

But there is a rather weird twist to this business of natural selection which is worth mentioning, and which Norman Macbeth points out in his book, *Darwin Retried*.<sup>145</sup> He first quotes C.H. Waddington, that natural selection with survival of the fittest is actually a tautology and meaningless. Macbeth then goes on to point out that, if species are as stable as the fossil record indicates, natural selection must be an agent for *stability*, and any change takes place *in spite* of it!<sup>146,147</sup> This isn’t quite what neo-Darwinists expect, or, indeed, what they promulgate.

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### Fallacy 6: That Vestigial Organs show evolution

The definition of a vestigial organ, according to the 2004 edition of Prentice Hall's *Biology* textbook, is that:

“The vestigial organs are organs that serve no useful function in the organism.”<sup>148,149</sup>

More recent texts are a little more cagey about the ‘no useful’ bit, admitting that organs that used to be called vestigial might have some use. But they are still adamant that they are evolutionary ‘leftovers’.<sup>150</sup> In Victorian times, a scientist called Wiedersheim gave his opinion that we had 86 vestigial organs.<sup>151</sup> H.G. Wells, of *War of the Worlds* fame, and quoting the biologist Newman, put the figure at 180, although how they arrived at that figure must remain a mystery. It certainly measured their ignorance of human biology.

The argument that they are evolutionary leftovers is still used in many textbooks, although the idea has been debunked for a long time. Just before the first World War, Professor Goodrich was stating that:

“He would be a rash man indeed who would now assert that any part of the human body was useless.”<sup>152</sup>

That, please note, was in 1912.

Gradually, as more was learned about the human body, pretty much all the bits in it which ‘had no use’ were found not only to be useful, but often very important and occasionally crucial to survival. Typical examples are the pineal gland, the vermiform appendix and the coccyx.

#### The pineal gland

The pineal gland is a tiny blob of tissue, shaped like a pine cone (hence its name), right in the centre of the brain. The pineal gland produces melatonin, a very important hormone, which controls sleep patterns and development. Without natural melatonin you would die. That early evolutionists were happy to dismiss this as a ‘useless’ organ speaks volumes for their ignorance of the workings of the human body. Sadly things haven’t changed much in that regard, and the current argument over ‘junk’ DNA is typical of the continuing ignorance displayed by neo-Darwinists.

### The appendix

There is a small, finger-shaped projection right at the end of the small intestine where it joins the large intestine. This is the appendix, an organ very generously supplied with blood vessels, a fact which should have been enough to tell biologists that it was important. The reason is that all living organisms are engineered to be very efficient, and if that small piece of tissue genuinely had no use it would have a very limited supply of blood, and we probably wouldn't even know about it. So what does it do?

The clue came from doctors. In days gone by, the slightest problem with the appendix meant that you would lose it surgically. Then after some years someone noticed that those whose appendix had been removed suffered poorer health later in life. We now know that losing your appendix before you are 50 means that you become more prone to Crohn's disease later.<sup>153</sup>

The appendix is a very important part of the immune system. It has its own small artery supplying it with blood, and it sits right on the spot where infection will manifest itself first in the intestines. When this happens the appendix sends a warning to the rest of the body, triggering a response to the infection earlier than would occur otherwise.<sup>154</sup> So doctors now are very reluctant to remove the appendix, and will only do so in the most serious cases. Even in 1947, W. Strauss, writing in the *Quarterly Review of Biology*, stated, "There is no longer any justification for regarding the vermiform appendix as a vestigial structure."<sup>155</sup>

There is also some evidence that it holds a sample of the bacteria necessary for digestion. This is important when we suffer diarrhoea and when not only rogue bacteria but also much of our useful bacteria are flushed out of our digestive tract. The little store in the appendix can then help 'rebuild the system'.<sup>156</sup> Douglas Dewar (1875 – 1957) quotes another use of this 'useless' organ, that it may well secrete a lubricant for the large intestine and rectum.<sup>157</sup>

### The coccyx

The coccyx is a bone, really five fused vertebrae, at the lower end of the vertebral column. References on the Web more or less universally still call it vestigial, but is it, really? The coccyx actually acts as what is known as an insertion point, a connecting region, for muscles in the pelvis. These muscles help us sit down and eliminate solid waste. Wikipedia dismisses the coccyx as redundant, although it admits that if

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it is absent those muscles are also connected to other bones, and this hardly makes the coccyx vestigial.

David Menton has a Ph.D. in cell biology from Brown University. He has a long and illustrious career as a medical school professor earning the Silver Award for Basic Research from the American Academy of Dermatology. He was awarded the 'Distinguished Service Teaching Award' from Washington University School of Medicine in 1991, 1994, 1995, 1996, and 1997. Dr Menton was named 'Teacher of the Year' at Washington University School of Medicine in 1979 and was elected 'Professor of the Year' by that same institution. His piece, "The human tail and other tales of evolution", makes it absolutely clear that the coccyx is not vestigial.<sup>158</sup>

Douglas Dewar also weighs in on this one. He was a founder of the Evolution Protest Movement in London in 1932 and was a long-time leader of this organisation. He had been a graduate of Cambridge in Natural Science and was an evolutionist in his early career, even authoring books on evolution. He had a distinguished career in India, both in politics and as a naturalist and ornithologist, authoring more than 20 books on the birds and the history of India. After he became a Christian and creationist, when he was about 50 years of age, he wrote numerous papers and books expounding the scientific basis of creationism. He was elected Vice President of the Victoria Institute and participated in a number of both written and oral creation/evolution debates with leading British evolutionists, including H.S. Shelton, J.B.S. Haldane, and Joseph McCabe.

In a small pamphlet, *Man A Special Creation*, Dewar writes that the coccyx:

"... is normally composed of the four lowest vertebrae fused together; it corresponds to the tail of tailed animals. The coccyx is longer in human beings than in the anthropoid apes, in which it is usually composed of only three vertebrae. Hence, according to the evolutionists, the anthropoid apes have advanced further towards a tailless condition than has man.

The human coccyx is placed lower than that of the ape; it reaches almost to the lower end of the pubic symphysis, involving the formation of a transverse perineum as opposed to the oblique one of the ape. These differences correspond to profound differences between the organisation of man and that of the anthropoid apes. In the case of man, the absence of a tail is essential to his upright posture; in the apes, were the coccyx not very short and situated higher than in man, the process of giving birth to the young would,

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as Vialleton points out, be greatly impeded. 'To regard the absence of a tail as a character common to man and the anthropoid apes,' he writes, 'is to disregard the differences of structure that are hidden behind this apparent resemblance, and to fail to appreciate the different conditions to which the anatomy of each type responds.'<sup>159</sup>

Dewar later notes that the human embryo displays a well-developed tail from the fifth to the eighth week of its existence, with connected muscles. These latter items subsequently become absorbed in the surroundings, and the vertebra of the coccyx shrink and fuse into a single bone.<sup>160</sup>

The whole point of this exercise is that these structures are supports for the whole rear region *as it develops*. Most biologists don't really take this into account in their studies of living things, but, as with any building, scaffolding is very important. This occurs in all vertebrates, and indeed in other animal types, and the supporting structures are then either modified or lost. In some the coccyx develops into a tail, in some it develops as a swimming organ as in the whales, in others it becomes smaller as in the human and provides insertion points for the muscles of the bowel and buttock. In some it is absorbed completely and disappears once its work as 'scaffolding' is done.

This business of scaffolding is interesting, for it almost certainly explains a number of structures which appear in the embryo or in childhood and which subsequently diminish or vanish entirely in the adult. We think it sensible to erect scaffolding when building, but don't really think about the need in developing organisms, yet the need is clear, as is the need to shrink or discard the structure when development is complete. The teeth of many animals, and probably the wisdom teeth of man, have that function, acting as organisers for the jaw. The body of an insect previous to metamorphosis is really just scaffolding, principally allowing growth, awaiting the eventual and complete restructuring of the animal into its adult form.

### **Other so-called vestigial structures**

Other claimed 'vestigial' examples include such items as the muscles in our ears and noses, wisdom teeth, the wings of flightless birds, the hind leg bones in whales, the erector pili of our skin, our body hair and the sexual organs of dandelions. All these, and almost all others, can be shown to have a use, but like many body organs they do not have to be vital, in the sense that to lose them would be fatal.

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Our bodies are built redundantly, in that their functions are very often covered in more than one way. The very few structures to which this does not apply include the heart and the brain. We have two kidneys, each of which, incidentally, can deal with ten times the amount of liquid waste that we produce. And why two? With that level of efficiency one kidney would be quite enough, one would think. But this gives the body a huge safety net, a total of twenty times over-capacity. Keeping the blood free of waste products is an absolutely vital job. Having this level of efficiency ensures that it will operate even if most of our kidney function is lost through disease or accident. But there is no imaginable scenario from the past in which we ever needed a *twenty-times overcapacity* for anything, so evolutionary ideas fail absolutely here. But according to strict neo-Darwinist thinking, most of each kidney must be vestigial, because it is perfectly possible to live healthily with only a small part of just one. Does this really make any sense?

The same is essentially true of almost any body organ. While the action of a few of our organs cannot be duplicated, for many there are almost always other systems in the body which can take over a particular task if an organ fails or becomes inefficient. We have two eyes, and although loss of one eye is debilitating, life is still possible. If we lose some toes, we can still walk. If we lose our hearing it is still possible to lip-read, and so-on. The body is designed to accommodate loss of parts, and although those losses make us less efficient, we can usually still live life to some effect.

In any case there are two points which are often missed here. Firstly, like Weidersheim, or Wells, we still do not know everything the body does or what it needs, even if we think we do. Secondly, even if these organs are vestigial, it would be proof of devolution, not evolution. Loss of function is hardly a proof of evolutionary advance.

### Fallacy 7: That embryology recapitulates the evolution of the organism

I find it difficult even to include this, but include it I must, for it is a very popular claim made by those who support evolutionary ideas. However, it is actually a prime example of scientific fraud, at least as significant as the Piltdown hoax. It is illustrative of the lengths people will go to prove a point. Unfortunately it is also proof that evolution is not based on unassailable evidence, for if it were, there would be no need for this sort of behaviour.

Ernst Haeckel (1834–1919), a German biologist, drawing from the ideas of earlier evolutionists, published a set of drawings, supposedly of embryos of different organisms at the same stage of development, putting forward the idea that embryos ‘recapitulated’, that is, ran through the pathway by which that particular organism had ‘evolved’. It became a very popular idea until the turn of the 20th century when it fell out of favour.

It is now well established that the illustrations of ‘evolutionary recapitulation’ were fraudulent. Haeckel used the same picture, recopying it and labelling the copies as different organisms. The claim is now considered to be false by all serious researchers, and indeed thoroughly embarrassing. Embryologist Michael Richardson said that ‘it was one of the most famous fakes in biology’.<sup>161</sup> One evolutionist simply called it ‘Abscheulich!’ [‘atrocious’].<sup>162,163,164,165</sup>

The really appalling part of this story, and the reason it is given a few column inches here, is that this series of drawings is *still used* by writers of elementary textbooks on Biology to ‘prove’ evolution. They know full well, or should do, that it is a complete fabrication, a lie to be quite frank, rejected by any competent biologist and by all the more serious textbooks. Yet they persist because “it tells a good story”. One of these is the *Holt Science and Technology book, Life Science*.<sup>166</sup> It is, in our view, thoroughly reprehensible that such untruths are promulgated, and particularly to the young and impressionable.

### Fallacy 8: That there was a Last Universal Common Ancestor (LUCA)

This idea is an inevitable consequence of belief in neo-Darwinism. Neo-Darwinists believe that all living organisms came about by tiny incremental changes. If this was true, and given that the cellular DNA mechanism is common to all life, it follows that there was a single organism from which everything else developed, the Last Universal Common Ancestor. The process of development from the LUCA is known as Universal Common Descent (UCD). Wikipedia defines the Last Universal Common Ancestor (LUCA), as:

“the most recent population of organisms from which all organisms now living on Earth have a common descent. LUCA is therefore the most recent common ancestor of all current life on Earth.”

Wikipedia<sup>167</sup> goes on:

“While there is no specific fossil evidence of LUCA, it can be studied by comparing the genomes of its descendants, all organisms living today. By this means, a 2016 study identified a set of 355 genes inferred to have been present in LUCA.”

Nevertheless it is now generally accepted, for reasons discussed below, that the LUCA is impossible, as is UCD therefore. This is quite separate from the claim that the cell came into being without any outside assistance, the so-called ‘spontaneous generation of life’ (which we also discuss below). The difficulty, or impossibility, of a LUCA stems from the differences between the way in which bacterial cells and the other common life forms copy their DNA. In one of his books Carl Woese, one of the most celebrated modern neo-Darwinists, says, “Modern genome replication systems seem to have evolved twice.” A few pages later he says, “Extant life on Earth is descended not from one, but from three distinctly different cell types,”<sup>168</sup> implying that there are *three* different DNA copying systems.

So the LUCA turns out to be three quite separate cells, three last common ancestors, all with different cell chemistry, and some modern biologists are beginning to believe that the number is more likely to be four. All of these just somehow appeared at about the same time. This also means that the basis of UCD evaporates, for if there really was more than one initial cell then ‘common’ descent cannot have occurred. As we point out below, the odds against just one cell suddenly appearing out of the blue, purely from the point of view of the

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proteins it needs, has been calculated at 1 chance in  $1 \times 10^{40,000}$ , so for four cells to spontaneously appear, the chance of this happening shrinks to just 1 in  $1 \times 10^{1,600,000,000,000,000}$ ! This is like searching for one thing in a number wildly in excess of the number of elementary particles in the known universe. How far do we have to go down this pathway before it clicks with neo-Darwinists that they might just possibly be mistaken? Discovery Institute's book, *Theistic Evolution*, contains a good summary of this problem on pages 419–422.

It should be made clear that for some Theistic Evolutionists spontaneous generation of life is not an issue, because they believe that God created the first life form. But the subject needs addressing because the most extreme group holds that God merely set up our universe and the physical and chemical properties of the elements in the expectation that life might appear spontaneously. The problem is that all our modern knowledge leads to the absolute conviction that the physical and chemical properties of the elements and molecules have no power whatsoever to produce a living cell. No cell could possibly have come 'out of the blue'. And the longer one waits the worse is the problem, as any competent synthetic chemist will testify. This is dealt with in more detail in Fallacy 11.

Common Descent is not accepted by mainstream neo-Darwinists now. As Carl Woese made clear in 2002, "The time has come for biology to go beyond the doctrine of Common Descent."<sup>169,170</sup> In any case, even if there were evidence of LUCAs, which then served as a basis for patterns for all life, there really shouldn't be any difficulty with the idea that they were life forms which God created at some point and which, perhaps, were templates or patterns for angels to follow when creating their own forms of life. But your acceptance of this possibility will depend on your own world view, of course.

The LUCA was supposed to have a basic minimum number of genes which all members of that particular family of life forms inherited and which were used to produce all the basic proteins and body structures. We would not argue against this, for our own systems of manufacture and construction conform to precisely this sort of thinking. We very often reuse ideas when we design things, employing components and even basic layouts from other creations. It would be a bit nonsensical to do anything else. Why reinvent the wheel? There are a few niche car manufacturers which make three-wheel cars, but most use four, simply because it has proven to be the best design overall. The reuse and repurposing of already-designed objects is a technique practised worldwide.

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Different models and even different makes of cars have huge numbers of components in common. This extends even to some quite specialised cars, where, for example, rear lamp clusters and door handles designed originally for cheaper vehicles have been found on far more expensive ones. Whole body pans, the lower parts of car bodies, are used in different makes of vehicle. The XUD diesel engine in the Citroen ZX, made in partnership between Citroen and Peugeot in the 1990s, was also used in two Fiat models, the Honda Concerto, the Hyundai Lantra, the Lada Niva, three Suzuki models, the Toyota Corolla and the Rover 200 and 400. It's the way we do things. But if we do it, why shouldn't God? This is what the basic number of genes believed to have been present in the LUCA is really all about (355 of them, if that number has any reality).

So this business of common genes argues as powerfully for divine design as it does for any sort of naturalistic evolution. But there are three far more serious issues with the claim that there was a LUCA. These issues are firstly the impossibility of the spontaneous generation of life, secondly the problem of the information contained in the cell, both dealt with below, and thirdly, that although much of the genetic information across many organisms is the same or very similar, a remarkable number of genes in any one organism are unique to that particular life form.

It is a remarkable fact that between 10% and 20% of the genes in any one species are only found in that species.<sup>171</sup> In cyanobacteria something like a *third* of cellular proteins are unique to each species, which means that the genes producing them are also unique. That we find the same proteins in different forms of life is hardly surprising. What is difficult to explain from an evolutionary standpoint are unique proteins that come from unique genes in a particular organism.

That two thirds of the genes in an organism are the same as in other related organisms is to be expected, and, indeed there is no reason from a divine design point of view why many proteins should not be identical or very similar across the whole spectrum of life. But to find that a significant minority of proteins are unique to an individual species absolutely denies the claimed neo-Darwinian mechanism. Neo-Darwinists, however, largely ignore this problem.<sup>172</sup> And the spontaneous appearance of life is an issue of another order entirely, again dealt with in Fallacies 10 and 11.

### Fallacy 9: That rocks can be accurately dated

The first thing that should be appreciated is that, in the normal way, only sedimentary rocks, that is those laid down by the action of water or wind, can hold fossils. Igneous rocks, coming red-hot from inside the crust, rarely contain any traces of living matter. Any organic remains that they might have contained are almost always destroyed. For the same reason metamorphic rocks, rocks that have been changed by heat and pressure, very rarely contain fossils.

Sedimentary rocks are really the weathered remains of much older rocks, igneous and metamorphic, and we cannot know directly from the sedimentary rocks themselves when they were laid down. This means that sedimentary rocks have to be dated by 'intrusions', igneous rocks which have been forced into cracks in the sedimentary strata. But, as we shall see, the dating of igneous rock is itself highly uncertain, and therefore we have no reliable means of knowing when the intrusions happened.

#### **Officially rocks are dated by the fossils, and fossils from the rocks**

Scientists generally hold that there are two basic ways of dating rocks, that is to say of dating rock layers or strata. But in fact this stance is called into question by two simple facts. If you go to a large text on geology, it is quite likely that you will read that rocks are basically dated by the fossils that they contain. On the other hand, in books on biology, and particularly those dealing with palaeontology, you will be presented with the diametrically opposite argument, that fossils are dated by the rocks in which they are found. So in the minds of geologists and biologists the dating of both rocks and fossils is circular, each one depending on the other.

One web page from Berkeley University makes it quite clear that rocks are broadly dated by geologists from the fossils they contain.<sup>173</sup> There is a convention for the age of a particular fossil, and the rock that contains that fossil is then dated accordingly. Similarly, in their book, *Geology*, von Engel and Caster state:

"The part of geology that deals with the tracing of the geologic record of the past is called historic geology. Historic geology relies chiefly on palaeontology, the study of fossil evolution, as preserved in the fossil record, to identify and correlate the lithic (rock or strata) records of ancient time."<sup>174</sup>

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But, again from the Berkeley University website on another page:

“Geologists use radiometric dating to estimate how long ago rocks formed, and to *infer the ages of fossils* contained within those rocks.”<sup>175</sup> (emphasis added)

To say the least, this gives mixed messages.

### Radiometry

As indicated in the last quote, to get out of this circular dependence of rocks and fossils, and to try to get some handle on their ages, radiometric rock dating has to be employed. The Australian Museum website states that the principal method for dating fossils is by radiometric dating of the rocks in which they are found.<sup>176</sup>

Scientists try to do this by using the very slight radiation that rocks give out, or more commonly by measuring the amounts of materials lost by the radioactive reactions and the amounts of materials produced by them. But this depends on knowing the ‘parent’ elements, which are radioactive, and which ‘daughter’ elements they change into. This can be done in theory because the radioactive elements lose their radioactivity, usually over millions of years, at a generally accepted rate, and the changes are well documented. Parent elements therefore change into daughter elements at a known rate. The fundamental idea is that the lower concentration of parent elements, or the higher the amounts of the resulting daughter substances, the older the rock.

That’s fine in principle, but as a technique for dating strata it does not hold up in practice. To begin with, how do we know how much radioactive material was in the rock to begin with? This is absolutely crucial to the whole scheme. Secondly, what if some of the original parent radioactive substances, or the results of the radioactive reactions, the daughter elements, were washed out over long periods of time? And thirdly, how do we know that the rate of radioactive change is steady? Further, according to one paper in the journal *Industrial Research*, all our assumptions have been thrown into doubt by changes in cosmic radiation from supernovae which apparently alter radioactive breakdown rates.<sup>177</sup> These and several other uncertainties compromise the whole dating process.

### Radiometric methods don’t work

Despite the claims, igneous rocks, those that come direct from volcanoes, cannot be dated because we don’t know their history in the depths of the earth. This is where some very constructive and imaginative thinking is used by geologists. A suitable ‘age’ has to be

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selected so that the eventual rock ‘ages’ can be made to fit in with the ideas of the neo-Darwinists. From the *National Geographic* website:

“Although fossil dating is now more scientifically accurate, it still requires skill and experience as scientists have to make *educated guesses* based on any evidence and the dating available for the layers surrounding the fossils.”<sup>178</sup> (emphasis added)

It has to be said that phrases such as ‘scientifically accurate’ and ‘educated guesses’ make strange bedfellows. We would suggest that this exposes the real problem with palaeontological dating.

There are several different types of radiometry used in geology, based on known changes in radioactive element isotopes. Carbon 14 (C<sup>14</sup>) dating is used for dating material up to about 50,000 years of age, typically samples of wood, cloth and ash, although it is claimed that it is possible to use this technique for older dates.<sup>179</sup> However, for a number of reasons, as Melvin Cook, one time Professor of Engineering at the University of Utah, points out in *Prehistory and Earth Models*,<sup>180</sup> C<sup>14</sup> dating is very unreliable. Further, C<sup>14</sup> is not even in equilibrium with the nitrogen in the atmosphere from which it is formed. This leads to the rather startling conclusion that if all the other conditions hold, the age of the present atmosphere cannot be more than *16,000 years old*, almost certainly younger. If this is true then nearly all C<sup>14</sup> date estimates are unrealistically high and increasingly collapse the further back one goes.

### Dendrochronology – tree-ring dating

To try to support this type of dating, the results from C<sup>14</sup> determinations are often compared to tree-ring data. Unfortunately tree-ring dating is itself fraught with assumptions and problems. These are not talked about, but certainly exist. No tree provides a complete record of yearly growth, which is the basis of this dating technique. So a number of samples of wood have to be analysed, and sequences have to be matched by overlapping.

However, no tree yields consistent rings, and neither do trees from the same area. In one year there may be no discernible ring, in another year there may be two or even more. The matching is done on ring thickness, and this also is never consistent between individual trees. The matching has to be done on a statistical basis, and is subject to interpretation and (more) educated guesswork. But this isn’t science, particularly when the results are all too easily skewed to fit the prevailing ideas. Reading the Wikipedia article on tree-ring dating makes these problems all too clear. The creation.com website has an

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article examining the technique,<sup>181</sup> the writer being a tree physiologist, and an authority on this subject. As the *Colorado Encyclopaedia* makes clear: "In theory, tree-ring dating is a relatively straightforward process; in practice it can be astonishingly difficult."<sup>182</sup> So correlating tree-ring data with C<sup>14</sup> dating is no guarantee of accuracy.

### Longer-term radiometric methods

The longer-term radiometric methods, that is uranium/thorium/lead, rubidium/strontium and potassium/argon sequences, are employed for much older material, and are used to try to date rock strata. These methods are also analysed very thoroughly by Cook in chapter 2 of his book, where he spells out numerous problems with them. The original radioactive materials, and elements they change into, can easily be lost. They can suffer washing out and evaporation, and it is impossible to be sure whether or not the rocks have suffered from either effect.

The simple fact is that methods fail which attempt to date rocks using their natural radioactivity. Henry Faul, in his book *Ages of Rocks, Planets and Stars*, states that when rock ages are measured from the same place we get widely differing results. The accepted and published ages of rocks depend on determinations of age from a number of different places, and only 'after careful consideration'.<sup>183,184</sup> Cook makes it clear that all radiometric methods of dating are wholly unreliable.<sup>185</sup> So does E.M. Spieker, who wrote a paper in 1956 in the *Bulletin of the American Association of Petroleum Geologists*.<sup>186</sup> It should be made clear that we are not talking about small discrepancies, but in some cases those of many millions of years and error factors in the thousands.

Some concrete examples of our inability to date strata by radiometry:

1. Sunset Crater, an Arizona volcano, is believed from tree-ring dating to be about 1000 years old. But potassium-argon dating put it at over 200,000 years.<sup>187</sup> That is a discrepancy factor of about 200, and makes the point about the problems of correlating two different dating methods. In all fairness, using potassium-argon dating for this sort of date probably isn't valid, but it illustrates the researchers' confidence in it, warranted or otherwise.
2. For the volcanic island of Rangitoto in New Zealand, the potassium-argon dating method dated the lava flows as 145,000 to 465,000 years old, but the journal of the Geochemical Society noted that "the radiocarbon, geological and botanical evidence unequivocally shows that it was active and was probably formed during the last 1000 years", so that is a discrepancy of the same

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order as the above. In fact, wood buried underneath its lava has been carbon-dated as less than 350 years old.<sup>188</sup>

3. The lava dome of Mount St Helens (produced in 1980) has been radiometrically dated at 2.8 million years.<sup>189</sup> As at 2021 the discrepancy there is a factor of about 70,000.

Compared to some of the dates claimed by neo-Darwinists, these are quite recent, but for various technical reasons the accuracy problem can only get worse as the ages increase. So it is plain that rocks cannot be effectively dated by natural radioactivity. This does not mean that they are not as old as neo-Darwinists claim, but that we simply don't know how old they are. It is therefore meaningless to try to argue for any dates, and pointless to try to base any sort of evolutionary scheme on that uncertainty. Virtually all the evidence we have suggests that the claimed ages are too great.

### Zone or index fossils

If we cannot use physical methods to date the rock strata we are back to the fossils themselves. So neo-Darwinists appeal to what are called 'index fossils' or 'zone fossils'. These are fossils of particular species which, by agreement, neo-Darwinists have accepted as appearing in certain rock strata. From this, according to the ruling ideas, the strata have to be accepted as being of particular ages.<sup>190</sup> As a concept, the idea of 'index fossils' is very revealing in itself. If it has to be employed at all it demonstrates the fragility of the claims for absolute ages when they are assessed by other means.

T.S. Kemp, writing in *New Scientist* in 1985 makes the rather pithy comment that:

"A circular argument arises: Interpret the fossil record in the terms of a particular theory of evolution, inspect the interpretation, and note that it confirms the theory. Well, it would, wouldn't it?"<sup>191</sup>

Niles Eldridge of Chicago University states quite plainly that:

"Paleontologists cannot operate this way. There is no way simply to look at a fossil and say how old it is unless you know the age of the rocks it comes from. ... And this poses something of a problem: If we date the rocks by the fossils, how can we then turn around and talk about the pattern of evolutionary change through time in the fossil record?"<sup>192</sup>

So these statements are candid admissions that the whole argument for the accepted dating scheme is circular. Searching the literature and

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the Web reveals that neo-Darwinists have to resort largely to relative dating, not absolute dating. Relative dating is basically the establishment of a sequence of fossils, but without being sure of where individuals actually sit in time. But that inevitably subjects the whole dating scheme to opinion and pre-conceived ideas, which cannot in all honesty be called science.

H.D. Hedberg wrote a paper in 1961 which was published in the *Bulletin of the Geological Society of America*, one of the most important journals for the subject. In this he made clear that fossils cannot date strata.<sup>193</sup> Another paper by O.H. Schindewolf in the *American Journal of Science* in 1957 essentially makes the same point,<sup>194</sup> and there are many others who agree. So when you read that certain fossils have been found in rocks which are a particular number of millions of years old, it may be true, but equally it may be completely fictional. We simply do not know.

## Coal

Coal, as most people are aware, comes from plant material. The current dogma is that coal takes many hundreds of thousands of years to form, and this supposedly all happened between 30 and 300 million years ago (which puts it well before man 'came on the scene', to use evolutionary phraseology). The common impression is that the plant material involved was growing in a swampy region, and that this vegetation gradually sank into the bog and became compressed as more and more material grew above it. It began to decompose and heat, and finally it was overlaid with silt and sand. With more layers of similar nature piling up, gradually the material was compressed and heated until it became coal. That's the way it is popularly presented.

My most useful source of material for the geological data in these paragraphs on coal has been *Prehistory and Earth Models* by Cook, who gives a great deal of carefully collated and calculated information about coal and other related matters. Cook does a very efficient demolition job on the presumed age of coal.

It is wrong to think that coal was necessarily laid down very slowly, or that decomposition of the plant material was a major factor in the production of coal. All the evidence points to a quick water-laid burial of huge numbers of trees and large quantities of other vegetable matter, followed, in most cases, by deeper burial and possibly rapid heating. It is highly likely that the pressure of quick burial produced the heating.<sup>195</sup> The best types of coal do not typically show fungal or bacterial decomposition, which would happen within a few days of the demise of the vegetation.<sup>196</sup> And since the best types of coal go

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through the poorer lignite and brown coal stages, this must apply to those types too.

Peat, a supposed precursor to some types of coal, is generally believed to form at a rate of about one foot (30 cm) in 6000 years, or one five-hundredth of an inch (one twentieth of a millimetre) per year. However local farmers say that the rate is more like two inches (5 cm) per year, and the evidence appears to favour the farmers. Roman roads in Scotland are covered in places to a depth of eight feet (two and a half metres) by peat.<sup>197</sup>

In Abbeville, France, a boat loaded with Roman bricks was found in the lowest tier of the peat. In the Somme Valley, beech stumps up to four feet in height were found covered by peat before they had decayed.<sup>198</sup> By no stretch of the imagination could the formation rate of peat have been as slow as some would like us to believe.

As an example of the speed at which coal can form, Cook quotes the construction of a railway bridge near Freiberg, Germany, in which wooden piles, rammed into the ground, had been compressed by overriding rocks. On later examination the centre of the piles were found to be, to all intents and purposes, high grade coal.<sup>199</sup> This dramatically shows that neither time nor temperature is important for the formation of coal. The really important effect is that of pressure.

To make the point more clear, there is a coal seam running between Pittsburgh and Ohio which dips into the earth at the rate of between 20 and 40 feet per mile. The total change in depth of the coal seam is several thousand feet, and the quality of the coal perfectly matches its depth. The shallow coal is brown, peaty lignite, the poorest quality fuel, and the deep coal is anthracite, the best quality, with all gradations in between.<sup>200</sup> As it is of one unbroken seam the coal must all have been laid down at one time, and therefore the quality depends almost wholly on the pressure it suffered in that process and not how long it took to form. Cook lists a number of coal seams globally which tell a very similar story. The prevailing belief is that quality coals are the oldest and that poorer coals are of more recent origin, but Cook makes the point that there is not a shred of solid evidence for this.

Another complication is that the layers of coal at some sites are quite numerous, sometimes ten or more, and the layers themselves are by no means thin, many being in the region of a foot (30 cm) or greater. When coal is formed there is at least a twenty times compression of the original material. Seams of coal have been found many metres thick, sometimes implying that the original material was hundreds of metres in depth. The flora is not usually typical of a peat bog either.

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We are faced with an untenable situation if it is claimed that coal was formed by the processes which occur in a peat bog. It is very difficult to believe that many peat bogs once formed in steady succession, and that each one came to a virtually identical end as indicated by the similar layers of intervening rock strata.

In *The Creation Research Society Quarterly Journal* for June 1974, a remarkable amount of evidence is amassed for a recent production age of coal (and other rocks). I am aware of the suspicion in which the Creation Research Society is held in some quarters, but they are, of course, well aware of this themselves and strive to be as unbiased as they can. They will report events and discoveries which main-stream evolutionists either will not or cannot. Here are a few examples.

A sizeable lump of coal, mined in 1912 in Oklahoma, was found when broken up to contain a large iron pot which left an impression in the coal. The pot was subsequently examined by literally thousands of people, and photographed.<sup>201</sup>

A small cube of steel was found in 1885 in Austria when a piece of coal was being broken to fuel a furnace. The current opinion was in favour of it being artificial, although some held it to be a meteorite. It ought to be pointed out that meteorites are commonly nickel-iron, and steel is iron with a very small amount of added carbon.<sup>202</sup> Further, meteorites don't usually arrive cube-shaped.

In 1958, in Tuscany, a flattened jawbone of a child was found embedded in coal conventionally dated from the Miocene era, which extends from 5 to 23 million years ago. In coal dated 30 million years old, dug from a seam in Montana during 1926, two human molars were discovered, and in West Virginia a miner came across a perfectly formed human leg that had changed into coal.<sup>203</sup>

### **Polystrate fossils**

In the open area in front of the Natural History Museum in London stands a fossilised tree. This object was found in a quarry in Edinburgh in 1873, embedded upright in sandstone, approximately 56 metres below the surface. It is one of numerous similar finds, all of which are surrounded by many sediment layers, supposedly laid down over millions of years. This particular fern-tree, a *Pityis withamii*, is believed to have lived some 300 million years ago. Another similar petrified trunk is in the Royal Botanic Garden in Edinburgh.

Polystrate fossils pose a serious problem for the idea of the slow deposition of sediment. How could a fern-like trunk survive for millions

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of years, remaining upright and not rotting, eventually becoming fossilised, as layers of rock sediment built up around it very, very slowly? It is remotely possible that the layers could have been rapidly deposited in a few cases of this kind, but this type of fossil has been discovered world-wide in many locations. This argues for a much more rapid rate of rock formation than is generally accepted.<sup>204</sup>

### **Fallacy 10: That biological (or any) information can be generated by random processes**

When one does considerable research into evolution, time and again one comes up against a curious inconsistency. Neo-Darwinists believe that evolution has no direction. It must therefore be a random process, yet many of them insist that the process is not fundamentally random. But this implies that such a process must be at least partially directed. The claim that a process is both wholly random, and also directed, even if only partially, is a cognitive dissonance, a belief in two contradictory things. How does it come about?

The lynchpin of neo-Darwinism is materialism, and materialism, also known as naturalism, demands a belief in an undirected, essentially Godless universe. Materialism is defined as a belief that there is nothing in the universe, or outside it, except particles, forces and radiation. (As a chemist I am aware of the interconversion of particles and radiation, and indeed of the modern theory of forces, but I have given that definition for the benefit of those who are not so cognisant of the issues here.) In other words neo-Darwinism states that there is no conscious directing force, and certainly no God.

To be specific, we have no scientific evidence that particles are self-directed in any way. Within themselves they do not contain any sort of purpose or direction. Pulitzer Prize-winning author Edward Humes states his belief that living creatures also “differ from one another, and those variations arise at random, without a plan or purpose.”<sup>205</sup>

Without a creating and controlling Deity, everything in biology must bow to the random effects to which all the elements of the universe appear subject. Therefore science alone, or at least the work done in the name of science, cannot logically provide any reasons for anything. As pointed out in the Evolutionary Introduction, science only describes; it does not explain. It is claimed that our existence is without purpose or a definite goal. In the opinion of Lawrence Krauss, our existence is purposeless, and therefore, logically, undefined.<sup>206</sup>

In 1971 Jacques Monod, a leading and extremely well respected evolutionist, in his book, *Chance and Necessity*, wrote that:

“... *chance alone* is at the source of every innovation, of all creation in the biosphere. Pure chance, absolutely free but blind, is at the very root of the stupendous edifice of evolution: this central concept of modern biology is no longer one among other possible or even

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conceivable hypotheses. It is today *the sole conceivable hypothesis*, the only one that squares with observed and tested fact. And nothing warrants the supposition—or the hope—that on this score our position is likely ever to be revised.”<sup>207</sup> (emphasis added)

In 2005, during the hearing of the Kansas State Board of Education, no fewer than 38 Nobel Laureates wrote a letter to the *New York Times* to the effect that:

“... evolution is understood to be the result of an *unguided, unplanned process* of random variation and natural selection.”<sup>208</sup> (emphasis added)

So that stands as the ruling opinion of some of the world’s most decorated scientists.

### **But life shows the appearance of intelligence in design**

It is nevertheless very clear that neo-Darwinists, and indeed evolutionists generally, see the overwhelming appearance of intelligence in life.<sup>209</sup> So they have to insist, like Francis Crick in his book, *What Mad Pursuit*, that:

“Biologists must constantly keep in mind that what they see was not designed but evolved.”<sup>210</sup>

They hold this to be true even of the environment which supports living organisms, that is to say the material Earth and its surroundings, that is, that *everything* came about by means of random processes. But the universe, and Earth in particular, appears purpose-built for life, and not just in a general way, but to an incredible precision in many aspects. We call this the ‘Goldilocks effect’.

So illogically, neo-Darwinists, materialists all, are also forced to claim that in some way evolution is not totally randomly driven. The briefest Web search will show that claim very clearly. To support this contradictory and bizarre stance, neo-Darwinists will quibble with this word ‘random’. They assert that the way we use that term in everyday speech is not the way it is used in science. They prefer to use another word, and say that evolution is subject to ‘stochastic’ influences.

The problem here is that dictionary definitions supply the word ‘probabilistic’ as a synonym for ‘stochastic’, and ‘probabilistic’ is what is generally meant by the word ‘random’, so the three words mean basically the same. As confirmation of this, the Merriam-Webster dictionary gives the word ‘random’ as a synonym for ‘stochastic’. In

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point of strict fact, probabilities are the only way we can measure random events. If an influence, an effect of some sort, isn't what is generally accepted as a random one, we couldn't talk about probabilities.

Further, if it isn't random, stochastic or probabilistic, then that influence must be directed. Claiming a sort of in-between state, a sort of random-but-directed state, is like claiming that when skydiving one only half jumped out of an aeroplane, or that one can be half pregnant. Plainly the effect is either one or the other, either entirely random or purposeful and directed in some way.

But, almost unbelievably, this in-between state is exactly what is claimed by neo-Darwinists. And the effect that they invoke to support this rather strange mindset is natural selection. We have dealt with natural selection earlier, but, just to recap, it is evident even from the meaning of the words that natural selection can only *select*, but has no power to *create*. Remember Sir Patrick Bateson's statement that natural selection is not an agent (for change). Change has to depend totally on mutations, and then on environmental effects. Both of these, to the individual organism, must be random in the simple sense that we always use the term. Otherwise we have to admit purpose and direction, concepts which neo-Darwinists themselves explicitly reject.

But we don't even have to argue along these lines, for any system which even only partially depends on random effects is indeterminate. That is to say, a system which is partly randomly controlled and partly directed has an outcome which cannot be predicted, and is therefore effectively a random one.

Leonid Levin's law of Independence Conservation states that "no combination of random and deterministic processing can increase mutual information."<sup>211</sup> If on a journey you are faced with a two-way junction, in one sense each way is determined. But guessing, or the use of a coin flip to choose a way to proceed, does not improve your chances of taking the right way. The 'mutual information' does not increase. The use of the random generator, the guess or the coin toss, produces a totally unpredictable result.

Therefore the random effect is the 'controller' of that situation. So even if mutations, which are random, were only half the picture of evolution, and even if natural selection were a magic wand with some sort of predictive power, the overall movement of change would still be random and therefore unpredictable. The 'controller' here is the randomness of the mutations.

### The information problem

So now the question is whether this random process can produce the immensely complex information that is at the core of all biological processes in living things. This doesn't only affect the claim that random processes can produce new organisms from older ones. It also lies at the very centre of how life appeared in the first place. Indeed, the origin of biological information is considered by neo-Darwinists to be the equivalent of the origin of life.<sup>212</sup> Some neo-Darwinists claim that information can 'come out of the blue', but they are confusing two very different types of information. This is dealt with in Appendix 8, and please read this if there is any doubt on this issue. Suffice it to say that the DNA holds meaningful information, and this is only produced by intelligence.

Take a handful of Scrabble letters, say about 20, and throw them onto your carpet. How many times must you do this to produce a line of letters which form one sensible sentence? Forget it. It will never happen, not in many lifetimes of the Earth itself. Now take the letters and make a sentence yourself. This may be difficult, but, assuming you have chosen a reasonable set of letters in the first place, it is possible. How quickly you do it, and indeed if you manage it at all, depends on ... your intelligence, of course. It doesn't depend on the letters themselves, or the time of day, or even the pattern on the carpet. It only depends on you, your choice of letters and the order in which you place them. A sensible arrangement of any symbols, carrying meaningful information, only ever comes about by the use of intelligence.

Life depends on meaningful information, not on order (again refer to Appendix 8) and neo-Darwinists have no explanation for that fact. In most of our cells we have DNA, a highly complex molecule which carries immense amounts of meaningful information. This is absolutely inexplicable from an evolutionary standpoint, whatever is claimed. It is argued that this only affects the beginning of life, in the formation of the first cell, and some Theistic Evolutionists acknowledge that God intervened at this point.<sup>213</sup>

But if cells and organisms have to become more complex, then this problem of information applies here too. We know of no non-divine mechanism which genuinely increases the amount of information in a cell. Duplication of genes, or transfers of genetic material, may duplicate information, but it does nothing more. Doubling information does not increase it. To increase the amount of information we would have to change the DNA by means of mutations. Neo-Darwinists claim

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that this can happen, but, as we have shown in the section on mutations, the real experts amongst them here state that there is arguably no evidence that this leads to anything positive.

In 1977, French zoologist Pierre-Paul Grass, holding a professorship at Sorbonne University for 30 years, and ex-president of the French Academy of Sciences, asked:

“Where does [information] come from? This is a problem which concerns both biologists and philosophers and, at present, science seems incapable of solving it.”<sup>214</sup>

In 1999 astrophysicist Paul Davies stated that complex specified information, meaningful information, cannot be produced by the laws of physics and chemistry, or indeed by any other law in ‘nature’.<sup>215</sup>

This crystallises the information problem. All our knowledge leads inexorably to the conclusion that meaningful information is only generated by intelligence. This is factual, and therefore science. Speculations that meaningful information could spontaneously arise have no evidential support whatsoever, and such speculations therefore are metaphysical, faith-based, and unscientific. Whether scientists are prepared to recognise this is irrelevant. If we uphold facts, we have to accept their consequences.

### Fallacy 11: That life could arise spontaneously

Following on from the above, an important issue is the claim that life could have appeared without any outside help, that life was generated spontaneously, by random effects. We have to consider this because there is a group of Theistic Evolutionists who say that God made the universe and put all the physical and chemical things in place, but then stood back and watched life appear without interfering or assisting in any way. Clearly some rather fundamental theological issues raise their heads here, but there are also some very crucial scientific problems with this view.

To begin with, even neo-Darwinists admit that there is nothing in the physical and chemical properties of matter, the stuff of which the universe is made, which can in any way explain how life arose.<sup>216,217</sup> They offer the ideas of immense lengths of time and huge amounts of chance. But there are a number of basic reasons why these ideas are totally insufficient and why we are justified in dismissing any possibility that life could just happen by itself.<sup>218,219</sup>

Why can we be sure that life could never have arisen spontaneously? It really stems from the fact that life depends utterly on a substantial number of very complex molecules in each cell, and an immensely complex system by which they are organised and in which they act. In each cell there are a number of very large DNA molecules and typically tens or hundreds of thousands of protein molecules which are of many types. Furthermore, all these have to be in the right places in the cell, and correctly interacting with each other. We now know that there is a circular dependency between the DNA and the proteins. Proteins are produced from the information in the DNA, but the functions of the DNA depend upon proteins which come from it. Therefore they all had to be in place from the very beginning. But could the initial molecules come into existence by chance to make the first cell?

#### Two issues

There are really two separate issues here, mathematical and chemical. The chemical part is the difficulty of building the individual bits from scratch and then of connecting them all together. The mathematical issue is making sure that all the bits that make up the molecules are in the right order before they are connected up. Let's deal with the mathematical aspect first.

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### Mathematical difficulties

Firstly it must be recognised that the molecules in the cell are some of the largest known. Proteins can be very large, and the DNA molecules are immense. In one sense they are also complex. But, using proteins as our example, their complexity arises from the fact that they are all made up of many smaller, different units called amino acids, and these have to be in a tightly specified order. The best analogy is that proteins are like freight trains. Freight trains are made up of many different wagons, all connected in a line. The protein molecules are similar in that they are made up of many subunits all connected in a line, rather like those old popper beads one used to be able to buy.

It is believed that the absolute minimum number of separate and different proteins required for a cell to exist is around 800 (and there is good reason to think that this estimate is too low). Each protein molecule is between about 100 and 500 subunits (amino acids) long, and there must be thousands of *each* type of protein molecule, so many thousands in total.

A protein molecule, made up of many amino acids, is analogous to our freight train being made up of different types of ore wagons. In a real freight train the wagons with one type of ore would often be lumped together, but in our protein molecule the amino acids appear almost randomly arranged. The arrangement may indeed look random, but to be of any use in the cell those amino acids must be arranged in a very precise sequence. The reason for this is that to be useful the long amino acid string folds up into a very precisely shaped ball, and this folding is controlled absolutely by the sequence of the amino acids which form connections with one another. But the real question is, when life started, how did the amino acids get into the right sequence in any protein?

In our freight train analogy this would probably be done by a computer program in the railway yard, telling the loco drivers and the switchers where each wagon goes in the consist (the whole train). In a cell this is the mathematical problem of assembling the amino acids in the correct sequence in each protein. This sequence is specified by the DNA in the nucleus, by a copying mechanism and by subsequent manipulations of the molecules themselves.

### The myth of time

Now it can be shown quite easily, assuming that the Earth is as old as modern science claims, that the total number of protein molecules in every living thing that has ever existed, produced since the Earth

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appeared, cannot have been more than about  $1 \times 10^{40}$ , a number with 40 zeros after the 1. We get this by estimating the number of organisms which could have lived, and by multiplying that by the average number of cells that each had, and then by the number of protein molecules required by each cell. This might sound a bit vague, but we can get somewhere near what it must have been. We can certainly put an upper limit on it.

Douglas Axe, in his book *Undeniable*, shows that if proteins are made randomly, (which is the way in which neo-Darwinists believe they had to be made) on average only one *useful* protein for a cell appears when  $1 \times 10^{74}$  proteins are produced. So taking the calculation in the previous paragraph, this means that to be reasonably certain of acquiring just *one useful protein molecule by chance*, one would have to wait  $1 \times 10^{34}$  times the age of the Earth (i.e.  $1 \times 10^{74}$  divided by  $1 \times 10^{40}$ ).<sup>220</sup> Physicists believe the Earth to be five billion years old. Therefore we would have to wait an absurdly long time for enough proteins to form by chance just to make up one cell. This would be  $1 \times 10^{34}$  multiplied by five billion years multiplied by 800 for the number of different proteins in a cell, multiplied by 1000 or so for each protein. It's probably of the order of at least  $4 \times 10^{50}$  years. The point is that just one useful cell protein isn't going to happen by chance, so the idea that a whole cell might somehow pop out of nowhere is just wild imagination.

In case you are still not sure about the time involved, perhaps because you are not sure what  $4 \times 10^{50}$  years really means, let's look at it another way. Let's not talk about  $4 \times 10^{50}$ , let's imagine a small fraction of that number.  $1 \times 10^{25}$  will do nicely. The Andromeda nebula is our nearest galaxy, but is a long way away, approximately 2.5 million light-years from Earth, about 15,000,000,000,000 miles or 24,000,000,000,000 kilometres. If we stacked  $1 \times 10^{25}$  normal playing cards in a single pile they would reach beyond the Andromeda nebula. But  $1 \times 10^{50}$  playing cards would reach  $1 \times 10^{25}$  times further. So  $1 \times 10^{50}$  years is an utterly unimaginably long time for a cell to form, assuming everything else is in its favour, which it isn't, in fact.

Mathematician John Lennox, a Professor of Mathematics at Oxford, in his book *God's Undertaker*, has also calculated the chance of randomly putting together just one cell. Assuming that the most simple cell is reckoned to require at least 800 proteins to function at all, Lennox makes clear that the odds of producing all the molecules for a functional cell diminish in various ways to only 1 chance in  $1 \times 10^{40,000}$ , a figure way, way beyond imagination, never mind possibility.<sup>221</sup> It is generally accepted that 1 chance in  $1 \times 10^{50}$  represents outright

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impossibility, so scientists choosing to go any further down this road are driven purely by faith, not by rationality. Life by this calculation is truly miraculous.

If the maths passes you by, let's just say that you cannot honestly have any reason to believe that even one useful protein molecule for a cell could be produced by chance in the life-times of many, many universes. And if that is true, then cells are never going to appear by chance processes.

What that all represents, using several proofs, is that there is no way, absolutely *no way*, that life just happened somehow. It isn't that life is rather unlikely. Simply from the point of view of time it's wildly impossible, and no clever scheme for the generation of life in the deep ocean, or in some cave, or deep in the Earth itself, or even anywhere else in the universe, is going to change that.

So there are utterly insurmountable mathematical difficulties in the way of generating the molecules required for life. The chances of putting everything together in the correct sequence are so low as to be effectively impossible. From this angle alone, spontaneous generation of life is untenable as an idea. But we haven't finished.

### The difficulties of chemical synthesis

The second issue is a chemical one. Having got the subunits all together in a line in the right sequence, we need to physically join them together. This, going back to our freight train analogy, is like the loco pushing the wagons together and the yard workers physically coupling them up. This isn't very difficult in a railway yard, but it is a significant chemical problem in both the DNA and proteins. To get some sort of handle on this we need to listen to James Tour.

James Tour is an American synthetic organic chemist, specialising in nanotechnology. He is a Professor of Chemistry, Professor of Materials Science and Nano-Engineering, and Professor of Computer Science at Rice University in Houston, Texas, United States. He is a member of an elite, very small, international group of synthetic organic chemists who really make complex molecules rather than sitting back and theorising. In a lecture, and in a chapter that he wrote for *Theistic Evolution*, he states quite unequivocally that those who try to convince others about the spontaneous generation of life simply "do not know what they are talking about."<sup>222,223</sup>

In several of the films, given as lectures and published on YouTube,<sup>224</sup> Tour goes into some detail about the hurdles one must get over to

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make complex molecules, and the seemingly endless traps and pitfalls one has to avoid. The impression one obtains from some of the media is that one can throw a lot of stuff into some container, stir it up, and out pops the pure molecule you want. Tour disabuses one of that idea very thoroughly (see Appendix 3).

Having discussed these things in detail with a number of his learned colleagues, Tour is also quite adamant that no-one has the remotest idea how any of this could have occurred without intelligent, detailed supervision and control. And this isn't a case of our having incomplete knowledge, which we might be able to address at some point. This is all about contradicting everything we now know about chemistry and physics. From a chemical point of view alone we can be absolutely certain that life did not arise by chance.

### **Time is an enemy**

Some are still happy to argue that time solved the problem, but Tour makes it quite clear that, in the real world, time is actually an enemy. The reason for this is that, without the natural protection mechanisms already in the cell, any molecules which might spontaneously form outside a cell would come apart *more quickly than they were being made*. This, again, is a simple but inexorable chemical effect which cannot be prevented. As a chemist, although nowhere near the ability of Tour, I can confirm his statements absolutely.

### **The problem of water**

Another of the issues which comes out of Tour's work, and that of others, is the role of water. Water is absolutely crucial to the production of the very large molecules in the cell. Water not only supports the 'machinery' which does the construction, but it is an intimate and irreplaceable part of the process. Water is incorporated into the molecules themselves.

Paradoxically, however, water is also a very dangerous substance. Without the inbuilt protective mechanisms of the cell machinery, water would destroy the molecules almost as soon as they were made. A few of the transformations which have to occur to build the molecules can do without water, indeed some, artificially done outside a cell, are derailed by its very presence. However, most of these transformations, the reactions, rely absolutely on water being present. So one has to ask how these molecules could ever have been constructed outside the cell without the cellular protective mechanisms. This is the basic chemical dilemma which would have prevented life appearing spontaneously.

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### 'Extraterrestrial life'

It has been suggested that life might have spontaneously occurred elsewhere in the universe. That idea has been around since the time of Lord Kelvin (1871) and Svante Arrhenius (1903), but was first put forward as a modern hypothesis by Francis Crick in 1976 when it was called 'Panspermia'. In 1981 Fred Hoyle, Chandra Wickramasinghe and their many colleagues extended the idea. They proposed that aliens on a distant planet 'seeded' the universe with DNA strands which somehow made their way to Earth via comets or meteorites.<sup>225</sup> The reason that a possible extra-terrestrial life source came to prominence was that Hoyle and Wickramasinghe made quite a good case for there being no conditions on the early Earth which would have permitted the natural appearance of life there. Therefore, since the spontaneous appearance of life was (to them) a given, life had to be generated elsewhere.

Although we have never seen it articulated, one suspects that Hoyle and Wickramasinghe were having a little fun with their colleagues over this issue. They of all people must have been aware that anything impossible in all the varied environments on Earth, past and present, would also be impossible anywhere else, assuming that the laws of chemistry and physics hold throughout the Universe, and we have absolutely no scientific reason to believe otherwise.

In the end, this cannot be tested, and therefore by implication it is outside the domain of science. In any case, all these speculations manage to do is to move the problem onto a different planet, but they do nothing to resolve the issues. Whether on the Earth or on some distant planetary body, neither the mathematical nor the chemical issues go away.

Only those ignorant of the mathematical and chemical issues can hold to a belief that life's molecules could somehow just 'happen'. Sadly that includes most biologists, for the simple reason that they are wholly unaware of the monumental chemical problems. As Tour makes clear, speculation does not solve any of the chemical problems of the generation of the many large molecules which are vital for life. Neither does it come anywhere near dealing with the mathematical issues. There is a more technical analysis of this issue in the appendix.

## Fallacy 12: That the Galapagos finches and the Peppered Moth show macro-evolution

It would, perhaps, be wrong not to include at least two examples of living organisms which are used to try to prove evolution, and to show that they do nothing of the kind. The first of these is almost certainly an example of the action of epigenetics.<sup>226</sup>

Epigenetics (i.e. extra to the genes) is a relatively new discovery, or perhaps acceptance, that what has previously looked like changes in the genetic DNA is merely the result of the genes being controlled by other parts of the DNA. (Genes, remember, are merely a small part of the total DNA in each cell.) These other parts, which have until recently been termed 'Junk DNA', do not appear to code directly for proteins, but are now being recognised as the means by which the 'coding' parts of the DNA, the genes, are controlled to do their job of constructing proteins.

In 2011, Nessa Carey, a former Senior Lecturer in Molecular Biology at Imperial College, London, published *The Epigenetics Revolution*,<sup>227</sup> in which she gave the molecular details of a host of examples of epigenetic action, and showed that many changes previously viewed as macro-evolution have nothing whatsoever to do with DNA and gene change or mutation. None of these changes, which are clearly examples of micro-evolution, could be responsible for major changes leading to completely new species. Both the changes in the Galapagos finches and in the Peppered Moth are examples of epigenetics and not neo-Darwinistic change, as was previously believed.

### The Finches

When Darwin went to the Galapagos Islands he noticed and recorded the variations in the ground finches he found there. One characteristic which intrigued him was their beak shape. Wikipedia gives the current view of these birds in its page 'Darwin's finches' (although it was actually David Lack in his 1947 book, *Darwin's Finches*, who gave the group its nickname). The writer of the Wikipedia page gives his opinion that there are a number of different species, and that they 'must' have evolved from one type which was assumed to have flown several hundred miles from the main South American continent. However, this isn't the whole story, and the main claims in the page are not supported by the evidence.

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As we now know, and as Lee Spetner shows in his book, *The Evolution Revolution*, and Michael Behe in his book, *Darwin Devolves*, the finches' beaks change shape depending on the availability of food and by other environmental conditions, and very rapidly, and therefore not by any underlying genetic (DNA) change.<sup>228,229</sup> Some of the birds' beaks are short and strongly built, and can be used for cracking open hard-shelled nuts, while others are much more slender and used for picking up softer seeds.

Since the food availability varies from year to year, the beaks of the finches also vary, ensuring that the birds as a group have an adequate supply of food. This is where the environment affects the controlling systems of the DNA to produce variation in order that the individuals can live, which is a very typical epigenetic effect. But this is micro-evolution, not macro-evolution. And indeed, what the Galapagos finches have not done over supposedly great lengths of time is to change into any other sorts of birds. They remain ground finches, very similar to those found on the mainland.

Michael Behe gives some crucial biochemical detail relevant to this story. If, as neo-Darwinists hold, the finches have been there for many thousands of years, it is remarkable that there have only been relatively trivial changes, a few in the DNA, probably due to normal genetic drift, but no alteration beyond the genus level. They are still finches. This is in accord with Behe's findings that there is no evidence for changes above the genus level in any organism, animal or plant.<sup>230</sup>

The case of the Galapagos finches, far from being an example of evolution, actually argues very strongly against it.<sup>231</sup> If the exceedingly minor changes which have occurred in the finches' DNA took place over approximately two million years, which is the sort of timescale applied by evolutionists here, then the amount of evolution has effectively been zero. And if the sort of environmental pressures which the birds regularly undergo have done so little to effect change in that time span, it is simply absurd to believe that evolution is responsible for the vastly more complex changes which are considered to have taken place to produce all the characteristics of living things which we see around us today.

It is now generally accepted, for example, that the Cambrian 'explosion' took about ten million years, and brought forth a large number of very different life forms, the majority of the major types of animals we see alive today and as fossil remnants. In view of the apparent inability of evolutionary processes to significantly change the

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Galapagos finches in two million years, how much confidence can we place in evolutionary ideas generally?

An interesting addition to this is given by Spetner, who recounts the experiment conducted by the United States Government on four isolated atolls, the Laysan group in the middle of the Pacific, which had no previous finch inhabitants, and on which about 100 finches were introduced in 1967.<sup>232</sup> Just seventeen years later the birds were found to have diversified in a very similar way to the finches found on the Galapagos, by behaviour, bill shapes and associated musculature.

The implications of this are immense. It shows that one of the prime 'proofs' of neo-Darwinism is nothing of the kind. The Laysan finches are almost certainly showing relatively rapid epigenetic effects, that is to say variation or micro-evolution, but not macro-evolution, and the Galapagos finches are the result, quite literally, of a loss of DNA function.<sup>233</sup>

### The Peppered Moth

The story of the Peppered Moth, *Biston betularia*, is in the end a rather sad comment on the probity of some researchers. This story is no more a proof of evolution than what might have been inferred, in the mid 1800s in America, from the ever larger numbers of black people present. Technically it is known as a gene-pool shift, and has happened in many places for all sorts of different reasons, none having anything remotely to do with neo-Darwinism, macro-evolution.

The original work on the Peppered Moth was done by H.B. Kettlewell in 1959. He noticed that in a forest there were many more melanic (dark) forms than non-melanic (light) forms of this moth, and assumed that there had been some evolution going on, where the light form had evolved into the dark form. It was thought that pollution from the Industrial Revolution darkened the tree trunks, mostly by killing the light-coloured covering lichen and adding soot. This, Kettlewell argued, made the light form of this moth more visible to birds, and so they were preferentially eaten, whereas the dark form tended to survive and became more common. Later, as pollution lessened and the barks became cleaner, the light moth became predominant again.

The shift in moth numbers was carefully documented through catching them in traps. Release-recapture experiments confirmed that in more polluted forests more of the dark form survived for recapture, and in less polluted areas the light forms predominated. In addition, birds were filmed preferentially eating the less camouflaged moths off tree trunks. The story has generated boundless evolutionary enthusiasm.

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Kettlewell, who performed most of the classic experiments, said that if Darwin had seen this, “He would have witnessed the consummation and confirmation of his life’s work.”<sup>234</sup>

### The reality

But, even as it stands, the textbook story demonstrates nothing more than gene frequencies shifting back and forth within one species. This is not evolution, for we have no proof that there were only light-coloured, (non-melanic) and no dark coloured (melanic) moths to begin with. It offers nothing which, even given millions of years, could add the sort of complex design information needed for amoeba-to-man evolution. Even L.H. Matthews, a biologist so distinguished that he was asked to write the foreword for the 1971 edition of Darwin’s *Origin of Species*, said therein that the Peppered Moth example showed natural selection, but not “evolution in action”.

It also turns out that this classic ‘research’ story itself has some very serious problems. To begin with there is some doubt as to whether Peppered Moths actually rest on tree trunks in full view during the day. The implications of this doubt are considerable. It unfortunately implies that Kettlewell, or whoever did the photos, faked them.

British scientist Cyril Clarke investigated the Peppered Moth for 25 years, and saw only *two* in their natural habitat by day. Kettlewell and others attracted the moths into traps in the forest either with light, or by releasing female pheromones. In each case the moths only flew in at night, and the simple fact is that we do not know where they spend the day, for they are nocturnal insects.<sup>235</sup> If birds are looking for them during the day they are likely to be disappointed, for the instinct in a nocturnal animal is to hide during daylight hours.

The moths filmed being eaten by the birds were laboratory-bred ones placed onto tree trunks by Kettlewell. They were so languid that he once had to warm them up on his car bonnet (hood).<sup>236</sup> And what of all those still photos of moths on tree trunks? One paper described how it was done. Dead moths were glued to the tree.<sup>237</sup> When he was a student, University of Massachusetts’ biologist Theodore Sargent helped glue moths onto trees for a NOVA documentary. He says textbooks and films have featured “a lot of fraudulent photographs”.<sup>238</sup>

Since then other studies have confirmed that birds do take the non-camouflaged moths (light variants on dark bark and vice versa), and indeed it would be rather surprising if they didn’t, but this is still a long way from proof that this was the mechanism for the change. Other studies have shown a very poor correlation between the lowered lichen

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covering, which is an indicator of poor air quality, and the respective moth populations. In fact there is a much better relationship between the predominant colour of the moth population and the hydrogen sulphide content of the air. This, so far as is known, has nothing to do with the habits of birds.

Again, when one group of researchers glued dead moths onto trunks in an unpolluted forest, the birds took more of the dark and less camouflaged ones, as expected. But their traps captured four times as many dark moths as light ones, the exact opposite of textbook predictions, because in an unpolluted forest there should, of course, have been many more of the lighter coloured, non-melanic moths.<sup>239</sup> Or was it because the dark-coloured moths were more prone to be attracted by the lights used? This is the sort of issue which can catch out even the most careful researcher. Science is very rarely clear-cut.

University of Chicago evolutionary biologist Jerry Coyne agrees that the Peppered Moth story, which was “the prize horse in our stable”, has to be thrown out. He says the realisation that this was necessary gave him the same feeling as when he discovered that Santa Claus was not real.<sup>240</sup> Regrettably, millions of students continue to be indoctrinated with a ‘proof’ of evolution which is riddled with error, fraud and half-truths, and which even as a straightforward proposition gives absolutely no support to neo-Darwinism.

Unfettered by evolutionary ‘just so’ stories,<sup>241</sup> researchers can now look for the real causes of these population shifts. Melanic forms of this moth are known elsewhere than in Britain, and there is no reason to suppose that they were not present in this country originally. Might the melanic form actually have a function, like absorbing more warmth? Could it reflect conditions in the caterpillar stage? It’s a relevant question because in a different nocturnal moth species Sargent has found that the plants eaten by the larvae may induce or repress the expression of such melanism in adult moths.<sup>242</sup>

At the moment it is clear that the Peppered Moths do not support evolution in any shape or form. Neither that example, nor the case of the Galapagos Finches, has anything to do with true macro-evolution, neo-Darwinism.

These are two examples of a number of claimed ‘evolutionary proofs’, all of have huge questions hanging over them when analysed from the evidence.

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### Conclusion

It should be made clear that there are many more fallacies claimed by neo-Darwinists, and therefore by many Theistic Evolutionists, but unless we were to write a very much larger book we could not cover them in reasonable detail. The above chapters, however, should show where the land really lies. The simple fact is that in nearly 55 years of searching we have personally not found a single proof of any evolutionary scheme which stands up to real scientific scrutiny.

This is important. Materialists claim that those who are anti-evolutionary are driven by nothing more than religious faith, which by implication is a knowledge vacuum. This in itself is another fallacy. The paradox is that we do not even need a knowledge of a Creator to realise that all evolutionary schemes fail. They fail on the basis of evidence, of logic, and of common experience. Neo-Darwinian thinking is very largely speculation, sometimes shown even to be lacking simple common sense, and occasionally supported by false claims. The most damning indictment of neo-Darwinism is that it is demonstrably not science, but faith-based.

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# CHAPTER 13: CONTRA-EVOLUTIONARY EVIDENCE

1. The mechanism of flower fertilisation
2. The bat's wing and the other necessary changes in the bat's body
3. The enucleation of the red blood cell
4. Feathers and the flight of birds
5. The pentadactyl limb
6. The gecko
7. The design 'problem'
8. Convergent evolution
9. The testimony of cladism
10. The top ten problems with neo-Darwinian evolution

## Introduction

In a short film on YouTube, *The Biology of the Baroque*, put out by the Discovery Institute, the point is well made that life shows properties far above those which would be required for simple survival. For example, how would an ability in higher mathematics have evolved when humans or their supposed ancestors were chasing wildebeest on the Serengeti? Why was it that our delight in seeing a rainbow against a dark sky, or the amazing colours of sunset, was necessary for survival?

Evolution does not explain why there are so many colours of flowers, especially as, curiously, there isn't much evidence that the colour we perceive helps bees pollinate flowers.<sup>1</sup> Neither is there any evolutionary explanation for why some butterflies are vividly coloured, whilst others aren't, and why leaves display an almost infinite variety of shapes. There are almost endless examples like this, none of which evolution even begins to give cogent reasons for. And it isn't just our perception of beauty that is a problem. There are many other issues as well.<sup>2,3,4,5</sup>

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For example, some animals are superbly camouflaged, some not at all. Butterflies are a very good example of this. Many butterflies are very brightly coloured, the famous *Morpho* butterflies being visible a quarter of a mile away in deep jungle. The cabbage white butterfly could hardly stand out more than it does, yet it is one of our most common insects, so clearly it is not the most vulnerable. As a contrast the Peppered Moth is almost indistinguishable on the bark of a suitable tree, although, as we have pointed out, they are nocturnal and do not rest on bark during daytime, from which we may ask why they are camouflaged in the first place.

Fish are very often a lighter colour underneath and darker on top, which certainly acts as camouflage in both directions. Chameleons, octopuses, squid and a number of fish species can alter their body colour and patterns to match their background. The vertical stripes on animals in woodland disguise them very well, and the white fur of the polar bear and arctic fox does the same job in snowy landscapes. Some animals are superbly camouflaged, but others, even when we think that we can see a need, not at all. So what price camouflage? Why are some so incredibly well hidden, while others appear to advertise their presence? And these are not the only issues which turn up from time to time.

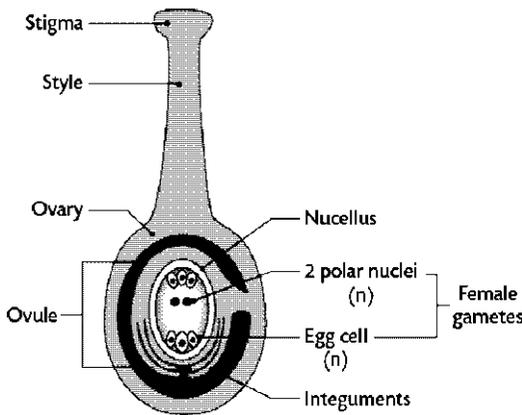
In this section we shall look at a few of the many characteristics of living things which neo-Darwinism cannot explain. For the most part these are specific examples, drawn from many. They emphasise the absurdity of the neo-Darwinist argument.

## A Challenge to Theistic Evolution

### 1. The mechanism of flower fertilisation

For a full description of this process one really needs to read Denton's book, *Evolution: Still a Theory in Crisis*.<sup>6</sup> Below is the problem in a nutshell. The two diagrams are taken from the book.

As pepper flowers prepare for fertilisation, the sequence in the flower carpels, illustrated on the next page, where the new seed will be produced, is very varied.



The potential new plants all begin from a single cell, technically known as a megaspore mother cell. This then divides into two, but from this point, depending on the particular species of pepper, there are at least seven distinct 'pathways', patterns of cell division and rearrangement, before the embryo sac is ready for fertilisation. The

diagram shows the finished carpel, the centre part of the flower, just before it is fertilised by a pollen grain. All these processes are complex, but the majority end with just two cells, or nuclei, which are involved in the actual process of fertilisation. Denton reasonably asks how this variability in closely related species could ever have been driven by the need for survival, as the neo-Darwinian idea demands, if the result of all the different sequences is fundamentally the same.

The commonest pathway is that of the *Polygonum* type, illustrated in the top line of the diagram on the next page. In this process there are various cell divisions and, weirdly, several cell deaths. The remaining cells are arranged very precisely in the mature embryo sac. A second pathway, shown on the next line, is similar, but here a different set of cells die, and the subsequent divisions are quite different. Inspection of the table shows several other sequences in different species of this one small plant group.

As Denton says, the underlying cellular machinery which produces these changes must be very complex, and different in each species,

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but to what end? All that is eventually produced, with the sperm nuclei, are two fertilised cells. One is the egg cell from which a new seed is made and a new plant will grow, and the other is a food store. Denton's own description of this and other utterly inexplicable features is well worth a read.

| Type                                          | Megasporogenesis                                                                    |                                                                                     |                                                                                     | Megagametogenesis                                                                   |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                               | Megaspore mother cell                                                               | Division I                                                                          | Division II                                                                         | Division III                                                                        | Division IV                                                                         | Division V                                                                          | Mature embryo sac                                                                   |
| Monosporic<br>8-nucleate<br>Polygonum type    |    |    |    |    |    |    |    |
| Monosporic<br>4-nucleate<br>Oenothera type    |    |    |    |    |    |    |    |
| Bisporic<br>8-nucleate<br>Allium type         |    |    |    |    |    |    |    |
| Tetrasporic<br>16-nucleate<br>Peperomia type  |    |    |    |    |    |    |    |
| Tetrasporic<br>16-nucleate<br>Penaea type     |    |    |    |    |    |    |    |
| Tetrasporic<br>16-nucleate<br>Drusa type      |  |  |  |  |  |  |  |
| Tetrasporic<br>8-nucleate<br>Fritillaria type |  |  |  |  |  |  |  |

### Cell Division in Peppers<sup>7</sup>

All this presents neo-Darwinism with an insoluble problem. Firstly, how did all this come about by many tiny incremental changes? Secondly, why was each peculiar stage necessary for survival? And thirdly, and perhaps even more pointedly, why all these large differences in seven closely related types of plant merely to achieve apparently identical ends? And how does this sit with the idea that these developmental stages all came from a single, basic one, especially when one thinks of the huge chemical changes which would have had to occur?

The evolutionist's response to this is to ask why a God would have created these things in this way, but this hardly lets them off the hook.

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They still have to come up with their own good reason why evolution invented half a dozen different ways to achieve virtually identical ends. And a creationist's answer, as to why a Deity might have done this, is that He allowed His angels sufficient leeway in their own creativity to produce what we see. But that is irrelevant. It is for the evolutionists to adequately defend their contention.

## 2. The bat's wing and the other necessary changes in the bat's body

There are 64 types of mammals known which can simply glide, such as the 'Flying' Squirrel, flying possums and the colugo.<sup>8</sup> Flying fish also glide, of course, and amazingly some three thousand species of frogs possess that ability.<sup>9</sup> But gliding is not the same as flying.

### Gliding and Flying

Birds, bats and insects fly, where other animals merely glide. Gliding is passive, where flying is active, and there is an immense gulf between the two. Animal gliding is almost invariably limited to descent, and generally only in gentle curves at most. True flyers have complete command of the air, ascending and descending, swooping, looping, barrel-rolling and turning sharply. Watching bats and dragonflies chasing insects, and rooks on a windy day, well and truly bangs this home.

There is an immense gap between animals capable of gliding and true flyers.<sup>10</sup> Gliding animals have to be able to climb solid objects, simply to gain the height which they need for gliding. With rare exceptions, true flying animals do not need to do this and, indeed, true flyers usually have problems climbing. Bats can climb, but they don't do it with much facility. Birds have the same difficulty without the use of their wings. So for any 'intermediate' between, say, a bat and a flying squirrel, there would have to be an animal with half wings and partly able to climb. Would this be an advantageous position for an animal? How would it improve on their original abilities, whatever they were?

### Structure

Gliding animals rely almost exclusively on a fold of skin stretched between the fore and hind limbs along the sides of the body (called a *patagium*), or a relatively flattened body and webbing between slightly enlarged digits.<sup>11</sup> There is, of course, a limit to the amount of loose skin that an animal can tolerate without it getting in the way of normal living. This is clear from a consideration of all the animals which have these structures, although some of these skin flaps are quite extensive.

The bat's wing is a structure which ought to give a committed neo-Darwinist sleepless nights, for a bat's wing is a very different object to a simple flap of skin. It is an integral part of the forelimb and is reinforced with very long, fine bones. The wing is relatively of a very much greater area than the skin extensions of gliding animals, and

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consists of a purpose-designed membrane rather than of a simple flap of skin. It is also backed up by a host of energy-saving measures in the body of the bat, and highly sophisticated control mechanisms in the brain.

But there are no intermediates known between the *patagium* of a gliding mammal and the fully developed bat's wing, living or fossil. Remarkably, from a consideration of the bone structure, all fossil bats could fly as well as any modern equivalent.<sup>12</sup>

“The earliest known bats appear in the fossil record ... [about] 50 million years ago, and they appear suddenly and already possessing the anatomical hallmarks of powered flight.”<sup>13</sup>

Even if we accept the usual neo-Darwinists' belief in huge time-spans, there is no incontrovertible fossil evidence of ancestors or transitional forms, the 'missing links'. This is hardly surprising. According to Glen Jepson, in his book, *The Biology of Bats*, the difference between something like a Flying Squirrel [which glides] and a bat isn't just enormous, it's unbridgeable.<sup>14</sup>

### Far-reaching differences

Giannini lists no fewer than 14 separate, major differences between bats and typical mammals. These are all changes which are necessary to enable powered flight. They include such specialist features as locking mechanisms in the vertebral column for energy-saving, in the forelimb joints to prevent too much twisting of the wing (think how our lower arms can twist 180 degrees) and in the hindlimb joints for gripping whilst resting.<sup>15</sup>

To this can be added wing leading- and trailing-edge control, streamlining of the body, moving the body's muscle-mass forward for aerial balance, and the synchronisation of the wing beats to respiration. This writer goes on, “... exactly how bats achieved the [necessary structures] for flight ... remains poorly understood,” which is the evolutionists' usual way of saying “we haven't the remotest idea.”<sup>16</sup>

The genetics of the 'change' are also fascinating. There are, apparently, literally hundreds of new 'gene circuits'. These are either pre-existing genetic pathways co-opted to new tasks or brand new genes, that is to say new DNA, including a dozen or more genes that are simply involved in the production of the long 'finger' bones in the wings.<sup>17</sup>

One of the problems is that some of these genes can also be involved in structures having nothing whatsoever to do with the bat's wing (this

## Chapter 13: Contra-evolutionary evidence

is generally known as pleiotropy). But we have an even greater problem here. At least two of the necessary 'bone-lengthening' genes actually work against producing the membrane between the 'fingers'. Longer bones, it seems, dictate less membrane! So more genes have to be employed to suppress this tendency, so that the membranes can form properly!<sup>18,19</sup>

### Neo-Darwinian difficulties

And this is where the neo-Darwinian idea runs smack into the brick wall of reality, for the one thing that cannot be true of all this is that these changes came about incrementally, bit by tiny bit, through single additions or alterations in the DNA. There would have had to be many thousands of simultaneous changes in the genes and pathways in order to produce a functional animal. This is the clear evidence of the fossils, for we have no transitional forms between the bats and any possible forebears. Hence the admission of experts that the change is "poorly understood", which it wouldn't be if there were valid transitional forms.

So, once again, we have these spoilers for evolution: sudden appearance in the fossil record with no previous 'half-bat' forms, huge changes which cannot by any stretch of imagination be due to many fine incremental stages, and highly complex genetics which equally could not have come about by fine increments. And we haven't even started on a bat's amazing echo-location skills.

We are finding that the more we discover in biology, the greater the problems that are being exposed for the current evolutionary mindset. We should expect this. Scientists are inevitably uncovering the truth. If our suspicions are correct, it is little wonder that their discoveries and their pre-conceptions clash.

So often neo-Darwinists have to assume teleology, a knowledge of ultimate design or ends, in living things. The evolutionary process would have had to 'know' exactly where it was going, if only because the intermediate steps of the change are plainly disadvantageous to the animal. But teleology directly nullifies the neo-Darwinists' central belief, famously articulated by Dawkins, that the 'Watchmaker' is blind!

### 3. The enucleation of the red blood cell

The loss of the nucleus (the enucleation) of the mammalian red blood cell, as it is produced in the bone marrow, is one of the most curious events in biology. It apparently contributes nothing to the health or fitness of any individual, and yet is highly complex, which means that it could not have come about by many fine incremental stages. It defies every tenet of neo-Darwinian evolution. It was this, above anything else, which caused Michael Denton to question neo-Darwinism when reading for his PhD in the Biochemistry Department of Kings College, London.<sup>20</sup> For a fuller description of the enucleation process with appropriate references, and the challenges it presents to neo-Darwinists, see his book, *Evolution: Still a Theory in Crisis* chapter 7, section 7.2. The account which follows here is a summary of that section.

Almost all living cells have a nucleus, a part in the centre which has its own membrane and is separated from the rest of the cell contents. But mammals are unique in the living world in having red blood cells with no nucleus. All other types of animals, such as fish, amphibians, reptiles, insects and crustaceans, have nucleated red cells and, significantly, so do birds, a fact we shall revisit.

Our red cells are responsible for carrying most of the oxygen to all our body cells, and they are principally made in the centre of the long bones, in what is known as the bone marrow. When they are formed they are split off from others, and to produce each red cell there are apparently several divisions from the starting stem cell. However, the final small cell produced in the marrow isn't a red blood cell as we would recognise it, because unlike red blood cells circulating in our blood, this still has its nucleus like any other normal body cell. But then, in a very complex procedure, and before the cell is released into the blood-stream, the nucleus is lost.

But the nucleus doesn't just vanish, absorbed by the cell, as one might expect. Before the cell is released into the blood stream the nucleus is physically ejected from the new red blood cell, and then engulfed and destroyed by a passing white blood cell. Almost certainly this lack of nuclei in our red blood cells contributes to the relatively short life of those cells, which is three to four months in human beings. At the end of its life the red cell usually ruptures and is filtered out by the spleen and recycled.

### Nuclear movement

But consider the mechanics of the loss of the nucleus. It has to be drawn to one side of the cell, which involves the building of a large network of microtubules. Motor molecules called kinesins physically drag the nucleus along these tubules from the centre of the cell to the cell wall. The cell wall at this point has to lose several important strengthening elements and become very much more elastic than it is usually.

The nucleus then has to be physically pushed up against the wall, creating first a bulge and then a distinct blob. Finally the cell wall behind the nucleus has to be pinched off between it and the rest of the cell, stitched up tightly and then restored to its original tough, impenetrable state.

At some point in that process the little nucleus-containing blob has to be 'flagged' as an unwanted intruder, just as bacterial invaders are. This prompts a white blood cell to grab it, swallow it and digest it, recycling the very useful materials of which it is composed.

That summary is a very short and rather inadequate synopsis of what occurs. Denton points out that, by any stretch of the imagination, this process cannot have come about by many finely divided stages. It's a bit like pregnancy. Either one is or one isn't. Either the nucleus stays in the cell or it doesn't. To confer any advantage it can't be half in and half out.

Further as already pointed out, this change, from a red blood cell with a nucleus to one without it, is a universal feature of all mammals, but of no other type of animal, not fish, amphibians, reptiles or birds, and not any of the non-vertebrates like bees and snails.

### No advantages

The main biological argument for the loss of the nucleus seems to be that the red cell can assume its typical, filled-in doughnut shape, which means that it has a large surface area compared to its volume. This in turn means that it is very efficient in taking up and releasing oxygen, its principal purpose in life. In this form the cell can also be easily folded into a much narrower shape. This is rather useful when it has to work its way through capillaries which internally are about half the diameter of the normal red cell.

But unfortunately, to do this it has to be folded pretty tightly. This means that the red cell must lose much of its oxygen-trading advantage precisely where it is most needed, both in the lung

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capillaries when it is absorbing the gas and in the tissue capillaries when it is releasing it.

And there is worse to come for any evolutionary argument. Apparently red blood cells with nuclei, and some which are much larger than normal, are found in the blood stream of the mammal foetus when it is in the womb. This is exactly the situation where efficiency of gas exchange is hugely important. So if the cell without a nucleus is more efficient in exchanging oxygen, why are nucleated cells, which are supposedly less efficient, found in a situation where a supply of oxygen is most critical?

### **Oxygen demand in Birds**

Continuing this argument, all birds have a much higher demand for oxygen than we do, their metabolism (speed of body processes) being considerably greater than our own. And yet all the red blood cells in birds have nuclei!

Birds are able to survive levels of hypoxia (oxygen deprivation) which would kill mammals. When hovering and sucking nectar from a flower, a Humming Bird's heart needs to beat about 60 times a second, indicating an immense need for oxygen. Bar-headed geese, migrating regularly over the Himalayas at altitudes of up to 6500 metres, fly in air with only a fifth as much oxygen available as normal. It is true that several features of their metabolism may assist them in this endeavour, although there is considerable argument about this, but birds flying in these conditions are reckoned to need between 10 and 20 times as much oxygen as when they are at rest.

So if red blood cells without nuclei have an advantage, one would imagine that evolution would have provided birds with them. But it didn't, and it is eminently reasonable to ask why not. Don't birds have a huge need for efficient oxygen systems? And isn't this precisely the sort of situation to which mutation and natural selection should speedily respond? It seems that red cells with nuclei aren't much of a problem in those cases.

So why do mammals have red blood cells without nuclei with all the mind-numbing complexity that it demands, but all other animals lack them? What advantage does this give mammals, which is the neo-Darwinistic reason for any change?

We still have no solid answers as to why a red blood cell loses its nucleus. It may be that, as the red cell ages, it becomes less efficient, and the lack of a nucleus initiates the recycling of the useful materials

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and the production of new red cells. This would ensure an efficient oxygen transport system which a blood system clogged with old cells would struggle to provide. But this doesn't help evolutionists explain why birds and other animals have nucleated red cells, for exactly the same issues affect them.

### **Sophisticated control**

Lastly, purely on the issue of the ejection mechanism, we know broadly what happens, but we haven't a clue how it is orchestrated and controlled. There must be an immensely complex system deeply buried in the chemistry of the cell which makes it all work, but we know absolutely nothing about its nature. But even if we did know, how could all this have slowly arisen, and without actually being used of course, until quite suddenly it was put into operation? This was Denton's question when he was studying.

From a neo-Darwinian perspective the worst part of it all is that this process and its result, the red cell without a nucleus, cannot be argued to have any particular advantages over cells with nuclei. Biologists have come up with some arguments that this process has survival value, which they believe to be plausible, but Denton simply buries these with contrary evidence.

### 4. Feathers and the flight of birds

As the famous evolutionist of the 19th Century Alfred Wallace recognised, a crucial element of the bird's wing is the feather. In 1910, W.P. Pycraft published a book, *Animal Life: An Evolutionary Natural History, Vol. II-A History of Birds*, in which he claimed that the feather could have been produced by the 'fraying' out of the sort of scale that reptiles possess.<sup>21</sup>

This preposterous story was still current and seriously promoted in 1972<sup>22</sup> and again in 2000.<sup>23</sup> It is really bizarre that mature scientists go along with this sort of absurdity, and it vividly illustrates the fact that some biologists are hopelessly ignorant of basic physical and chemical laws.

First and foremost, to propose that a frayed scale might be passed on to the next generation is the purest Lamarckism (See Appendix 4) and an absolutely forbidden idea to any neo-Darwinian, so neo-Darwinists are showing some double standards here. Secondly, it is now known that scales and feathers come from different layers of the skin, so there is no way that such a transformation could ever have occurred.

Finally, how would a scale 'fray'? This could only occur by the scale melting and being pulled out by wind, so how fast would an animal have to move to achieve that? This proposition not only shows a basic ignorance of physics, but also utterly fails to explain how this feature might somehow be passed on to the next generation. Clearly we can discount the 'frayed scale' hypothesis.

The evolutionary 'development' of the feather is one of the premier biological puzzles. As feathers appeared very suddenly in the fossil record, with some reason B.J. Stahl, in her *Vertebrate History: Problems in Evolution*, states quite frankly: "How they arose initially ... defies analysis."<sup>24</sup>

In 2002 in the *Quarterly Review of Biology*, Prum and Brush stated that: "... [feathers] have no homolog in any antecedent structure",<sup>25</sup> biological jargon which translates as "We have found nothing from which the feather could have evolved." The simple fact is that we have no fossil or living examples of evolving feathers. All were or are fully formed, and therefore, presumably, functional.

In 1974 John Ostrom revived an old idea that 'protobirds' were insect snatchers, using long arm feathers to ensnare flying insects.<sup>26</sup> The feathers on the wings, it was alleged, allowed the bird to enclose the insects with some sort of sweeping motion. Ostrom has since

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abandoned this idea as untenable, and the reason is rather simple. Anyone who has ever tried to nail an insect with a fly swat is aware of at least one simple fact, and that is that the swat face must be porous to air, otherwise the insect is simply brushed aside by the air pressure.

But a bird's wing, to be useful at all, must be reasonably *air-tight*, both for propulsion and gliding. The two modes of use, insect swatting and flying, are diametrically opposed, one absolutely precluding the other. A bird's wing could never have developed through that sort of pathway.

Concerning the fact that something is either a feather or it isn't, Prum states:

“... we think it is preferable to recognize all of the diverse structures that likely grow from feather follicles as feathers, and we recommend that the term ‘protofeather’ be abandoned. ... It is either a feather or it isn't. Period.”<sup>27</sup>

In other words, Prum contends that we have found no credible evidence in the fossil record of half-evolved feathers or of any feather evolution.<sup>28</sup>

Later workers haven't moved on from this, except in speculation, as a careful search of the Internet will reveal. Probably the best statement of this kind was from Xu and Guo, two Chinese workers, who attempted a reconstruction of the sequence in which feathers first evolved.<sup>29</sup> This is hardly concrete evidence for it.

### Feather growth

The way in which an individual feather develops from its initial little bud of cells simply has no parallel in the living world. It is the most complex external structure found in any vertebrate.<sup>30</sup> Furthermore, feather structure is critical to the functional integrity of the entire animal.<sup>31</sup> That is to say, without the feather, birds would not be able to act anything like birds. They simply wouldn't *be* birds.

Individual feather growth starts with a feather follicle, a depression in the skin in which a hollow tube appears. After the production of the tube there are several distinct stages in the growth of the feather. Barb ridges appear inside the tube, which then grow up the tube in spiral fashion, from which the barbules grow out. Then minute hooks appear, which will hold the entire feather structure together as an almost air-tight plate while still allowing considerable flexing and separation for cleaning. Finally all the living material dies off, the tube splits open, falls away and, as if by magic, out pops the fully formed feather in all its glory.

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The barbule-hook arrangement is very reminiscent of Velcro of course, itself very much like the common burr. If you are interested it is well worth looking up feather development and structure to see just what is involved here.

What is also remarkable about this process is that it apparently depends, at least in part, on a slew of already-present genetic systems, which have been redirected to produce this brand new structure. It is inevitable that neo-Darwinists employ this as ‘proof’ of evolution.<sup>32</sup>

### **Sudden appearance in the fossil record**

They conveniently forget that, at least according to their reading of the fossil record, all this appeared very suddenly. It would also be necessary to provide good reasons why this initial, simple tube, without any sort of feather structure, was quite spontaneously useful by itself, and why a host of immensely complex biochemical pathways should be suddenly conscripted and realigned to make feather production possible, without any apparent immediate advantage to the animal until the completely formed feather appeared.

Remember Prum’s comment, implying that there are no known intermediate stages in feather ‘evolution’. Everything had to be in place for the sudden appearance of the feather. This completely contradicts the neo-Darwinian principle that the changes are very small and very many over a long period of time, and that each tiny change only occurs when it immediately improves the survival of the individual, and gradually builds up to a recognisable and useful structure.

There are no less than six clearly definable substructures in the feather which are accepted by avian authorities as being completely ‘new’, in other words they have no “remotely similar analogues” in any other class of animal structure. This is as near as it gets to saying that the feather came out of the blue. There are many strange ideas used to explain feathers, but all are insufficient, according to Prum, and they really measure the desperation of neo-Darwinists to explain how feathers could have arisen.<sup>33</sup>

### **Insulation**

Feathers are employed in a number of quite distinct ways. One of the most obvious, and probably the most common, is for insulation. Being warm-blooded, all birds rely on this feature, some much more so than others. Diving birds, for instance, would quickly perish from thermal

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shock without the layer of warm air held against their skin by waterproofed feathers.

Feathers are close to being the most efficient insulation known for their weight, a very important consideration in flight. But they are complex, and the point has been made that hair would have been a better bet if feathers had developed purely for insulation, which is one of the more accepted reasons for their existence.<sup>34</sup> After all, polar bears seem to manage very well with hair as insulation, as do several other mammals, so why should birds have gone to the immense trouble to create feathers just for that purpose? Feathers may be lighter than hairs, but the difference is not great enough to justify the development of something as complex as a feather.

But the air layer is employed in at least another mode. Recent research shows that the air in a penguin's feathers can be partly shed as bubbles to lubricate their passage through the water as they come to the surface, explaining their ability to swim up very rapidly and enabling their leap onto ice floes.<sup>35</sup>

### Flight feathers

The flight feathers of a bird are of three broadly different shapes and are classified as primaries, secondaries and tertiaries. The primaries are connected to the bones equivalent to a bird's hand, the secondaries to the ulna, (one of the lower arm bones), and the tertiaries to the humerus (the upper arm bone).

The larger primaries and secondaries are asymmetric in shape, one edge having shorter barbs than the other, but each having its mirror image on the other wing. This means that each separate feather can act as a mini-wing, as can be clearly seen on the wing-tips of birds such as buzzards and eagles when they are in flight, or they can be layered over each other for a greater lifting effect.

Although each wing is asymmetric, lop-sided if you like, the two wings as whole structures are perfect mirror images of each other, the feathers being asymmetrically shaped accordingly and matched wing to wing. One might ask how this could ever have come about by chance.

The feathers are individually rotated by means of muscles and tendons in order for the gaps between them to open shutter-fashion as the wing is raised, and to close as the wing makes its downbeat. And remarkably, when feathers are lost in moulting, they are lost in precise opposite pairs, in order to balance the bird when flying.

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The wings can also be changed in shape to achieve various ends. When gliding the wing is as streamlined and flat as possible so as to minimise air resistance. When actively flying the wing is slightly cupped and can be twisted in order to provide forward motion. Finally, and this is beautifully shown by birds such as ducks when landing, the wing can also be deeply cupped and shaped like a parachute, the bottom edge being brought almost directly below the top edge, in order to slow the bird before alighting.

The leading-edge feathers of birds such as owls are frilled in such a way as to dampen any noise in flight as the animal hunts. Owls also have face feathers which act as reflectors and concentrators of sound, which explains at least some of their extraordinary powers of hearing.

### **Conditioning**

Certain feathers, known as powderdown feathers, have a role in keeping the whole feather system clean. They are fragile and the barbule tips constantly break off to create a fine conditioning powder. This absorbs liquids and helps to dry-lubricate the feathers so that they can work together without being worn or damaged. This feature is very important for the feather system.

### **Camouflage**

Finally there is the important property of camouflage, or of colour in the case of birds such as parrots and peacocks. Why do some birds sport camouflage while others are dazzlingly arrayed? Further, how could a pattern be spread across a feather, each initial cell in the 'embryo' feather knowing what all the others are doing and producing the correct hue in a wider distribution of which they are individually in total ignorance?

Even worse, for neo-Darwinism, is the problem of a pattern being intrinsic not just to one individual feather, but appearing to be 'painted' across many. This is particularly noticeable on the undersides of the wings of some raptors, the wing tips of which are often darker than the centres, and many of these birds show a clear barring pattern. The patterning runs smoothly across the wing and the edges are clear.

Each feather has to 'know' what the adjacent feather looks like in order to match it and seamlessly continue the band of colour, and to fade out appropriately. What evolutionary drive produced this feature, and how was it accomplished? More importantly, why was it, at any time, so crucial that it ensured the enhanced survival of that individual, and was therefore selected over what had gone before? It is simply

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inconceivable that a selective system based on chance could ever have achieved this.

### 5. The pentadactyl limb

The term 'pentadactyl limb' refers to the type of limb possessed by all tetrapods (four-footed animals), either fairly simply as in the case of human beings, or much enhanced as, for example, in the case of horses and bats. The forelimb has one long bone extending from the upper body bone ring (the shoulder girdle), then two bones parallel to each other, then a number of bones in five sets' which in our case are our hands, fingers and thumb, essentially a "one-two-five" pattern.

This pattern is not only matched symmetrically on each side, but also completely copied on the lower hip bone ring. When one considers the very different demands in all tetrapods of the fore and hindlimbs, it is inconceivable that an identical pattern of bones for both should have come about by any evolutionary process.

There are other things we have to consider about this basic structure. Denton points out, in *Evolution: Still a Theory in Crisis*, that the actual forms of the fore and hind limbs are never quite the same in different animals. Indeed they are often widely different, and the shapes of the five digits always differ, the thumb and big toe markedly so from the others.<sup>36</sup> But the basic bone and muscle structure is always discernable even if it is very much modified for particular purposes.

Further, every bone *and muscle* in the 'hand' is matched in the 'foot', as do their various tendons and attachments. Again, Denton says, this is absolutely stunning given the very different uses to which the 'hand' and 'foot' are put.

It has been argued that the tetrapod limb is merely an evolutionary extension of the fish limb, but Denton demolishes that idea. Inspection of even recent discoveries makes it clear that there is no fossil sequence of development from fish lobes to tetrapod limbs, and no cross-over or intermediate types:

"...the tetrapod limb did not arise through a long series of transitional forms subject to cumulative selection."<sup>37</sup>

Ahlberg and Clack, commenting in *Nature* in 2007 on the latest offering for a transitional form, *Tiktaalik*, a lobe-finned fish from the Devonian period, supposedly 375 million years ago, stated that:

"there remains a large morphological [structure] gap between [the bones of the fin] and the digits [fingers] of [the earliest fossil tetrapod]."<sup>38</sup>

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In other words there are no intermediate types known. Wagner agrees that the pattern of bones in the tetrapod has no antecedent (previous structure) in any fish fin.<sup>39</sup> This is stating quite baldly that in the fossil record there is no transitional animal which shows a half-way stage between the fish fin and the tetrapod limb.

It is known that the genes necessary for the tetrapod limb are present in fish, but if anything that presents a serious problem of its own. If those genes are present, why don't fish show that bone pattern? The reason, as we are belatedly learning, and as we have mentioned previously, is that the protein-coding part of the DNA is merely a huge toolkit from which necessary proteins are produced. In the case of the fish the relevant parts of the DNA are not needed, so they are not used. But if that is so, and if the fish evolved first, why do they appear in the fish anyway?

The real change is in the non-coding part of the DNA, the dismissively termed 'Junk DNA'. This much larger part of the inheritable information is the real controller. That is spelt out in some detail by Carey in her book, *Junk DNA*, although she does not explicitly deal with the above issue. However, it isn't difficult to deduce that the so-called 'gene circuits' are merely an archive of protein-manufacturing processes which are modified for many different purposes in very different organisms. So the critical changes are in the non-coding DNA, which biologists have hardly begun to investigate.

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### 6. The gecko

Geckos are small-to-medium sized, nocturnal lizards found across all the southern continents, in southern Europe and southern Asia. The Tokay gecko, one of the commonest, is between 30-40 cm long and weighs between 150 and 300 gm. It can live twenty or more years in captivity.

Geckos seem to be able to cling to all types of surfaces, wet and dry, and at all orientations. A rough adobe wall, a lime-washed ceiling, or a glass window are all happy hunting grounds for the gecko as it searches for an insect meal. So how do they perform their spiderman-type acrobatics?

Each of the gecko's feet consists of five fairly equally spread toes, under which are long pads with a number of V shaped bands on them. The toe joints work in the opposite direction to ours, permitting the animal to 'peel' its feet off a surface. This in itself indicates just how strong a hold each toe has.<sup>40</sup>

#### Spilt Ends

The secret of the grip is that each toe has about 100,000 tiny hairs on it, each of which is split at the ends into between one hundred and a thousand tiny fibres called spatulae. Each of these tiny fibres has a widened and flattened end, but the end surface is set at an angle to its fibre. When these flattened ends are attached to a surface at an angle of less than about 30 degrees to the horizontal they stick to it with enormous power. But why should many such tiny hair end-plates have this property of sticking to a surface anyway?

There is an attractive force between all objects called the Van de Waal's force, but it only operates when the objects are extremely close. Most surfaces, because they are microscopically rough, only come close enough for this force to operate in a few tiny regions, often adding up to far less than 1% of the total available area. The toes of the gecko are very different. Because they and the hairs themselves are flexible, and the hair ends are microscopically small in area, almost all of the hairs on the gecko's foot can make good contact with any surface. This means that the areas in contact between the surface and the hair ends are relatively large, and the sticking power is equally strong, and it doesn't seem to be seriously affected by the surface being damp, dusty or oily.

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But of course this has its downside. Something which sticks as strongly as this would, if not engineered carefully, be impossible to pull away. However, as the foot is drawn up, the hairs progressively adopt angles of over 90 degrees to the surface and they then easily peel off. Because the hairs are solid structures they are not damaged in this process and can be used repeatedly.

Looking at the hairs, as they are revealed by the scanning electron microscope, one is struck with wonder not just at the structures themselves, but also at how the body of the gecko can produce them. Even more amazingly, if the gecko loses some, perhaps by trying to move too quickly, it automatically grows more to replace them.

Geckos are vastly over-engineered according to Keller Autumn, a biologist at the Lewis & Clark College in Oregon, US.<sup>41</sup> Apparently one 300g gecko can resist a pull of some 130 kilograms. Evolutionary dogma insists that such structures came about because it was to the advantage of the animal in some circumstance. But what circumstance ever required a 300 gram gecko to need a sticking power of over *400 times* its own weight? It is clearly untenable to claim that this came about by random means.

### Geckos in water

But the gecko's foot is not the only remarkable thing about this animal. Geckos can also 'walk' on water. Geckos are among the few animals (including basilisk lizards and grebes) that can skitter across the surface of water without sinking. In a video from *The Conversation*,<sup>42</sup> Jasmine Nirody from the Rockefeller University in New York describes how her team figured out the unique way geckos solve this problem:

“Initial calculations hinted, and video analysis confirmed, that unlike other species that move at the water's surface, geckos use a combination of techniques to move faster on top of the water than they can by swimming through it. By analysing videos of geckos moving across the water, we found that their gait was similar to that of the basilisk. Each step involves retracting the foot through the air, slapping the surface, and stroking beneath the water. But unlike basilisks, which aren't affected by changes in the water's surface tension, our experiments showed that geckos' speed and head height were cut by half when we added detergent to the water, reducing the surface tension. This suggests that they are at least partly using the forces between the water molecules to stay above the surface.”

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Watching the video carefully reveals that the slapping of the gecko's foot onto the water, which produces a bubble under the surface, is synchronised with the movement of the body twist so that the body is momentarily supported by that bubble as it passes over it.

And who taught the gecko atomic theory? Nirody goes on to describe how they perform 'semi-planing' by combining hydrostatic forces with hydrodynamic forces. Having super-hydrophobic (water repellent) skin helps, too. In addition, the gecko's tail undulates from side to side during the run to stabilize the lizard and add propulsion, letting it keep 72% of its body above water and reach speeds of 3 feet (a metre) per second.

The research shows that for medium-sized animals to move quickly along the surface of water, a complex and clever combination of physical mechanisms is required that previously was thought only to occur in larger and also in much smaller animals.

The research was published in *Current Biology*.<sup>43</sup> You may enjoy a video from *Berkeley News*, "The Gecko: Nature's Superhero."<sup>44</sup> The two-minute clip shows several 'superpowers' of the gecko beyond climbing walls and walking on water. Geckos are shown gliding through the air, landing upright like a cat when dropped, and inverting under objects while running at full speed.

The same article describing the remarkable ability of the gecko in water also describes amazing structures in two other creatures, the Fairyfly and the Manta Ray.<sup>45</sup> The Fairyfly is a minute creature, the smallest living flying organism, which does not have normal insect wings, but wings which look more like combs. Wings would not work in air on the tiny scale of the Fairyfly, and it probably uses vortices instead of the usual lowered pressure on the upper wing surfaces that larger animals and aircraft exploit.

The Manta Ray has a filter for feeding on plankton which uses none of the usual four ways of filtering, but an entirely different system in which the particles are steered away from the filter pores by wing-like structures. These separate out particles smaller than the pore size, allow high flow rates and resist filter clogging. This system was unknown until filtering in the Manta Ray was investigated.

## 7. The design ‘problem’

Francis Crick’s admonition was that:

“... biologists must constantly keep in mind that what they see was not designed but evolved.”<sup>46</sup>

Richard Dawkins has repeated this. It is revealing in two ways. Firstly it is an admission that most biologists cannot believe that purpose or intent figures in evolution at all, but it also underscores the fact that, whatever sophistry is used to discredit the idea, the design concept in life shouts at all levels. For if design in living organisms was not so obvious, why would neo-Darwinists try to downplay it?

Darwin was foremost in rejecting the design argument, and that rejection was probably his most important reason for the adoption of his ideas, although he does not give any logical reason or evidence for so doing.<sup>47</sup> But, presumably because of their experience in life, in many people there is an intuitive feeling that the complex systems that we find in life must have been designed, and must therefore have a purpose. It is this purposefulness that neo-Darwinists, and materialists generally, cannot accept, for to do so inevitably means a super-designer.

### Intelligent design and irreducible complexity

The term intelligent design was first proposed by Michael Behe, and given formal definition in his book, *Darwin’s Black Box*.<sup>48</sup> In some ways the phrase ‘intelligent design’ is an exercise in redundancy, for design can only occur by means of intelligence. But the phrase was chosen to counteract the neo-Darwinian claim that design can occur in the absence of intelligence.

The underlying idea which supports Behe’s basic thesis of intelligent design is that of irreducible complexity. Irreducible complexity is the idea that there are structures found in life which by their very nature have to be complete to be functional, and any attempt to remove one of the components causes the system to fail. By implication, irreducible complexity can only come about by intelligent design.

For an irreducibly complex system to function, each part must fit in perfectly with all the others, must be in the right place or places for that system to work, and all parts in that system must be present. Behe argues that since such structures could not have come all at once purely by chance, and they must have come simultaneously if the

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object or system was to function at all, they must have been designed and put into place together by an intelligence.

Further, an irreducibly complex system has abilities which are far in advance of all those of its component parts. A car will only function effectively if all its parts are together and working, and the individual parts, as separate items not properly assembled, will not act as a car. A mouse-trap only works if all the parts are designed to work together, are all present and are in their correct places.

In living things Behe gives the example of the molecular motor driving the bacterial flagellum.<sup>49</sup> This was the first example of a rotating system found in a living organism, and it isn't just the structure which is remarkable, but its abilities. The structure is made up of scores of large and complex molecules, all of which have to be sized precisely and assembled exactly, and the whole structure then has to be fitted into the cell wall of the bacterium so that it won't come out or drop into the cell, and so that the peripheral part of the motor itself will not spin. The inner part, driving the whip-like flagellum, rotates at a very high speed, but can stop dead in about half a second. And just to cap it all, it appears to be driven by electrical charges.

It should be noted that before the structure was elucidated the idea of anything biological actually rotating was understandably mocked by evolutionists. How random forces could produce anything so complex was beyond (their) belief. Now that they know about it, it seems to them that evolution could easily have produced it.

It may be true that 'gene circuits' already in existence were co-opted to produce the proteins which make it up, but firstly these would have to be extensively modified, and secondly all would have to be correct and present right from the very start to produce the motor.

Further, new control systems had to be in place in order to build the motor into the bacterial membrane, putting the right components into the correct places and ensuring that it was stable and secure. All these requirements add up to a very complex picture, one which by no stretch of the imagination could have just 'happened'.

### **The evolutionary establishment's attitude**

The evolutionary establishment has ridiculed intelligent design, dismissing it on the basis that it is religiously motivated, that the implied intelligent agent is a Deity. But, as Behe pointed out, there are many objects in our world which are clearly designed, but where we may have no idea who was responsible. How many people, for

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example, know who was responsible for the four Presidential figures carved into Mount Rushmore? (It happened to be a sculptor called Gutzon Borglum.)

But even if this was not known, no-one would seriously entertain the idea that the faces on the cliff were the work of the weather, earthquakes or meteorite strikes. Thus while we may claim that something was designed, we do not have to identify the person that designed it.

That said, in the case of living organisms, the conceptual distance between design and designer is small. Some are quite happy with the idea that a super-intelligent alien could have been responsible for the living world, and the non-living world as well. But if the life-form responsible was a super-intelligent alien, as one current idea proposes, how would one distinguish such a being from a Deity anyway? Regrettably, as is made plain above, God is excluded from the thinking of most modern scientists, and for that reason, and that alone, the idea of intelligent design is simply dismissed out of hand.

It is notable that there have been exceedingly few attempts to scientifically disprove the concept of intelligent design. It is just derided without any real attempt at systematic analysis. Meyer, however, gives a very thorough analysis of the scientific viability of intelligent design in his book, *Signature in the Cell*.<sup>50</sup> The paradox here is that scientists admit that they are already working under a design rather than an evolutionary program.<sup>51</sup>

In 2014 a paper in *Nature* actually stated that scientists suppress criticisms of neo-Darwinism to avoid lending support to intelligent design.<sup>52</sup> Quite apart from showing that scientists have severe doubts about neo-Darwinism, this hardly encourages one to believe in their impartiality.

### 8. Convergent evolution

Convergent evolution is a term applied when it appears to neo-Darwinists that evolution has produced the same or very similar DNA sequences in very different organisms. The production of just one structure coded by a DNA sequence generated randomly is wildly unlikely, and we believe that we show that in this book. But to think that random events could come up with the same thing multiple times, and presumably by different routes, which is what convergent evolution implies, merely makes such events even more absurd, and the more frank neo-Darwinists admit the problem.

According to Richard Dawkins:

“Convergent evolution [is] held by evolutionists to be ‘vanishingly improbable’ ... but there are numerous examples.”<sup>53</sup>

This is confirmed by another group of biologists, who try to explain it in evolutionary terms:

“Accumulating studies on this topic have reported surprising cases of convergent evolution at the molecular level ... .”<sup>54</sup>

It is claimed, for example, that eyes were ‘invented’ by evolution no less than three times, and, according to some, possibly five times. Birds, it is alleged, have evolved ultra-violet vision no less than *eight* times.<sup>55</sup> Just what they are proposing escapes those who make such claims. To anyone who has spent time studying the molecular biology of sight, these claims are quite absurd. The chemistry and physics of sight is fearsomely complex even in its most basic form of simple light detection.

That said, infinitely small probabilities never seem to bother neo-Darwinists, certainly not enough to make them lose faith in their belief. But at what point do exceeding small probabilities effectively become miracles anyway?

It is interesting in this context that physicists are far more dismissive of highly improbable events. Kip Thorne, in his book *Black Holes and Time Warps*, describes the scenario of an egg falling on the floor, and the improbability of it self-assembling back into a whole egg. He says, “The laws of physics permit such a regeneration with time going forward, but it never happens in practice because it is highly improbable.”<sup>56</sup> But even though many of the evolutionists’ claims are of an equal or worse probability, there seems no bar in their minds to their happening.

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As a post on the Discovery Institute website about a paper on convergent evolution in a leading (evolutionary) journal makes clear:

“Neo-Darwinian evolution isn’t supposed to be goal-directed, but some force is causing the same sequences – at the genetic level – to appear independently over and over again. In an undesigned world, this is extremely unlikely. Though the authors [of this paper] of course do not advocate any sort of purpose behind evolution, their paper’s teleological language [i.e. language assuming that there is intelligent direction of events] about the ‘potential’ or ‘predisposition’ for beneficial evolutionary change is striking.”<sup>57</sup>

Simon Conway Morris has a website documenting many hundreds of examples of unexpected ‘convergent evolution’.<sup>58</sup> In reality, when neo-Darwinists appeal to the idea of ‘convergent evolution’, instead of it being a realistic ‘scientific explanation’ it reflects the unscientific nature of neo-Darwinian evolutionary ideas. But unexpected findings are never allowed to falsify neo-Darwinism.

*The Evolution News* website has a page entitled, “*Problem 7: Convergent Evolution Challenges Darwinism and Destroys the Logic Behind Common Ancestry.*”<sup>59</sup> Excerpt:

“Whenever evolutionary biologists are forced to appeal to convergent evolution, it reflects a breakdown in the main assumption [i.e. of gradual change], and an inability to fit the data to a treelike pattern. Examples of this abound in the literature.”

Biochemist and Darwin-sceptic Fazale Rana reviewed the technical literature and documented over 100 reported cases of supposed convergent genetic evolution.<sup>60</sup> Each case shows an example where biological similarity, even at the genetic level, cannot be the result of inheritance from a common ancestor. So what does this do to the main assumption of evolutionary tree-building, which is that biological similarity must imply inheritance from a common ancestor? The section on the Tree of Life in the Sociology and Philosophy section later on gives more detail. With so many exceptions to the rule, one has to wonder if the rule itself has any real meaning.<sup>61</sup>

For example, octopuses have an uncanny intelligence, and also eyes very much like our own, but from an evolutionarily standpoint we can only be related in a very distant way. Therefore all the necessary genes, immensely complex structures and incredible capabilities are claimed to have come about at least twice.

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These examples prove the opposite of the main claim of neo-Darwinists. Biological similarity does not necessarily indicate inheritance from a common ancestor. Casey Luskin gives some very clear examples of this,<sup>62</sup> and Michael Denton demolishes this hypothesis even more thoroughly.<sup>63</sup> In 2015 Denyse O’Leary wrote a useful article about the fact that widely differing species have very similar genetic specifications.<sup>64</sup> Shark and human proteins are closely similar, apparently, and genetically kangaroos are very close to humans, despite the fact that kangaroos are marsupials. But this absolutely contradicts the basic tenets of neo-Darwinism.

## 9. The testimony of cladism

Cladism is the science of identifying living organisms on the basis of their physical characteristics, and grouping them into what are known as 'taxa' (which is why cladists were previously called taxonomists). For many years, indeed since the system of classification was begun by Linnaeus in 1735 with his book *Systema Naturae*, living organisms and their fossils have been classified on the basis of typical characteristics, those body structures by which we identify them. If an animal has a backbone it is classed with vertebrates. If an animal has fur, a diaphragm and mammary glands it is a member of the mammal group, or mammal 'taxon', and so on. But this directly contradicts the basic ideas of neo-Darwinian evolution.

As Michael Denton makes clear, "The existence of taxon-defining characteristics is incompatible with the whole notion of gradual neo-Darwinian transformations." If evolution occurs, taxa should have no "properties that are collectively necessary and sufficient for members in the group."<sup>65</sup>

In other words, if life evolved by many tiny, neo-Darwinian changes, what we should emphatically not see are distinct groups of animals, each having characteristics which clearly separate them from all the other animals and groups. All living organisms should shade seamlessly across the entire spectrum of possible characteristics.

Modern biologists, following an agenda driven by evolutionary considerations, are now denying taxa-defining characteristics. According to them, no classification is possible. Taxonomists and cladists disagree in the strongest terms with this, and not because they are afraid of job loss. It simply does not fit the facts. Characteristics which define groups and separate them clearly from others are real and clearly discernible.

The practice of separating living organisms into distinct and easily identifiable types is no anti-Darwinian fantasy. Neither in living forms nor in the fossil record are group-defining characteristics led up to by an endless series of minutely different intermediates. Characteristics are very sharply defined and the gaps between different animals are very clear. Indeed it is precisely this that enables us to identify different living organisms.

The characteristics in fossils apparently persist for millions of years and are used to define groups. The Cambrian strata make this abundantly clear, for here we have, quite suddenly, the appearance of

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about 30 new, different groups of animals. Each group has quite distinct characteristics by which we can identify them. This would simply not be possible if neo-Darwinism were true.

Let me reiterate. If all living things came about by tiny, incremental stages, then what we should not see are distinct groups of organisms identified by specific characteristics or features. Reptiles should appear to shade absolutely seamlessly into birds and mammals (assuming that birds and mammals came from reptiles). Starting with plants such as conifers, we should see plants having many small modifications until we get to flowering plants, and so on. We should not be able to group certain animals as reptiles, birds or mammals. Indeed, we should not even be able to name them separately.

But what we actually see are organisms clearly separated out into groups, with very obvious, specific and different characteristics. Only very rarely do we find animals which seem to have a mixture of characteristics, like the Duck-billed Platypus, which has mammal characteristics, essentially fur, warm blood, and suckling young, but lays eggs like reptiles and birds. But even this animal has distinct, fully developed characteristics, so it doesn't support the argument for endless fine changes.

Furthermore, this particular animal has no fossil forebears from which it could possibly have come, and neither does it appear to have produced any other types of animals, so it cannot be intermediate or transitional in any way. In fact the Duck-billed Platypus is another serious disrupter of the neo-Darwinian idea.

Denton, in chapter three of *Evolution: Still a Theory in Crisis*, points out, using the words of the neo-Darwinists themselves, that the characteristics which define the types of organisms, both fossilised and living, are incompatible with the whole idea of gradual changes. For example R. Ried states that:

“If every character were free to change in every direction, the living world would appear as a random chaotic mixture of patterns, and the single relationship left among their representatives would not relate to common ancestry but only to common functions, such as analogous limbs, horns, wings, jaws and so forth.”<sup>66</sup>

But what we observe are clearly distinct forms of life.

In point of strict fact, biologists have listed well over 100,000 'taxon defining novelties', characteristics which define types of organisms. Someone classifying a new bug can almost immediately say, “Ah yes,

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this is a weevil because it has a little proboscis (snout) with small, L-shaped sensory antennae each side of it", or whatever. What is more, as we have pointed out earlier, all these taxon-defining features appear suddenly, without any indication in the fossil record of 'pre-characteristics' which might lead up to them. It would be difficult to find a more damning indictment of present neo-Darwinian ideas.

Even if one were to accept that endless variations are seen in organisms, and that neo-Darwinism is true, if all living organisms really did arise by means of tiny variations, what caused them to 'stick' at certain conformations? Why does a fox look as it does, and not slightly different, with considerably longer legs, say, or a much shorter tail?

As we do not see endless variation, the neo-Darwinists' conclusion has to be that a fox has to be exactly the sort of animal it is because somehow built into the structure of the environment, indeed the universe, is a template for a fox into which it has to fit. The same goes for every other organism, of course. This makes things much more difficult for any sort of evolution, for if living things really had to conform to templates, how did they then evolve out of them? And just where are all these templates, and how did they come about? The worst part of this for the neo-Darwinist is that we step right out of random chance and into the world of teleology, of design and of prediction, which is wholly at odds with neo-Darwinism. Even Denton is forced down this 'template' line, and he is clearly very uncomfortable with the idea.

Further, according to neo-Darwinism, all the variation we see should be purely functional, not aesthetic. That is to say, every tiny new feature must, according to neo-Darwinism, have 'survival value' for that organism. According to that belief, everything which we see in any organism must have helped them survive in the past. But there are many characteristics of animals and plants which are 'just there', without any imaginable survival value whatsoever. The most serious problems with neo-Darwinism are that it predicts precisely that which we have not found, utterly fails to explain much of what we do see, and often inhibits and confuses advances in our knowledge.

### 10. The top ten problems with neo-Darwinian evolution

For those who would like a compact summary of some major problems of Darwinian evolution, here is a list of ten. Casey Luskin published this list in July 12, 2012, on the *Evolution News* website.<sup>67</sup>

1. Neo-Darwinism lacks a viable mechanism for producing high levels of complex and specified information. Related to this are problems with the Darwinian mechanism producing irreducibly complex features, and the problems of non-functional or deleterious intermediate stages. For details, see:

“The NCSE, Judge Jones, and Bluffs About the Origin of New Functional Genetic Information”,<sup>68</sup> “Do Car Engines Run on Lugnuts? A Response to Ken Miller & Judge Jones’s Straw Man Tests of Irreducible Complexity for the Bacterial Flagellum”,<sup>69</sup> and “Opening Darwin’s Black Box”,<sup>70</sup> or “Can Random Mutations Create New Complex Features? A Response to TalkOrigins.”<sup>71</sup>

2. The fossil record fails to provide support for Darwinian evolution. For details, see:

“Punctuated Equilibrium and Patterns from the Fossil Record”<sup>72</sup> or “Intelligent Design Has Scientific Merit in Paleontology.”<sup>73</sup>

3. Molecular biology fails to provide evidence for a grand ‘Tree of Life’. For details, see:

“A Primer on the Tree of Life.”<sup>74</sup>

4. Natural selection is an extremely inefficient method of spreading traits in populations unless a trait has an extremely high selection coefficient. That is to say, the trait must be very advantageous.

5. Convergent evolution appears rampant, at both the genetic and morphological levels, even though under Darwinian theory this is highly unlikely. For details, see:

“Convergent Genetic Evolution: ‘Surprising’ Under Unguided Evolution, Expected Under Intelligent Design”<sup>75</sup>, and “Dolphins and Porpoises and...Bats? Oh My! Evolution’s Convergence Problem.”<sup>76</sup>

6. Chemistry fails to explain the origin of the genetic code. For details, see:

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“The origin of life remains a mystery”<sup>77</sup>, or “Problems with the Natural Chemical ‘Origin of Life.’”<sup>78</sup>

7. Developmental biology fails to explain why vertebrate embryos diverge from the beginning of development. For details, see:

“Evolving views of embryology,”<sup>79</sup> “A Reply to Carl Zimmer on Embryology and Developmental Biology”<sup>80</sup>, “Current Textbooks Misuse Embryology to Argue for Evolution.”<sup>81</sup>

8. Neo-Darwinian evolution does not explain the biogeographical distribution of many species. For details, see:

“Sea Monkey Hypotheses Refute the NCSE’s Biogeography Objections to Explore Evolution”<sup>82</sup> or “Sea Monkeys Are the Tip of the Iceberg: More Biogeographical Conundrums for neo-Darwinism.”<sup>83</sup>

9. There is a long history of inaccurate predictions inspired by neo-Darwinism regarding vestigial organs or so-called ‘junk’ DNA. For details, see:

“Intelligent Design and the Death of the ‘Junk-DNA’ neo-Darwinian Paradigm”,<sup>84</sup> “The Latest Proof of Evolution: The Appendix Has No Important Function”,<sup>85</sup> or “Does Darrel Falk’s Junk DNA Argument for Common Descent Commit ‘One of the Biggest Mistakes in the History of Molecular Biology’?”<sup>86</sup>

10. Humans show many behavioural and cognitive traits and abilities that offer no apparent survival advantage, for example music, art, religion, higher mathematics and an ability to ponder the nature of the universe.

Most of these objections to neo-Darwinism have been covered in the previous pages, but item no. 8 hasn’t been covered. However, we have copied the entire list over in order to give readers a useful set of reasons with relevant references, compactly and all in one place. But as Luskin implies, this is merely the tip of the proverbial iceberg.

Item 8 is a fascinating glimpse of the tangle that evolutionists get themselves into by their speculations.

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### Conclusion

Here, then, are ten examples of claimed proofs of neo-Darwinism, none of which stand up when examined carefully. If anything they demonstrate ignorance, naivety and even, sadly, downright fraud. Incredibly they are all still used as 'proofs' of neo-Darwinism in textbooks and the media generally, but all are now admitted by authoritative sources to be nothing of the kind.

So why do neo-Darwinists and atheists generally persist in using them as examples? This is an example of the 'power of the paradigm'. If one starts out by a demarcation argument, in this case an argument or condition which excludes a perfectly reasonable explanation for an effect, then inevitably one is limited in the conclusions one can come to.

If one arbitrarily excludes a Deity, a super-intelligence, as an explanation for life, then any deductions from the facts will be impoverished, and speculations, from the reasonable to the absurd, will abound. But this hardly makes for good science. As was pointed out earlier, what we finish up with is scientism, not clear, logical and fact-based knowledge.

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## CHAPTER 14: SOME PHILOSOPHICAL AND SOCIOLOGICAL ISSUES

### Introduction

Neo-Darwinism not only poses problems in the fields of palaeontology and biochemistry, but as indicated by the headings above, it also has serious philosophical difficulties. Further, there are sociological issues which are worth addressing, if only because they are revealing as to the mindset of neo-Darwinists themselves. Some of these have surfaced earlier, but others need to be brought out.

The sociology of evolution concerns the way in which the ideas of neo-Darwinism are promulgated and even enforced by a small number of very powerful academics, and is also concerned with how neo-Darwinism distorts social views and attitudes. This might sound extreme as a statement, but there is plenty of evidence that it happens. It is revealing that biology is probably the only branch of science which is straitjacketed in this way and which influences thinking in the way it does. If anything this points to a lack of evidence for the idea. For if the neo-Darwinian hypothesis rested on solid data there would be no argument about it and no need for any form of coercion.

The philosophy of materialism is self-contradictory on several counts, and the philosophical objections to a God similarly fail in a number of ways. Although this is not really part of the evolutionary argument, it is worth appreciating that, even in these issues, evolutionary ideas and the materialism it rests on are barren concepts, only held by atheists due to their dominant world-view.

### Philosophical Issues

Philosophy merely means thought, and this covers everything from pure rational thinking based wholly on facts to ideas stemming from pure emotionalism. Although one has to be rather careful in this area, there is little doubt that philosophy plays a large part in how people view evolution and creation, if only because philosophy is allied very strongly to one's 'world view', that is one's attitude to people and events and the reasons for the way things are.

We cannot know everything and it is inevitable that we tend to select from the relatively little that we do know and produce a 'picture' with which we are most comfortable. This colours the way we think and what we select as valid.

### Materialism

Materialism is the belief that in this universe there is nothing except radiation, forces and materials, all of which scientists call 'matter'.<sup>1</sup> The claim is that there is nothing spiritual, no Deity, no direction and no purpose, in what we see and experience. According to this world view, matter, the stuff of which everything is made, is subject to random events alone.

However this means that materialism is a contradiction. According to this dogma, our brains must merely host endless random electrical pulses running through equally random nerve pathways. Otherwise we have to acknowledge a directed, purposeful system, which is a forbidden concept in neo-Darwinism.

If both nerve pathways and pulses are produced by random processes, how can we believe that our thoughts are logical or in any way meaningful? How can scientists claim that their thinking has any value? How can they have self-will and make decisions, which are manifestations of purpose? Some very erudite scientists admit that they see the conflict, but are unable to resolve it. The point is that purpose cannot come from the random events which are supposed to drive any form of evolution. It is notable that scientists who subscribe to materialism are unable to resolve this dilemma.

To get around this contradiction some have claimed that intelligence and logic are somehow 'emergent properties' of brains as big as ours. This idea comes purely from the fact that our brains are formed of a vast number of connections. The claim, essentially, is that beyond a certain number of connections intelligence somehow emerges

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automatically. On this basis some have been scared that the internet might suddenly become conscious and start ordering us around. But the appeal to emergent properties is fatuous, and recognised as such by many.<sup>2</sup> We have absolutely no evidence that such a thing is even possible, so that idea does not qualify as science.

As we pointed out previously, Thomas Nagel was a world-renowned, atheist philosopher who made his convictions quite plain, arguing that materialism is a wholly inadequate explanation of life.<sup>3</sup> He also shows his wholesale doubt of the truth of neo-Darwinism. How such men can then remain atheistic is a fascinating peek into human psychology. Even if there is no explanation for life except a Creator, apparently it is still possible to dismiss the idea of a God.

Materialism denies any purpose or direction in the universe, and cannot explain anything spiritual. It cannot explain thoughts, emotions, beliefs or determinate action. But what is bizarre about materialism is that because it denies belief it thereby denies its own foundation. You have to be a believer in materialism to espouse it, but you contradict yourself because strict and consistent materialism rules out the very idea of belief in anything. Materialists cannot logically claim that what they believe makes any sense, so materialism is patently self-defeating.

Materialism is also destructive from a personal and social angle, although evolutionists will deny it. One cannot ignore the evidence, for example, that Hitler's own acceptance of Darwinian principles, which are founded solidly on materialism, was the driving force behind the Holocaust.<sup>4</sup> This destructive effect is even recognised by atheistic philosophers.

The 2018 November 20th issue of the *Economist* carried a review of a new book by John Gray, a retired Professor of Philosophy at the London School of Economics. He is an atheist, and in a number of books asserts his belief that there is no God. In his latest offering, *Seven Types of Atheism*, he states that, in the absence of a moral code mandated by God, people must accept a spectrum of morality, palatable or otherwise. He goes on:

“Anyone who wants their morality secured by something beyond the fickle human world had better join an old-fashioned religion.”<sup>5</sup>

### The ‘Two Books’

The idea of the two books has been around for centuries, at least since AD 354 when Augustine of Hippo first made it public. The ‘books’

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in question are the Bible and the 'Book of Nature'. The basic idea is that we need to consult both books to learn of God's mind. We would agree with this, but not in the way it is presented now. In the modern world the clear teachings of the Scriptures are made subservient by Theistic Evolutionists to the theories and conjectures of man, which are now effectively the modern perceptions of scientists. We believe this to be an attempt to dress up belief in evolution as something spiritually respectable.

In chapter 2 of their book, *The Deception of Theistic Evolution*, Allfree and Davies spell out the issues and the subtlety of this philosophy. Theistic Evolutionists emphasise that these two books of God must be in complete harmony, and cannot contradict each other. According to Theistic Evolutionists, any apparent contradiction is down to the inability of the 'reader' of the two books to fully understand either one, or the other, or both of them. As one proponent of this idea says:

"God's two books can and should be read together in harmony when we are open to allowing them to speak for themselves on their own terms. Ultimately, they cannot contradict each other because the source of both is the same God, and if they seem to be in contradiction it is because *we have misread one or both of them*, and we need to be willing therefore to *allow ourselves to be open to thinking about either one in different ways*, trusting that God will ultimately lead us to see the truth of the whole."<sup>6</sup> (emphases added).

Although the plea is to look at "either one in different ways", the expectation is that we should only be prepared to look at Scripture in a different way, and never, of course, that we should look at science in a different way. Again, when Theistic Evolutionists insist that "the two books cannot contradict each other", they are implying that both are right, and this is simply not true. We hold that the Word of God is correct and accurate in its statements, but even if that isn't true, unfortunately the 'Book of Nature' is not correct, because that book, as it is now envisaged, is at best merely a series of human interpretations of data, and at worst agenda-driven. The evidence for that is presented above.

The salient point here is that human interpretations cannot be allowed to hold God's Word to ransom in meaning. When the speculations of fallible man are used to interpret Scripture, and when those speculations give rise to conclusions which eventually destroy the Bible's whole message, clearly something has gone badly wrong somewhere. The 'Two Books' in that sense do not agree, and the

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reason is because one of them, the so-called 'Book of Nature', is not founded on unassailable fact. It is therefore untrue that they "cannot contradict each other", so long as one understands that one of them isn't true science but scientism.

It is interesting in this context that the 'Book of Nature' has somehow morphed into the 'Book of Science'. Although we do not like the term 'Nature', coming as it does from 'Natural', meaning something accepted and having the overtones of spontaneity without direction, at least it is neutral in the way it is now used. But the word 'science' has definitely evolved to mean man's take on the world, rather than a straightforward set of facts. Without doubt, and taking 'science' to mean man's opinions, the Word of God and the Book of Science do not agree.

### **The Evolutionary 'Tree of Life'**

One of the evolutionary ideas that one meets from time to time is that of the 'Tree of Life'. This isn't the Edenic 'Tree of Life', and almost certainly the name was chosen as a dig at Scripture. The evolutionary 'Tree of Life' is a symbolic map of the way in which neo-Darwinists envisage the development of living organisms, from the simplest to the most complex. As we shall see, it has very little to do with reality.

The evolutionary 'Tree of Life' is an inevitable consequence of evolutionary thinking. If the neo-Darwinian beliefs are right, then we should be able to see clear and unarguable evidence in the fossils of simple organisms changing slowly and steadily into those which are more complex. Darwin was responsible for making this idea public, if he did not actually invent it. If evolution happened, then the simplest life form gradually changed into more complex organisms, and they then changed into still more complex beings, and so on. The 'succession of life' as it is sometimes called, might then look rather like a tree, with the simplest life forms at the bottom of the trunk, and more complex and resultant organisms forming the branches.

That is the theory, and it is superficially supported by what we see around us. But, as usual, the devil is in the detail, and the detail derails the idea of an evolutionary 'Tree of Life' rather thoroughly. There are at least two major objections to it.

To begin with, if the 'tree' has a 'root' consisting of a primordial cell, a single original cell, then it makes no sense if there was more than one primordial cell. As the evidence stands, and by the admission of the neo-Darwinists themselves, there must have been at least three original cells which started three separate 'lines' of living organisms.

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These lines of organisms were the bacteria or prokaryotes, the eukaryotes (the common organisms like us) and the archaea (the so-called Blue-green Algae and a group which includes the 'extremophiles', some of which can live in very hot pools).<sup>7</sup> But even if it were true that life began differently and spontaneously three times, which is an absurd idea anyway, other solid pieces of evidence militate against the concept of a 'Tree of Life'.

The problem with this proposed 'tree' lies in its branches. If there is a 'Tree of Life', the curious fact is that we do not see the branches at all, merely their tips. These are represented (in neo-Darwinists' minds) by the animals and plants we know about. What we see are very distinct groups and not continuous, gradually changing lines which would represent the branches of a true Tree of Life. As pointed out earlier, this 'typing' or grouping of living organisms is very sharp and clear, with transitional species being at best rare and arguably totally absent.

Norman Macbeth, in his book *Darwin Revisited*, spells this out very lucidly. He shows that any such tree, if diagrammed, has almost every organism teetering on the very ends of its symbolic twigs, "with the trunk shrouded in mystery".<sup>8</sup> This hardly argues for clear lines of progression and change (See Fallacy 8).

Secondly, even within groups, the relationships between species are never in neat lines, but all too often in what might better be called nets. Further still, the 'routes' through the nets seen by different neo-Darwinists differ according to the individual. The real problem with this analogy is that it just doesn't fit the facts, and this is being recognised by many.<sup>9,10</sup>

There are plenty of examples of very messy relationships between animals within a group, never mind across groups, and the 'history' of the horses is a classic example of this.<sup>11</sup> And just to set the evidence cat amongst the evolutionary pigeons again, *Equus*, the modern horse, has been found in strata believed to be *older* than *Eohippus*, the 'Dawn Horse', the supposed ancestor of them all. Palaeontologist Pettingrew says that the modern horse was seen nearly 70 million years before the living creatures alleged to be its ancestors.<sup>12</sup> So whatever the horses tell us, it isn't in the form of a neat succession of individuals. There are just too many examples of net-like relationships similar to that of the horse fossils to make any sort of 'Tree of Life' convincing.

The wide range of the fossil horses, or at least their supposed family members, resolves into no clear lines, and it is illuminating that each neo-Darwinist produces their own scheme which contradicts others.<sup>13</sup>

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Incidentally, *Eohippus* has a bone structure which is virtually indistinguishable from two animals which are alive and well today. The Daman enjoys life in East Africa and the Hyrax lives in Syria.<sup>14</sup> We appear here to have a land-equivalent of the *coelacanth*. And just to close this out, not only does the modern horse appear far too early, it appears very abruptly in the fossil record with no convincing ancestors.<sup>15</sup> From an evolutionary point of view this is all wrong.

## Biochemical evidence against the Tree of Life

And then there is the evidence of biochemistry. "For a long time the holy grail was to build a 'Tree of Life'," says Eric Bapteste, an evolutionary biologist at the Pierre and Marie Curie University in Paris, France. A few years ago it looked as though the grail was within reach. But today the project lies in fragments, crushed by an onslaught of negative evidence. Many biologists now argue that the tree concept is obsolete and needs to be discarded. "We have no evidence at all that the 'Tree of Life' is a reality," says Bapteste. That bombshell has even persuaded some that the current view of biology needs to change.<sup>16</sup>

The problems began in the early 1990s when it became possible to sequence genes. Everybody expected these gene sequences to confirm current thinking, and sometimes they did, but crucially all too often they did not. The expectation was, of course, that the genes would largely carry over into the new organism, and one should be able to infer some sort of sequence or order in the organisms. However, while the gene sequence might suggest that species A was more closely related to species B than species C, a tree constructed from the organisms' physical similarities would suggest the reverse.<sup>17</sup>

Syvanen recently compared 2000 genes that are common to humans, frogs, sea squirts, sea urchins, fruit flies and nematodes (tiny worms). In theory he should have been able to use the gene sequences to construct an evolutionary tree showing the relationships between the six animals. He failed. The problem was that different genes told contradictory evolutionary stories.

The genes of the sea squirts are just one example of many. Conventionally, sea squirts, also known as tunicates, are lumped together with frogs, humans and other vertebrates in the phylum Chordata (animals with backbones), but the genes send mixed signals. Some genes do indeed imply that the sea squirts should be classed with the chordates, but others indicate that sea squirts should be placed with sea urchins, which aren't chordates. "Roughly 50 per cent of its genes have one evolutionary history and 50 per cent another," Syvanen says. "We have just destroyed the 'Tree of Life'."<sup>18</sup>

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Genetic conflicts can be seen everywhere in the universal 'tree', from its root to the major branches.<sup>19</sup> There are two good summaries of the problems with the 'Tree of Life' at the Discovery Institute site, from which the above is quoted.<sup>20,21</sup> The idea of a 'Tree of Life' fails absolutely in several fundamental ways and is now virtually discarded as a concept by most evolutionists.<sup>22,23,24</sup> And yet if evolution is true, evidence for a 'Tree of Life' should be absolutely unshakable.

Another very good article on the failure of the so-called 'Tree of Life', at the *Evolution News* website,<sup>25</sup> is a review of Miller's textbook, *Biology*, which in 2013 was submitted to the Texas Board of Education as a standard work on that subject. "Astonishingly," Miller claims, "every scientific test has supported Darwin's basic ideas about evolution." (p. 465) But many references, from Miller's own peers and other authoritative sources, have shown this claim to be utterly false.

The simple truth is that no scientific test has *ever* supported Darwin's basic ideas about evolution, and indeed, simply because of the way in which science is done, it is impossible to even devise such a test. Therefore, by the standards of true scientific methodology, neo-Darwinism cannot be a scientific idea. But even in a more general sense, neo-Darwinism is refuted very comprehensively by its own protagonists.

And just to follow on from this, Tom Wolfe, in his book, *Kingdom of Speech*, says, "There are five standard tests for a scientific hypothesis:<sup>26</sup>

1. "Has anyone observed the phenomenon — in this case, evolution — as it occurred and recorded it?"
2. Could other scientists replicate it?
3. Could any of them come up with a set of facts that, if true, would contradict the theory?
4. Could scientists make predictions based on it?
5. Did it illuminate hitherto unknown or baffling areas of science?

In the case of evolution... well... no... no... no... no... and no."

### The God of the gaps

This is really an accusation, levelled at Creationists by neo-Darwinists. The idea is that Creationists will explain otherwise inexplicable things, such as the emergence of life, by avoiding the use of scientific principles and by invoking God. But one of the major 'gaps' here is the

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inability of materialists to account for the appearance of life from inanimate substances, and this rather undermines their own accusations.

The accusation that Creationists just invoke God to explain the appearance of life implies an intellectual weakness on their part. But Creationists do not have to invoke God to cover ignorance. If it is a fact that God created life then those believing in that possibility are not showing any intellectual limitations. Creationists argue on scientific grounds outside the specific statements of Scripture, and, as we have shown above, there are plenty of scientific arguments against evolution. Even neo-Darwinists themselves cannot explain life's origins. All they do is assume that it just happened spontaneously. This, again, is not science.

Atheistic scientists claim that they never avoid scientific principles, although we have already demonstrated that they do just that when it is convenient. But they despise the position of Creationists because divine creation implies an organising principle. The neo-Darwinists' own position prevents them accepting this. If one believes in the possibility of a God, then the idea that He was a Creator cannot be forbidden as an idea.

The paradox now, as is shown all too well by Denton in the latter part of his book, *Evolution: Still a Theory in Crisis*, is that since neo-Darwinism utterly fails to explain life's organisation, some other organising principle is needed. According to Denton's world view, God is not in the frame, so he has to resort to what is known as 'structuralism' (see Appendix 9).<sup>27</sup>

Clearly this all turns on one's world view, specifically whether or not one believes in God's existence. It is not a scientific issue, any exposed 'gaps' by definition being outside knowledge, both that of Creationists and of neo-Darwinists. If gaps are outside knowledge then scientific tools cannot be used to bridge them. All that can be done in that case is to wait until more information turns up.

But paradoxically we don't have to use a 'God of the gaps' argument to explain the existence of life, because it isn't a question of waiting for more information. Simple evidence (and common sense) utterly refute any form of spontaneous appearance of life, or of evolution, and there is no other explanation for what we observe.

Further, the argument can be turned back on itself. Since there are many things that biologists cannot explain, if you are a neo-Darwinist then you just have to assume that somehow evolution managed to do

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whatever was supposed to have happened, however absurd any explanations have to be. So neo-Darwinists are themselves guilty in all too many cases of 'evolution of the gaps'.

### Who created the Creator?

This isn't a question generally asked by Theistic Evolutionists, if only because you can't truly be a Theistic Evolutionist if you don't believe in a Creator. That said, more than one person starting as a proponent of theistic evolution has lost their faith in a Creator entirely, and has asked this question along the way.

It is a rather trite question, raised by some people, in an attempt to rubbish the idea of a God. Their argument, simply, is that a Creator must himself have had to be created by another Creator, and he in turn had to be created by another Creator, and so on in an infinite regression. Since this idea is illogical, it therefore 'proves' to them that there cannot be a Creator. A similar argument is used over whether there can be an undesigned designer.

However, we, with Oxford Professor of Mathematics John Lennox, subscribe neither to the idea of a created Creator nor to that of a designed designer, but to that of an uncreated Creator and an undesigned designer.<sup>28,29</sup>

Immediately the atheists shout that it is nonsense to believe in such things. But is it? Surely these propositions are exactly that which any true atheists have no choice but to believe themselves. According to atheists, man was not created by a Creator, but came about by chance. But it is unarguable that man himself is a creator, and therefore, according to them, man himself is, ultimately, an uncreated creator! So why should we not believe in a superhuman uncreated Creator? Again, if an atheist insists that an undesigned designer is also nonsense, then unfortunately they also believe that nonsense as well, because man is a designer, but, according to their world view, is also undesigned.

I am sure that the typical atheist will come up with the claim that an all-powerful uncreated Creator wasn't quite what they meant, but creator power is merely an issue of scale or extent. We must appear all-powerful to ants (if they could think), so our argument holds.

# Sociological Issues

## The methods of research

Ignoring the very rare investigations done by those with private means, research is done either by public academic institutions, almost always universities, or by commercial enterprises such as pharmaceutical companies, or may be commissioned by research councils. Government agencies will also conduct research in specialised areas, such as that for military purposes, but most government research is contracted out to universities.

Research today is an expensive business. Researchers have to be paid, costs have to be met even for such mundane things as the supply of public utilities and the rates on buildings, exotic materials have to be bought and expensive equipment has to be purchased and maintained. A typical research project will cost hundreds of thousands of pounds, and the demands of long-term research are greater still. When research is done purely for the personal interest of a researcher in an institution, an application for a grant has to be made to that institution, if for no other reason than that the researcher has to support himself.

When governments or commercial outfits want research done they provide the funds. In 1990 the total sum spent in Britain on research was over £12,000 million, half provided by industry and 14% by private endowments, leaving 36% paid for by central government.<sup>30</sup> By 2011 the figure for the total annual research spending was £27,400 million.<sup>31</sup> In 2015–6 £400 million was spent by the government alone on scientific research.<sup>32</sup> In 2017 the government spent £7,600 million outside their own establishments like the MOD, although the actual figures vary widely depending on their source.

The buzz word now is 'value for money', and this is the basic driver for much research. In many ways this is good. It ensures that trivial projects do not occupy the time and energy of intelligent scientists. But it has its downside. Firstly projects are only researched if the funders, the commercial outfits and government departments, decide that they are worthwhile to them. Secondly, and this is not generally realised, the funders may specify that certain things are to be researched. Anything found that is not of interest, or, indeed, contrary to the ideas of the funders, will probably not see the light of day.

This last assertion may seem unwarranted. Research in the past has been seen to be universally unbiased. Sadly the simple fact is that this

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is not true now. Even if researchers do their work in good faith, their good intentions may be derailed by commercial or political considerations. And ultimately, like all people, scientific researchers have to pay the mortgage and put bread on the table. This is a huge constraint for any person.

### Faulty and fraudulent research

There is also evidence, unfortunately, for much faulty research. For example, in the 1970s the sugar industry downplayed the effect of sugar on children's teeth,<sup>33</sup> and it is well known that the tobacco industry distorted and falsified the research done on smoking.

Another piece of faulty research was done by PACE, a research program on ME/PVS/CFS that sparked a patient rebellion and challenged medicine because its conclusions just did not fit the facts.<sup>34</sup> It is worth at least scanning the referenced web page, which gives a very good idea of what can go wrong with research, particularly when the funders, the insurance industry and the UK government's Department for Work and Pensions in this case, have a vested interest in a particular outcome.

In the *Guardian* newspaper in 2012 there was an article by Alok Jha, their science correspondent, detailing some of the recent fraudulent research done and the worries of the scientific community over the issue.<sup>35</sup>

A retraction in a scientific journal is the public admission that some item of published research was faulty. According to a report in the journal *Nature* in 2011, published retractions in scientific journals have increased by a factor of 12 over the previous decade, that is 1200%, even though the number of published papers had gone up by only 44%. It should be made clear that retractions may be done in good faith, but it is now known that around half of these retractions are suspected cases of misconduct, fraud in other words.<sup>36</sup>

A foundational principle of scientific research is that it should be repeatable. That is to say it should be set up in such a way that any other researcher or group should be able to perform all the experiments again and obtain the same results. This is important because it enables the work to be checked and validated. Without this checking, research has little value.

Unfortunately we now know that much research is not repeatable and is therefore of very doubtful value. A report from the US National Library of Medicine National Institutes of Health in 2005 found that

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probably half of all medical research has been found to be unrepeatable, and therefore of little or no value,<sup>37</sup> and it would be unreasonable to imagine that the situation is significantly better in other disciplines.

The 2013 April/June issue of *Perspectives in Clinical Medicine* ran an article entitled: “Fraud and misconduct in clinical research: a concern.”<sup>38</sup> The opening sentence of the abstract (the summary) bluntly states: “Fraud and misconduct in clinical research is widespread.” With respect to other research subjects, in an interview on the Discovery.org website, biophysicist and philosopher Kirk Durston quotes a paper in *Nature* in 2012 which showed that some 89% of all research is not reproducible, and he gives his clear opinion why this is so. It is simply down to human nature.<sup>39</sup>

A web search using the terms ‘fraud in research’ revealed many misdemeanours in this field. Retraction Watch, a website devoted to listing some of the worst examples of false research, has 460 pages each with an average of 10 cases where researchers have had to admit faults in their research. As we said earlier, to be fair some are genuine mistakes, but many deliberately fraudulent cases are also being unearthed.

In Aug 2018 a highly respected UK cardiologist, Aseem Malhotra, revealed his controversial views on coronary stents and statin drugs. In the YouTube recording he goes into some detail about the misrepresentation of certain treatments, and, worse, shows from Peter Wilmshurst’s submission to the Parliamentary Science and Technology Committee in 2017 how vested interests, and that includes some of the leading medical men of the UK, distort and influence how drugs are advertised, distributed and then used by the medical profession.<sup>40</sup>

Another YouTube presentation by Maryanne Demasi confirms this.<sup>41</sup> Both show the way in which drug companies not only engage in fraudulent practices, for base and fiscal gain, but actually demonise those who present the truth.

At least some of these problems are almost certainly created by bias introduced by those funding the research. Commercial concerns want to be portrayed in a good light, and pharmaceutical companies in particular want results which will enable them to place products on the market which will make money, in many cases on a very large scale, and this is where clinical research suffers. Companies exist to make money for their top managers and for shareholders.

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To hope that such concerns will act ethically at all times is unrealistic, and there have been all too many examples where financial gain has trumped truth. The losers are the public at large and the probity of researchers and their consciences.<sup>42</sup>

Research is designed to produce conclusions. Research should give us information which can at least be useful to us and at best be enriching. To be fair, much research achieves this. But equally research can be very misleading, and some publicly and strongly held conclusions come from mere speculation, and appear to have little connection with any real research work.

It has to be said that much palaeontology comes into this category. There is plenty of evidence that palaeontology is largely agenda-driven, that is that the expectations of the researchers can override their own results, indeed can warp them to the point of absurdity. Some details on this were given in the section on fossils.

The media, newspapers, magazines and broadcasting generally are complicit in this, and for the same reasons. The media will also make much of an initial speculation, such as a new 'missing link', but rarely if ever report the subsequent doubt or the actual dismissal of the original claim. As a result the public are served an entirely false picture of the true state of knowledge of that part of evolutionary thinking.<sup>43</sup>

The media are also guilty of serious distortion and even of downright fabrication, and this doesn't only occur in biological matters. Kip Thorne, in his book, *Black Holes and Time Warps*, describes what happened when in 1988 he published some far-out thoughts on time travel in a minor physical journal.<sup>44</sup> His ideas were based on some very abstruse and uncertain mathematical speculations, and, as Thorne says, the chances of us even working out the details of practical time travel, never mind actually doing it, were about as far from our present technology and knowledge as that of a cave man working out how to do space travel. This should have been obvious to any reasonably informed person perusing his paper.

Despite this, three months after Thorne's paper was published, the *San Francisco Examiner* broke the story, and after that 'the blare was unstoppable', with headlines such as 'PHYSICISTS INVENT TIME TRAVEL', and 'PHYSICISTS PROVE TIME MACHINES EXIST.' Thorne admits that he abandoned all efforts to stem the tide and went into hiding. His book clearly shows just how speculative the physicists' ideas were, and just how far the newspapers and other media are prepared to go in telling blatant untruths, simply in order to make

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money. All too often news publications today rise no higher than novels with respect to scientific issues.

Another way in which false ideas are disseminated is by films. The film, *Inherit the Wind*, is purportedly an account of the 'Scopes Monkey Trial'. In 1925 a teacher in a school in Dayton, Tennessee, was tried for teaching evolution, which a recent law had made illegal. By any reasonable standard the film gives a seriously distorted view of what really went on.

For a start, the original John Scopes, the man tried, was a Mathematics and Physics teacher and couldn't even prove that he had taught Biology. Scopes was subsequently offered a new teaching contract but chose to leave Dayton and study geology at the University of Chicago graduate school. He eventually became a petroleum engineer. A good analysis of this issue can be found at *Free Science*.<sup>45</sup> This film utterly fails to report real history, but promulgates a certain view which has little basis in fact.

## **Peer Review**

A third area of concern recently has been the practice of peer review. When research is done the researchers naturally want their work to be useful to others, and they will want to publish it. More than that, universities and their staff succeed or fail on the quality and quantity of published research. In practice this means submitting work to a commercial publisher in the hope that it will be put in their journal. This also means that journals, especially the editors and the controlling committees, have enormous power over the rest of the scientific community, although this picture is gradually changing as more and more material is published on the Internet.

To help editors decide whether a piece of work is worth publishing they will submit it to a panel of reviewers or referees, who will give their opinion as to its value and likely truth. And this is where the real problems start. Only in science do we have a generally anonymous referee system, which unfortunately is considered counter-productive by some.

The referee system was used originally to sift out obvious rubbish, of which the editors of the journal may not have been aware because of their lack of specialist knowledge. Inevitably the reviewers themselves have to work in the same field as those submitting the research, else their competence to decide anything would be in question.

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But reviewers are all too often getting on in years, and the old adage applies, that middle age is the age where a narrow waist and a broad mind change places. A referee system tends to perpetuate the current thinking, as the referees themselves will also be chosen on the basis of how they are perceived by the senior members of the scientific establishment.<sup>46</sup> In biological matters this will effectively prevent anything being published which is in any way critical of neo-Darwinism.

### Evolutionary Research

It seems that research on molecular evolution, that is to say research on the actual mechanisms whereby certain molecules or molecular pathways are formed, is rare if not totally absent. This is true even in mainstream journals such as the *Journal of Molecular Evolution* (JME), arguably the most important of them in this context, and precisely where one would reasonably expect to find such studies.

Michael Behe, in his book, *Darwin's Black Box*, recounts his efforts to find articles in the JME detailing the evolution of molecular mechanisms. To 1999, through the time the JME had been running, out of about 600 articles, there were none which actually provided mechanisms, or anything remotely near.<sup>47</sup> He says that:

“... if you search the scientific literature on evolution, and if you focus your search on the question of how molecular machines, the basis of life, developed, you find an eerie and complete silence.”

There has been criticism of Behe by neo-Darwinists who contend that genuine research on molecular evolution has been done, but Behe has meticulously analysed these assertions and has proven the allegations incorrect.<sup>48</sup>

It was much the same with another mainstream, but less specialised, journal, *The Proceedings of the National Academy of Sciences*. Out of about 20,000 articles, published in the ten years between 1984 and 1994, approximately 400 were supposedly concerned with molecular evolution. But, as Behe says, there was not a single paper which published the actual routes by which complex molecular pathways could have changed and been ‘repurposed’.

It is worth reading this in Behe's book, for he gives a number of other journals and books which equally fail in this respect. Out of 146,000 references in 30 biochemistry textbooks published by 15 major publishing houses, less than 100 references refer in any way to biochemical evolution, and 14 of those books, nearly half of them, make no reference to it whatsoever. More damning is the fact that the

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references which do mention molecular evolution do not refer to any specific molecular evolutionary pathways, but just state that evolution has occurred, without the slightest attempt to produce any evidence.

While there may be a number of articles which discuss the idea of molecular evolution, the simple fact is that no-one has even attempted to trace out the evolution of a single complex molecular pathway. This makes claims for having solved the molecular mechanics of evolution look hopelessly unrealistic. The claims certainly have nothing to do with true science. It also strongly supports James Tour's dismissal of the spontaneous production of complex molecules.<sup>49</sup>

As Behe says:

“Molecular evolution is not based on scientific authority. There is *no publication in the scientific literature* ... that describes how molecular evolution of any real, complex, biochemical system either did occur or might have occurred.”<sup>50</sup> (emphasis added)

Although this was written in 2006, which at the time of writing is 14 years ago, the situation he describes was still valid in 2019. In his book, *Darwin Devolves*, Behe repeats the charge.<sup>51</sup>

Significantly, in one pathway of this sort that has been investigated, by Douglas Axe and Ann Gauger at the Biologic Institute, it was found that functional change of an enzyme almost certainly cannot happen by any evolutionary process,<sup>52</sup> and it is important to appreciate the significance of this. Part of the argument by evolutionists is that the protein molecules can be changed to perform new tasks in the cell.

Enzymes are typical protein molecules in this context. Axe and Gauger's work shows that the idea that enzymes can quickly and easily change their function is false. There are too many changes required in any enzyme structure, and which must occur all together, for a new and useful enzyme to appear. This was also covered earlier in the section on mutations.

Another investigation found no realistic evolutionary possibilities in millions upon millions of random mutations.<sup>53</sup> Worse, the chance of passing on a beneficial mutation to a species, that is to say, making it 'stick', could easily be less than one in a million for individuals.

The pass-on rate, if one can call it that, depends far less on genetic fitness and natural selection than on other factors, such as population size and random deaths, in other words simple chance.<sup>54</sup> But this assumes that beneficial, useful mutations as improvements in the DNA can really occur, and more importantly, that from them wholesale

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species change is possible, which is yet to be proven. Again, more detail will be found in the section on mutations.

### Conclusion

I am aware that the above pieces are something of a rag bag collection. They are issues which do not necessarily surface when discussing Theistic Evolution, but in my experience they are all issues which might be brought up when evolution is discussed, and therefore could be relevant. I have included them in the belief that the above discussions might be useful.

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## **Chapter 14: Some Philosophical and Sociological Issues**

## CHAPTER 15: CONCLUSION TO THE SCIENTIFIC ARGUMENTS

In the end, all forms of evolution fail to answer some of the most basic questions which rear their heads in biology. As we said in Chapter 13 part 10, the most serious problems with neo-Darwinism are that it predicts precisely that which we do not find, utterly fails to explain much of what we know to be true, and does nothing to help expand our knowledge. In fact it has been the root cause of much unproductive and time-wasting speculation.<sup>1</sup>

The simple fact is that only very small changes can be explained, not the major changes which would lead to genuinely new creatures and plants. Evolution can only account for changes which serve the simplest of necessities of living organisms. We now know that the vast majority of these are the product of epigenetic effects, which do not change the underlying DNA. Even when the DNA does change, it is only changed trivially, and almost every one of those changes represents a loss of function. This implies that the DNA is steadily deteriorating, not improving.

Neo-Darwinism cannot explain the large changes which occurred at a number of points in the history of the Earth. It has failed to produce any evidence of DNA changes which immediately confer some sort of survival or breeding advantage on the organism. It utterly fails to explain our intellectual capacity or properties leading to our appreciation of beauty or elegance. Lastly, and most damningly, because it is itself the product of materialism, it denies morality, consciousness, purpose and logic. It is therefore self-contradictory.

Although we have rarely mentioned creation above, it should be stated plainly that creation isn't some second-hand excuse for our beliefs which we have to wheel in because neo-Darwinism fails, or because we don't accept evolution for some arbitrary reason. It is actually a much better explanation for all we see, both fossil and living. However, we do not take sides in the 'old Earth' versus 'young Earth' debate for the very simple reason that Scripture does not tell us what happened before this Creation.

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Nevertheless, *scientifically* we know that life could never have appeared spontaneously, either on Earth or anywhere else in our universe, because the laws of chemistry and mathematical considerations simply forbid it. Only an intelligent agent and therefore a divine explanation will suffice here.

*Scientifically* all the fossil evidence that we have absolutely denies steadily increasing complexity in particular organisms, but supports sudden appearance, long, stable existence and sudden extinction. This only fits a Creation scenario in which there may have been successive creations, and which is not ruled out by any statement in Scripture.

And *science* testifies to the rank impossibility of complex systems in organisms suddenly appearing out of nowhere without intelligent input. Further, an improvement from the relatively simple to the highly complex is, again, something which is only explicable from a divine standpoint.

The reason we have spent time considering the scientific nature of these things is that, all too often, those espousing creation as it is revealed in the Scriptures are accused of arguing from a 'knowledge vacuum', that they effectively ignore scientific findings. As a matter of strict fact, however, the boot is very much on the other foot. It is neo-Darwinists who argue from a 'knowledge vacuum' and can rightly be accused of ignoring scientific evidence. They argue from faith in materialism, a faith which claims that there is no God. It is a sad fact that most neo-Darwinists resolutely refuse to discuss the scientific issues, and instead take refuge in demarcation arguments, authoritarianism, character assassination and innuendo.

A final quote from Matti Leisola's book, *Heretic*:

"The Darwinian theory of evolution is the phlogiston<sup>2</sup> of our day, festooned with a myriad and growing number of patches. Evolution is slow and gradual, except when it's fast. It is dynamic and creates huge changes over time, except when it keeps everything the same for millions of years. It explains both extreme complexity and elegant simplicity. It tells us how birds learned to fly and how some lost that ability. Evolution makes cheetahs fast and turtles slow. Some creatures it made big and others small; some gloriously beautiful, and some boringly grey. It forced fish to walk and walking animals to return to the sea. It diverges except when it converges; it produces exquisitely fine-tuned designs except when it produces junk. Evolution is random and without direction except when it moves toward a target. Life under evolution is a cruel battlefield

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except when it demonstrates altruism. And it does all this with a growing number of ancillary hypotheses. Modern evolutionary theory is the Rube Goldberg<sup>3</sup> of theoretical constructs. And what is the result of all this speculative ingenuity? Like the defunct theory of phlogiston, it explains everything without explaining anything well.”<sup>4</sup>

If you had serious doubts about the position of anti-evolutionists, but have made it this far, we hope that you now appreciate at least some of the reasons for our stance on evolution and neo-Darwinism. You may not be immediately convinced by the arguments which we have put forward, but we hope that you will at least be encouraged, provoked, irritated, whatever, enough to do some more research on this subject for yourself.

To borrow a phrase, all the above could be seen as an ‘inconvenient truth’. But if it is true, and we strongly believe it to be so, then, at least from a scientific point of view, Theistic Evolutionists are basing their faith on something which is false. They do this in an attempt to reconcile their belief in evolution and particularly in neo-Darwinism, with Scripture, being at the same time sadly in ignorance of its profound defects and the astonishing fact that many senior neo-Darwinists have now recognised that their hypothesis does not stand up scientifically.

Sadly there is also a strong element in the Theistic Evolution movement who want to be ‘in with the crowd’, and are prepared to trust man rather than God. Theistic Evolutionists appear unaware that by hitching their coach to the evolutionary horse they are being taken for a ride, one which can only end in the overthrow and loss of everything they are trying to stand for. It is this, in essence, which we have tried to make clear in this book.

## Notes and references

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1 Typical examples are the idea that mitochondria were once bacteria and were somehow co-opted into the cell at some point, although that failed to explain how the cell obtained its supplies of energy previous to that remarkable event. This idea is still put forward as the basis of a form of evolution, and called symbiogenesis, but was quietly dropped by some of the more discerning academics when it was realised that the DNA processes in mitochondria are different from those found in bacteria. Another idea was that of ‘Junk DNA’. Since by far the larger part of our DNA does not apparently code for proteins and is therefore not ‘genetic’ material in the sense of directly generating substances which are part of the structure and functioning of the cell, it was blithely assumed that the rest was left-over rubbish from ‘evolutionary experiments’, i.e. junk. The fact that the genetic DNA was utterly insufficient of itself to code for all our necessary proteins seemed to escape the attentions of some of the most intelligent people on the planet. With the results of the ENCODE project now published, we know that at least the larger part of the non-genetic DNA is active and necessary, and we shall probably find that all of it is.

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- 2 Phlogiston, first proposed by Becher in 1667, was believed to be something which left a substance when it burned. Since most things became smaller and lighter in this process, it made some sense, but only some. A few things became heavier, which implied that the phlogiston in such substances had negative weight. Tricky.
  - 3 Rube Goldberg was an artist and cartoonist who drew pictures of machines which solved simple tasks in the most overcomplicated, inefficient, and hilarious way possible. See <https://www.rubegoldberg.com/rube-the-artist/>
  - 4 Leisola, M., *Heretic*, Discovery Institute, Seattle, 2018, pp. 198–199.

## CHAPTER 16: A FINAL APPEAL

As we come to the end of our presentation of the biblical and scientific evidence which challenges theistic evolution, we feel a need to take a step back. We have given considerable space to the examination of the detailed meaning of Bible passages, the age of rocks, the significance of ancient bones and the like. But in examining the ‘trees’ we must not lose sight of the ‘wood’.

To appreciate that bigger picture we must understand and explain our experience of being human in our world. Is it satisfying and in any way hopeful to understand human existence and our personal experiences as the result of a multiple series of undirected and purposeless events, which is all that the belief in evolution offers us? Or does the explanation of purpose, as set out in the Bible, provide a more satisfactory answer to the questions about who we are and why we are here?

We believe that the Biblical Christian faith, founded upon a historical understanding of the Genesis account of Adam and Eve, is the only satisfactory and hopeful explanation of this bigger picture. It is satisfactory because it explains all that is beautiful and uplifting in our world, and also helps us to understand the cause of its ugly and undesirable aspects, including our own behaviours. It is hopeful because it is the only message that provides a solution to those ugly and unpleasant aspects of human experience which are so obvious to anyone who gives serious consideration to their life.

This message of hope, the Gospel, is *the* unifying message from Genesis to Revelation. It is the reason the Bible was written. The details in Genesis 1–3 underpin the whole of Genesis within the other books of Moses, which themselves form the foundation of the OT history of Israel as God’s people. That history culminates in the appearance of Jesus of Nazareth, the promised Messiah, whose rejection, death and resurrection make possible the acceptance of all nationalities as future citizens of the Kingdom of God on earth.<sup>1</sup> The blessing of that Kingdom will be the restoration of the fellowship between mankind and the Creator which existed in Eden, a fellowship which was lost by the disobedience of Adam, as set out in Genesis 3.

The Genesis account of a 'very good' creation, one that was marred by the sin of Adam and Eve who were the progenitors of the human race, is key to the plan of redemption centred in Jesus, the 'last Adam'. Any supposedly God-directed, evolutionary alternative undermines the authority of the Bible as the Word of God by contradicting what it says, and makes God either responsible for the existence of sin in human behaviours, or at least unable to control and change them. As a consequence, theistic evolution removes any confidence we might have that God is able to bring an end to the current sinful state of affairs, as he has declared in His Word.

At the beginning of this book we made statements, based upon our conviction in the historical truthfulness of the Genesis account of creation, which some may have thought surprising, unsupportable, even outrageous. How could we challenge the opinions of many tens of thousands of academics in theological colleges and scientists in universities? But we have shown that this ignores many others who have also considered these things in depth, and have come to very different and, we submit, more evidential and consistent conclusions.

We have provided a great deal of evidence that the idea of evolution, and of neo-Darwinism in particular, does not stand up scientifically, and for that reason is now actually being abandoned by its own practitioners. As a consequence we submit that theistic evolution has no foundation in true science.

Theistic Evolutionists are attempting to reconcile Scripture with what they see as proven science, but which is shown to be theories that are not only far from proven but are being discredited. Put simply, the Genesis account is absolutely inconsistent with the secular hypothesis of the biological evolution of mankind. Since there is total disagreement between the two viewpoints concerning the origins of mankind, if the Bible is correct, the evolutionary viewpoint is wrong, and if the evolutionary viewpoint is correct, the Bible is wrong. There is no half-way position.

In addition, interpreting the first few chapters of Genesis as mere metaphor or symbol produces fundamental clashes with the statements of Jesus and much of the rest of the Bible. We have shown that to believe theistic evolution one has at the very least to distort Scripture, and in several ways directly contradict it. In doing so the inspiration of Scripture is undermined and ultimately the Gospel message is destroyed. This means that what we believe about the Genesis account is not just a peripheral issue, but ultimately determines our salvation.

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We stress that the unity of the scriptural message is absolutely dependent upon an acceptance of the historical reliability of the Genesis account. As a final support to that point of view we are going to leave the last word to Thomas Huxley. Huxley coined the term 'agnostic', and, as pointed out earlier, was also known as 'Darwin's Bulldog' for his staunch defence of evolution following the publication of *The Origin of Species*.

However, Huxley was well aware of the importance of Genesis to the Christian Gospel, and although an atheist, he was, rather ironically, very dismissive of Christians who did not believe the whole Bible. In his essay, *Lights of the Church and the Light of Science*,<sup>2</sup> he wrote the following observation, which sums up our conclusion that if we are going to accept the testimony of the Scriptures about the hope of salvation fully, we must also accept the testimony of those Scriptures in full:

"I am fairly at a loss to comprehend how any one, for a moment, can doubt that Christian theology must stand or fall with the historical trustworthiness of the Jewish Scriptures. The very conception of the Messiah, or Christ, is inextricably interwoven with Jewish history; the identification of Jesus of Nazareth with that Messiah rests upon the interpretation of the passages of the Hebrew Scriptures, which have no evidential value unless they possess the historical character assigned to them. If the covenant with Abraham was not made; if circumcision and sacrifices were not ordained by Jahveh; if the 'ten words' [i.e. 10 Commandments] were not written by God's hand on the stone tables; if Abraham is more or less a mythical hero, such as Theseus; the Story of the Deluge a fiction; that of the Fall a legend; and that of the Creation the dream of a seer; if all these definite and detailed narratives of apparently real events have no more value as history than have the stories of the regal period of Rome — what is to be said about the Messianic doctrine, which is so much less clearly enunciated? And what about the authority of the writers of the books of the New Testament, who, on this theory, have not merely accepted flimsy fictions for solid truths, but have built the very foundations of Christian dogma upon legendary quicksands?"

We feel that Theistic Evolutionists need to consider this statement.

## References

- 1 Rom. 1:1–5
- 2 <https://mathcs.clarku.edu/huxley/CE4/Lights.html>, para. 10, and also see para. 12.



# APPENDICES

## Appendix 1: Theistic Evolution and ‘made in the image of God’

Genesis 1:26–27 states:

“Then God said, ‘Let us make man in our image, in our likeness’ ... So God created man in his own image, in the image of God he created him.”<sup>1</sup>

The precise meaning of being “in the image” of God (Elohim) is the subject of differing interpretations and disagreement,<sup>2</sup> even among those who accept the historical reliability of the Genesis account, including Christadelphians.<sup>3</sup> This is mainly because the meaning is not defined in Genesis and we are left to draw conclusions from other parts of Scripture.

However, if defining the meaning is a challenge for those who believe in the historical reliability of Genesis 1–3, it is a much bigger challenge for Theistic Evolutionists who believe in a long evolutionary history.

As Deborah Haarsma, Theistic Evolutionist and President of Biologos puts it:

“Traditionally this doctrine [made in the image of God] has been tied closely to the miraculous creation of humans, so that many find it hard to reconcile the *imago dei* [God’s image] with the idea of humans sharing a common ancestor with chimpanzees.”<sup>4</sup>

Contrary to a theistic evolutionary belief in human evolution from primates, Genesis makes it clear that unlike animals, Adam was created “in the image of God”. The difficulty for Theistic Evolutionists is how to identify when ‘humans’ began to bear the image of God, during what they believe is a very long evolutionary process. As Denis Alexander observes, “When exactly did the ‘image of God’ start applying in human history?”<sup>5</sup> This confusion and uncertainty is confirmed by Denis Lamoureux who says:

“The Divine Book of Words [the Bible] reveals that humans are the *only* creatures who bear the Image of God, and *only* humans are sinful. I suspect that the manifestation of these spiritual realities coincides with the appearance of behaviourally modern humans about 50,000 years ago. And similar to the way we do not really know when exactly each of us begins to bear God’s Image or commits our first sin, I believe the arrival of the first true humans is also a theological mystery.”<sup>6</sup> (emphasis original)

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He says that he “suspects” that modern humans manifested the image of God “about 50,000 years ago.” The truth is that without the historical reality of the specific creation of Adam at a specific point in time, every other suggested time is mere speculation.

In addition, when Lamoureux states, “We do not really know when exactly each of us begins to bear God’s Image or commits our first sin,” he implies that it is *our awareness* of these aspects of being human that determines whether they are a reality, whereas Genesis says Adam was created “in the image of God.” It did not require Adam to be aware of this for it to be a reality (cf. Gen. 9:3; 1 Cor. 11:7; James 3:9). Likewise, knowing when we committed “our first sin” is not what makes sin a reality in our lives. David declares that he “was sinful at birth” (Ps. 51:5), that is before he would have been aware of committing sin.

As for what it means to be “in the image of God”, it is clear that a physical resemblance to the Elohim is *an* intended meaning of ‘image’ in the creation of Adam. The same Hebrew word is used about Seth, the son Adam had “in his own image” (Gen. 5:3), and very occasionally for idols (e.g. Num. 33:52). It is also the word used for the making of the ‘models’ of rats and tumours by the Philistines (1 Sam. 6:5, 11). Given, as accepted by Theistic Evolutionists, the very long evolutionary history for the physical development of humans, it has to be questioned when the physical resemblance to the Elohim was reached. Does a slowly developing physical ‘image’ match the description in Genesis of a specific event happening on Day 6? We believe not. Jesus quoted the end of Genesis 1:27, “made them male and female”, and said this was “at the beginning” (Matt. 19:4).<sup>7</sup> But in evolution there is no identifiable ‘beginning’ for humans.

In the NT the use of ‘image’ creates an equally insurmountable problem for theistic evolution. Jesus is described as “the image of God” (2 Cor. 4:4), and “the exact representation of his being” (Heb. 1:3),<sup>8</sup> so that Jesus could say to Thomas: “Anyone who has seen me has seen the Father” (John 14:9). Jesus was the perfect manifestation of the Father as the son made in his ‘image’.<sup>9</sup> This manifestation was in the words and work of the Father which Jesus spoke and did, representing God on earth (John 4:34; 5:17, 19, 36; 12:49, 50). If manifestation in words and godly behaviours is another feature of bearing the image of God,<sup>10</sup> then at what point in evolutionary history did humans begin to “manifest” God?

In Ecclesiastes 7:29 we read: “God made [*asah*] mankind upright, but men have gone in search of many schemes.” Similarly in Genesis

1:31, after the creation of Adam and Eve, but before their sin, we are told: “God saw all that he had made [sw], and it was very good.”

The Bible describes an “upright” and “very good” beginning without sin and death, when Adam and Eve had fellowship with God in the garden, but which declined dramatically when they sinned. They then became aware of their nakedness, they hid from the LORD God to avoid fellowship, they experienced God’s judgement including death and they were driven from the garden.

Theistic evolutionary human history is the complete reverse of this description of decline. It begins with death and ‘humans’ behaving in ways that are sinful, but without any awareness of it. In this situation there is no fellowship with God, only a slowly growing sense of a God until God reveals himself to two or more individuals, who are then expected to make other ‘humans’ aware of his expectations (as described in Chapter 8).

We are forced to conclude that they cannot both be true, and the development of an awareness of God and morality in the evolutionary history of humans is a major problem for Theistic Evolutionists. Francis Collins, director of the National Institute of Health in Maryland, USA and founder of Biologos, says in his book, *The Language of God*, that human moral conscience and the sense of the divine are essential to the spiritual nature of human beings. However he still believes that humans were the product of the same evolutionary mechanisms as non-human animals.

Collins proposes that theistic evolution rests upon six premises. In premises 4 and 5 he says:

“4. Once evolution got under way, no special supernatural intervention was required.”

“5. Humans are part of this process, sharing a common ancestor with the great apes.”

However in his final premise he is forced to recognise that evolution cannot explain the uniqueness of humans that Genesis describes as being made “in the image of God”. He says:

“6. But humans are also unique in ways that defy evolutionary explanation and point to our spiritual nature. This includes the existence of the Moral Law (the knowledge of right and wrong) and the search for God that characterises all human cultures throughout history.”<sup>11</sup>

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John Walton also acknowledges that evolution cannot give us human beings who recognise a moral law. He says:

“If someone who takes the Bible and theology seriously were to believe that evidence supports the idea that hominids evolved, it would be essential for them to understand evolution as a guided process by the Creator God (e.g., something like Evolution Creation). *Somewhere in that process* – perhaps at the moment the geneticists refer to as the bottleneck when humanity nearly became extinct – *God undertook a special creation that gives the human population the image of God*. This would be a creative act and represents a gain *that could not be achieved through evolution.*”<sup>12</sup> (emphasis added)

This reasoning lacks clarity and scriptural (or scientific) evidence. There is a distinct failure on the part of Theistic Evolutionists to address the issue of the development of human awareness of God through evolutionary processes. They are forced to rely upon divine intervention to bridge the gap between their belief in evolutionary processes and the human experience of “the Moral law and the search for God.”

It is not within the scope of this study to explore more fully what is meant by the phrase “in the image God.”<sup>13</sup> It is sufficient here to make the point that Genesis 1:26–27 describes a point in time, which Jesus calls “the beginning”, when Adam was created in the image of God.<sup>14</sup> Theistic Evolutionists who do not accept the ‘special creation’ of Adam cannot say when in the evolutionary process God made this unique distinction between man and the rest of the animal world.<sup>15</sup>

## Notes and references

- 1 The NIV 2011 translation “in the image of God he created *them*” is incorrect. The structure of the Hebrew “created *him*” with “created *man*” is parallelism. For further exposition of Genesis 1.26,27 in relation to 1 Corinthians 11 see Perry, A., *Head Coverings and Creation*, p. 33–38
- 2 *Four Views on The Historical Adam*, p. 167n56
- 3 Edgar Andrews, Emeritus Professor of Materials Science in the University of London, states, “That man is made ‘in the image of God’ represents a form of sonship”, citing the genealogy of Christ back to Adam ‘the Son of God’ (Luke 3:38), and Paul’s words “the Father from whom his whole family ... derives its name” (Eph. 3:14). *Who made God?* 2009, p. 130 EP Books. The following Christadelphian writers express different opinions. John Thomas stated the image was, “of bodily *form*, not of intellectual and moral attainment”, citing the subsequent appearance of angels as “*men*”. *Elpis Israel*, 13th Ed, 1942, p. 39. Allfree and Davis state that it is “the capacity and opportunity to manifest in some measure the moral characteristics of God”, citing the reference in 1 Corinthians 11:7 to the “*glory of God*” which corresponds to “*His moral attributes*”, as set out in Exodus 34:6,7. They say that the “image of God/the Creator” (Eph. 4:24; Col. 3:10) becomes a theme, “to describe the various spiritual attributes of the new man”. *The Deception of Theistic Evolution*, p. 113–115. Perry says, “The sense in ‘image’ is

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- representative* of God just as the angels are his representatives." *Head Coverings and Creation*, p. 91n1,2.
- 4 *Four Views on Creation, Evolution, and Intelligent Design*, p. 149.
  - 5 <https://biologos.org/articles/genetics-theology-and-adam-as-a-historical-person>. J Richard Middleton also accepts this uncertainty; "It is particularly difficult to estimate when *Homo sapiens* began to show evidence of religious or moral consciousness." *Evolution and the Fall*, 2017, p. 75n28.
  - 6 *Four Views on The Historical Adam*, p. 64.
  - 7 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 797, 89.
  - 8 The words "exact representation" ("express image" KJV) is a translation of the Greek '*charakter*', meaning "a stamp" or "impress," as on a coin or a seal, in which case the seal or die which makes an impression bears the "image" produced by it, and, vice versa, all the features of the "image" correspond respectively with those of the instrument producing it." *Vine's Expository Dictionary of New Testament Words*, 1981, Marshall Morgan & Scott.
  - 9 Perry, A., *One God the Father*, Ed. Thomas E Gaston, Willow Publications, 2013, p. 242.
  - 10 This is illustrated by the behaviours expected of those "born of God" (John 1.13) if they are to "image" the Father. Paul states, "But now you must rid yourselves of all such things as these ... since you have put off your old self with its practices and have put on the new self which is being renewed in knowledge *in the image of its Creator*" (Col. 3:8–10; also Eph. 4:20–24). The conduct of the children born in the image of God is contrasted with the conduct of those who are "children of the devil" (John 8:44; 1 John 3:10).
  - 11 *The Language of God*, p.200–201.
  - 12 *The Historical Adam*, p. 114.
  - 13 See "In the Image of God", Pt 1 and 2, Howard Cooke, '*The Dawn*' *Ecclesial Magazine*, December 1985, p. 277, and January 1986, p. 9. Also *Bible Studies*, p. 311, First Edition, 1987, Harry Whittaker, Biblia Publications. Neither of these however address the physical aspects of what it could mean to be 'made in the image', for which see *The Image of God in Man*, David Clines, Tyndale Bulletin 19, (1968), p. 53–103.
  - 14 Paul makes clear that it was Adam who was created in the image of God (1 Cor. 11:7). He uses the Greek word *aner* for 'man', which refers to adult males (e.g. husband), throughout verses 3–8, confirming the reading of Genesis 1:27, "in the image of God he created *him*". James however uses the Greek *anthropos*, meaning people in general, when he says, "we curse men (*anthropos*), *who have been made in the likeness of God*" (James 3:9).
  - 15 J Richard Middleton is one who takes an extreme theistic evolutionary view of 'made in the image of God' when he says, "Indeed, we should be wary of understanding the *imago Dei* in terms of any distinct human qualities, since almost every human quality has some analogue in other animal species." *Evolution and the Fall*, p. 75.

### Appendix 2: Theistic Evolution and ‘Created male and female’

It may not be immediately apparent, but evolutionary theories, and thereby some versions of theistic evolution, impact on biblical teaching about gender. The statement in Gen. 1:27, 28: “male and female he created them. [And] God blessed them”, is repeated in 5:2 and confirmed by Jesus when he said: “the Creator made them male and female.” In creating Adam and Eve, Genesis states specifically that God created “male and female.” It does not explicitly state that about the creation of any other creatures, although it is reasonable to assume that this was the case, since he also commanded them to be ‘fruitful’. (v 22)

The precise way in which Genesis records the creation of the man (Gen. 2:7), and then the woman (2:21), as opposed to the creation of the other creatures, is the basis for teaching in the NT about roles and responsibilities both in the family (Eph. 5:22–33) and the ecclesia (church) (1 Cor. 11:1–12). If there was no unique creation of a historical Adam and Eve then the power of this teaching is seriously eroded. If Jesus and Paul were mistaken in believing the historical reliability of this creation account, as some suggest, then the Scriptures on which they based their instruction are unreliable. It might then be reasonable to regard their teaching as only relevant to the culture and time in which it was given, and therefore open to more appropriate interpretations for modern society in the 21<sup>st</sup>C.

This is in fact the stance taken by some on Paul's use of Genesis 1 in his teaching on head-coverings in 1 Corinthians 11. As Perry says:

“... today the argument against head-coverings is more likely to be based on cultural relativism. It is said that Paul is advocating a local choice of head-coverings at Corinth, and our Western culture does not have such a practice and so Paul's guidance does not apply to our situation.”<sup>1</sup>

On the basis of the creation account, the Bible knows only of male and female genders, unlike 21<sup>st</sup>C Western society which regards gender as a ‘social construct’.<sup>2</sup> The Genesis account of the creation of “male and female” is immediately followed by the “blessing” and command to “be fruitful and increase”, thereby linking procreation to the creation of “male and female.” Add to this the application Jesus makes of Genesis 1–2 to marriage, and we have a very serious biblical challenge to some of the alternative family structures adopted in Western societies.<sup>3</sup>

To summarise, Theistic Evolutionists who claim that there is no historical Adam and Eve, created as described in Genesis 1–2, undermine Bible teaching that there are only two genders, and that marriage was intended to be one man and one woman.

### Notes and references

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- 1 Perry, A., *Head Coverings and Creation*, Preface to the Third Edition, 2008.
- 2 The following exemplifies a Western liberal challenge to the biblical teaching based on the creation of Adam and Eve. "Fact: the gender binary is a social construct created and sanctioned largely by heteronormativity, Western Christianity, and capitalism. Some people are gay. Some people abstain from romantic and/or sexual relationships. Some people are polyamorous, i.e. have more than one romantic partner. Some people who are cisgender are gender non-conforming (think butch lesbians). Likewise, some people opt out of the gender binary. No one needs to conform to the gender binary any more than a person needs to pay taxes. Someone will get after you for it, either an individual or a government system, but in terms of nature, it simply doesn't exist." <https://www.quora.com/profile/Sapphire-Cianfriglia>
- 3 For example, "A relatively newly recognized type of family, again especially in industrial countries like the United States, is the family by choice. The term was popularized by the LGBTQ (Gay, Lesbian, Bisexual, Transgender, Queer) community to describe a family not recognized by the legal system." <https://courses.lumenlearning.com/culturalanthropology/chapter/types-of-families/>

### **Appendix 3: The practical difficulties of synthesising a molecule and the generation of the first cell**

To make a single complex molecule in a laboratory one has to do it in many stages, sometimes dozens of them. Each intermediate substance has to be separated out and then carefully purified from all the dross of the side reactions and unused reagents. Then one usually has to change all the conditions of the reaction. This often includes using a completely different solvent (the liquid in which you do the reaction), first making sure that it is pure. Then the temperature at which one runs the next reaction may have to be very different from the previous one. New reagents have to be chosen, first making sure that they are pure, and the speed and order in which one adds them is important.

Finally, almost certainly the amount of oxygen present has to be adjusted, as will the acidity. Crucially the chemist also has to know exactly when to stop the reaction, because there is an optimum time for obtaining the largest amount of the product. One then has to separate out that intermediate substance, purify it, and then repeat the whole rigmarole in the next stage, once again changing all the conditions.

A very important point, James Tour says, is that as a synthetic chemist he has a choice of many different solvents. 'Nature', however, only has one, that is water, and as pointed out earlier, water is destructive to the sort of substances needed in the cell. Tour can also choose some fairly sophisticated molecules with which to start, a benefit absolutely denied to any naturalistic process. He may even not have to purify them himself, as that will already have been done for him in the company labs which supply the substances.

But in order to participate in the generation of life's molecules, these starting substances almost certainly would need to have been at a high level of purity, something which would be vanishingly unlikely indeed in 'nature' without intelligent intervention. Even ignoring those problems, the chances are that, however carefully one plans the stages and carries them out, the synthesis will at first almost certainly fail. Each time one has to go 'back to the drawing board' and plan everything again differently.

The difficulty in all this is that evolution doesn't 'know' where it is going. In the end, even if other issues didn't intervene, it would quite literally make many billions of useless molecules on the way to making one which might be useful, and this is not an exaggeration. As pointed out earlier, Douglas Axe has shown that typically only one protein molecule in every  $1 \times 10^{74}$  possibilities might actually be useful.<sup>1</sup>

If there is only one chance of something occurring in  $10^{50}$  attempts it is generally accepted by mathematicians to be impossible, so we are an awfully long way short even of this. And how does evolution even 'know' that an intermediate in the process of synthesis is going to be useful or useless, never mind the final molecule? This, incidentally, has been identified as the 'clutter problem'. The clutter problem is that any system engaged in making possible molecules for the first cell would end up with many trillions of useless intermediate experimental molecules which would hopelessly clog it up.<sup>2</sup>

On top of all this is the fact that all life's important molecules are asymmetric, 'chiral' technically, or, more colloquially, twisted. Unguided chemical reactions almost always make molecules with both types of twist, left-handed and right-handed, and almost always in equal amounts. Since life only uses the left-handedly twisted versions of the required molecules, these have to be separated out each time as a distinct operation, and that is very difficult. Worse, if you can imagine it, many molecules are twisted in several ways.

Six-carbon sugars, the sort the body is involved in all the time, have at least four and quite often six possible positions in the molecule which twist, leading to at least sixteen different versions of the sugar, depending on how you class them. And in many of the complex molecules which incorporate the sugar (DNA is merely one), only one of these sugar versions can be used. So when the molecule is made in the lab we have to throw away most of the product because it isn't of any use.

How would it be possible, in the random manufacture of a particular one of these molecules, for just that molecule to be used in a living system when all the others were getting in the way? The point is that all the wrong molecules try to get in on the act, producing rogue, useless sorts of DNA for example, very few of which would possess a neat helix, a vital part of its structure. Even those that can do this only produce versions of DNA which are far less stable than the one actually in use.

It also ignores the fact that these molecules can't just be suddenly enclosed in a two-layered membrane bag as a primordial cell and then

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expected to get on with things, which is the way in which evolutionists typically picture it. The cell 'skin', the membrane itself, has many thousands of fine pores embedded in it, each of which is surrounded by several chosen from a huge variety of complex molecules. These allow the cell to communicate with the outside world but prevent dangerous substances from entering. Marcus Eberlin, in his book, *Foresight*, gives an illuminating and detailed account of this.<sup>3</sup>

Cells are nothing remotely like the micelles which form when detergents interact with oils and fats, which, sadly, is the way in which cell membranes are all too often described. If anything this presents problems several orders of magnitude greater than even producing the molecules themselves. It also absolutely precludes any idea that a membrane just suddenly formed as an active and useful outer layer for the first cell. If only for this reason, spontaneous generation of life simply could not have occurred.

Yet further, we have not even begun untangling the immense problems of getting a cell to come to life, because, even if the cell was to somehow magically self-assemble, the only possible result would be a dead one. All the tens or hundreds of thousands of molecules have to be in specific positions, and the reactions which are crucial to the workings of the cell have to be set in motion. It is just absurd nonsense to imagine that this could be accomplished by electric discharges, beloved of the Victorians, or, indeed, by anything else. As Tour says, modern evolutionists really haven't a clue as to what they are so blithely proposing.

Spontaneous generation of life is impossible. That isn't strictly a scientific statement, but one cannot escape the fact that information science, physics and chemistry absolutely forbid it.

### Notes and references

- 1 Axe, D., "*Undeniable*", p. 57. If there is only one chance of something occurring in  $10^{50}$  attempts it is generally reckoned to be impossible.
- 2 Joyce, "*Antiquity of RNA-Based Evolution*," p. 215.
- 3 Eberlin, M., *Foresight: How the Chemistry of Life Reveals Planning and Purpose*, Discovery Institute, Seattle, 2019, p. 14.

## Appendix 4: Lamarkism

Jean-Baptiste Lamarck (1744 – 1829) was a naturalist who was also a taxonomist of considerable authority. He believed in the inheritance of acquired characteristics. For example if an animal lost its tail in some accident, this loss could be transmitted to its progeny. He differed from Darwin and the other evolutionists in proposing that environmental conditions could modify the characteristics of organisms, sometimes significantly, although not actually change species.

However, with the rise of neo-Darwinism, Lamarkism became a dirty word. Lamarck's ideas were repudiated and dismissed by the evolutionary establishment, despite there being considerable evidence to support his contentions.

The paradox is that, with the discovery of DNA and the recent work on how it operates, we now realise that environment can and does change the way in which the genes work. This produces far-reaching structural and metabolic changes in the individual through epigenetics, many of which can be passed on to further generations, either unaltered or in modified form.

This overturns the long held conviction of neo-Darwinists that only when the DNA is itself modified do we see any changes in the organisms. It also refutes the argument of Richard Dawkins (which he has now withdrawn) and others that we are totally and solely beholden to our genes, that we are, in some weird way, genetic robots. The clear message now coming from much painstaking scientific research is that we are nothing of the kind.

It should be made clear, however, that this does nothing to solve the problem of information. The environment can only effectively influence which genes are active and which ones are not. It does not contribute in any way to new information, on which any form of evolution absolutely depends.

### Appendix 5: Genetic repurposing – common DNA in different organisms

One of the arguments used by evolutionists is that God would not have reused genetic pathways from simpler life forms in more complex ones. This, they claim, shows that neo-Darwinism is proved. The 'proof' is that new genetic pathways would have to appear, and this could only occur by mutation and natural selection. There are at least two fallacies here, however.

The first fallacy is the claim that God doesn't work like a man. But why shouldn't He? Do we really have a line on how God thinks or works? And if this is the instinctive action of man, and God made man, why can it not be an action of God? There is absolutely no reason why the Creator could not have reused or repurposed gene circuits to other ends. This is rather typical of an argument used by Theistic Evolutionists: "We can't imagine God doing it this way, so we assume that He didn't."

There should be no difficulty with the idea that gene circuits have been co-opted to produce new proteins. This is, after all is said and done, the way we work when programming computers. We may write a generalised routine, and we then modify it in order to use it in a variety of different ways. But this does not explain two things. The first of these is exactly how the gene pathway could be redirected, and this must already have been programmed into the system, either in the non-protein coding DNA, or in some other region in the cell. The second fact that this does not explain is why every species appears to have up to 20% of its DNA unique to that species.

In a neo-Darwinian scenario the co-option and modification of gene circuits would again require many minute changes, every one of which would have to be advantageous from the point of view of survival. This merely pushes the problem back one stage, and makes a Darwinian explanation even more absurd. The unique amount of DNA in related species dilutes the effect of co-option, and requires a massive amount of repurposing and change for every new species.

The second fallacy is that all new genetic pathways are old ones repurposed. In fact, as is pointed out in the section on fallacies, many completely unique genes (and therefore the pathways that the genes take in producing structural changes) appear quite separately in closely related species. Axe found the figure typically to be between 10% and 20%.

## Appendix 6: The Multiverse Hypothesis

The multiverse hypothesis is a claim that there must be an infinite number of universes of which ours is only one, and which just happens to have the right conditions to permit our kind of life. This hypothesis is supposedly an answer to the otherwise intractable ‘Goldilocks problem’,<sup>1</sup> which is that universe in which we live was minutely and precisely designed for life.

The ‘Goldilocks problem’ isn’t just true in a few trivial ways. One researcher has found, at the last count, that some 75 conditions in our universe had to be correct in order for life to exist.<sup>2</sup> This very strongly implies that the values of all the major forces and material objects had to be put in place by a designing intelligence. The odds of these coming into existence by chance in a single universe is so remote as to be absurd. Materialists appreciated this, so the multiverse hypothesis was postulated by Steven Hawking and others, on the basis of pure speculation. This posits endless universes, all with different laws, and, of course, we would only know about the one which we inhabit because that is one which permits and contains life.

The philosophical basis for the multiverse is centred on how one interprets quantum theory, and it is important to realise that some interpretations of that theory do not involve a multiverse. Therefore it is a metaphysical issue, not a scientific one, however it is sold to the man in the street.

The fundamental problem with the multiverse hypothesis is that we have absolutely no evidence for any other universes, and therefore the idea is simply not science. To be consistent, scientists should therefore treat this idea in exactly the same way as they treat any other issue which cannot be proved by science, including the possibility that there is a Deity.

As a believer in a Creator God, the present writer has no problem with the multiverse idea. If we believe in an infinitely powerful and intelligent Creator it seems reasonable that the universe we inhabit is unlikely to be unique. After all, why should God stop here? This belief does nothing to detract from the incredible fine tuning of this universe, which is necessary in order to permit life. But to insist that the multiverse hypothesis is real, and also that there is no God, is, curiously, to contradict oneself.

The principal idea of the multiverse is that universes are continuously created by quantum events. But that aside, those who believe in the

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multiverse hypothesis are in effect claiming that anything, absolutely *anything*, including any form of life, is possible somewhere, hence the idea of an infinite number of universes. But why stop at universes? The whole argument eventually is that literally anything is possible, and this must include not just universes but many other things, including entities which we cannot even imagine.

And if any form of life is possible, or anything else, then somewhere 'out there' *must* be a Creator God who is all powerful, etc., and who created our universe. This has to be a possibility in an infinite set of possibilities, and this is precisely the claim of the God of the Bible. Unlike all the human deities, He is outside our universe, just as the multiverse hypothesis predicts. So the multiverse hypothesis is not a problem to those who believe in a God.<sup>3</sup>

Another argument against the multiverse hypothesis is that each universe produced has to first appear as a quantum entity which must collapse into a single reality. Unfortunately quantum theory demands that for this to happen it has to be observed, presumably by a living being, and really the only candidate for such a role is a transcendent Deity. This of itself proves that God must exist in such a scenario. So whether one accepts the 'Goldilocks' effect, or claims a multiverse hypothesis, either way we have to admit that there must be a God.

Yet another problem for the multiverse hypothesis is that it depends upon, or is intimately entwined with, modern 'string theory', an attempt to harmonise all we know about the universe. Unfortunately, the discovery by the Large Hadron Collider in Geneva that the value of the Higgs Boson was the lower of two possible values appears at the time of writing to have made string theory unlikely, and, therefore, puts a very large question mark against the multiverse hypothesis. And string theory should, by rights, be called the 'string hypothesis', as it is another purely mathematical speculation founded on a set of assumptions. Because it operates over such tiny dimensional scales string theory will probably ever remain unproven.

### Notes and references

1 <http://www.godandscience.org/apologetics/probabilitieslife.html>.

2 Ibid.

3 Ibid.

## Appendix 7: Character-assassination and evolutionists' attitudes to debate

One of the principal ways which evolutionists use to prevent the public from hearing opposing views is to obstruct those who wish to publish what they know about the deficiencies of neo-Darwinism. Methods of defending the status quo include character assassination by ridicule, the prevention of publishing, which every scientist lives or dies by, and engineering the loss of the scientist's job.

Those who come in for this sort of treatment include creationists and even evolutionists themselves when they express doubts. Alan Hayward, in his book *Creation and Evolution*, quotes Professor C.P. Martin, of McGill University in Montreal in 1953: "... it must be remembered that unless we command independent means of publication it is very difficult for us to obtain a hearing today."<sup>1</sup>

### Matti Leisola

This has not changed since, except, perhaps, to become even worse. Matti Leisola is a Finnish bioengineer, and amongst a number of prestigious posts was Dean of Chemistry and Material Sciences at Helsinki University of Technology. Professor Leisola's detractors accused him of being unscientific, but refused to debate or enter into any discussion of the science. They even prevented him from discussing issues publicly, or holding meetings or seminars to debate the issues in the University. Further, the media deliberately misreported any that did take place.<sup>2</sup> There are endless examples of this in Leisola's book. The evolutionary thought-police prevented papers and even a book from being published.

### Richard Sternberg

Another illustration of the way in which the evolutionary establishment suppresses dissent is the case of Richard Sternberg, described in pp. 147–150 of Leisola's book. Biologist Richard Sternberg holds two PhDs (Molecular Evolution and Systems Science/Theoretical Biology). In 2004, he worked as a staff scientist at the National Center for Biotechnology Information and as a Research Associate at Smithsonian's National Museum of Natural History. He also served as editor of *The Proceedings of the Biological Society of Washington (PBSW)*.

In 2004 Sternberg received an article for the *PBSW* from Stephen Meyer on intelligent design.<sup>3</sup> He sent it through the normal peer review

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process, which checks all facts for accuracy. This was confirmed later by the president of the Biological Society of Washington (BSW), both in an email to Sternberg and in an email to an official at the Museum. Meyer's article, "Intelligent Design: The Origin of Biological Information and the Higher Taxonomic Categories," was published in the *Proceedings of the Biological Society of Washington* on August 4, 2004.<sup>4</sup>

At the time, Sternberg did not consider himself an intelligent design proponent. He told National Public Radio (NPR): "Why [did I] publish it? Because evolutionary biologists are thinking about this. So I thought that by putting this on the table, there could be some reasoned discourse. That's what I thought, and I was dead wrong." Amid uproar from the Smithsonian, the Council of the Biological Society of Washington decided to retract the article.

But that wasn't all. Sternberg lost access to specimens, and his master key to the Museum. Rumours went around that he wasn't even a scientist, despite his holding two PhDs in biology. His Research Associateship was not renewed and he was demoted to research collaborator. He was transferred to a hostile supervisor and his office was taken away. Sternberg also notes that the National Center for Biotechnology Information (part of the National Institutes of Health) was pressured to fire him.

Sternberg filed a complaint with the US Office of Special Counsel. Unfortunately, they were unable to complete the investigation due to jurisdictional issues. But they did tell him in a letter: "It is also clear that a hostile work environment was created with the ultimate goal of forcing you out of the SI."<sup>5</sup> Facing an unbearable work environment, Sternberg resigned.

Sternberg notes the following on his website: "Subsequently, after the controversy arose, Roy McDiarmid, President of the Council of the BSW, reviewed the peer-review file and concluded that all was in order. As Dr McDiarmid informed me in an email message on August 25th, 2004, 'Finally, I got the [peer] reviews and agree that they are in support of your decision [to publish the article].'" (brackets in original)

Additionally, an email in January 2005 included in the appendix to the *Souder* report, from McDiarmid to an official at the Museum, reiterates that the official peer review process for Meyer's paper was completed correctly: "I have seen the review file and comments from 3 reviewers on the Meyer paper. All three, with some differences among the comments, recommended or suggested publication. I was surprised

but concluded that there was not inappropriate behavior vs [sic] a vis the review process.”

As the US Office of Special Counsel noted in a letter to Sternberg:

“I have carefully considered the information you provided. Based upon my evaluation of the facts and law applicable to your claim, I have made a preliminary determination to close our investigation into your allegations. My decision is not based upon the substance of your allegations; in fact, our preliminary investigation supports your complaint. My decision is founded upon a complicated jurisdictional puzzle and your position as a Research Associate.”

The ‘jurisdictional puzzle’ which surfaced had to do with whether the US Office of Special Counsel had the authority to intervene in the case. But the OSC noted, “It is also clear that a hostile work environment was created with the ultimate goal of forcing you out of the SI.”

Sternberg did everything right, checking that the paper passed all reasonable scientific tests. For publishing this paper Sternberg was vilified by those outside the institution and forced to leave his post. This case eventually came before a US House of Representatives committee in 2006, and the passages below are quoted from the summary of the United States House of Representatives Committee on Government Reform, December 2006.

### INTOLERANCE AND THE POLITICIZATION OF SCIENCE AT THE SMITHSONIAN<sup>6</sup>

“Since the treatment of Dr. Sternberg came to light in early 2005, evidence has accumulated of *widespread invidious discrimination against other qualified scientists who dissent from Darwinian theory and/or who are supportive of intelligent design*. In November, 2005, for example, NPR reported that it had ‘talked with 18 university professors and scientists who subscribe to intelligent design. Most would not speak on the record *for fear of losing their jobs*. One untenured professor at Kennesaw State University in Georgia wrote that talking to NPR would be, quote, ‘the kiss of death’. Another said, ‘There is no way I would reveal myself prior to obtaining tenure.’”<sup>7</sup> In another case, the President of the University of Idaho issued a letter forbidding faculty from teaching alternatives to Darwin’s theory in science classes there.<sup>8</sup> The widespread hostility of many scientists to criticisms of Darwinian theory makes further violations in this area by federally-funded institutions likely. (emphasis added)

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While the majority of scientists continue to support Darwinian theory, it is important that neither federal funds nor federal power be used to punish otherwise qualified scientists merely because they articulate a dissenting scientific viewpoint on this issue. Scientific controversies should be decided through research and open debate, not through on-the-job harassment at federally-funded institutions or the blacklisting of certain scientists because of their outside activities. Scientists such as Dr. Sternberg have a First Amendment right to express their skepticism toward Darwinian evolution without having to fear government-sponsored retaliation.”

### **Other examples**

Ben Stein's movie, *Expelled – No Intelligence Allowed*, documents the fate of a number of professionals whose careers have been cut short due to their refusal to bow to the establishment.<sup>9</sup> *The Free Science* website documents a number of cases where perfectly competent scientists have been sidelined or even dismissed for simply putting both sides of the argument to students,<sup>10</sup> and Matti Leisola's book gives similar details of a number of others.<sup>11</sup> A separate testimony is given by Halvorsen, who states that expressing doubts (about neo-Darwinism) is intellectual suicide.<sup>12</sup>

Richard Milton's experience is a prime example of the lengths to which the evolutionary establishment will go to suppress anything they deem undercuts the current paradigm. In his book, *Forbidden Science*, he gives details of the way scientific ground-breakers and people who question the established scientific ideas, including himself, have been vilified and sidelined by the scientific paradigm police. In his first chapter he runs through several egregious cases of scientific suppression and shows how the scientific establishment managed to make things worse in some cases.<sup>13</sup>

### **Refusal to debate the issue**

Another problem is that all too often, when creationists want to debate issues scientifically, the evolutionary establishment refuses to do so. The reasons given usually centre on the belief amongst evolutionists that anti-evolutionary thinking is driven solely by religious considerations, or on (unsubstantiated) claims such as “intelligent design has been proven wrong.” Rarely is any attempt made to confront the scientific arguments put forward by anti-evolutionists and those who support intelligent design. This demonstrates the weakness of the evolutionary position. If evolutionists had sound arguments and could refute the supposedly weak arguments against evolution, why are they not willing to do so in public debate?

A recent post in *Evolution News* pointed out that scientists, particularly evolutionists, spend an inordinate amount of their time attempting privately to refute intelligent design arguments, generally failing in that endeavour. In the Italian humanities journal, *Angelaki*, Giuseppe Longo wrote:

“During a recent colloquium on biology in Paris, I have heard with dread all American colleagues ... lost 20 percent of their time and brain power combat [sic] intelligent design theory, so much the stakes have become drastically central, even for the financing of research, in this country.”<sup>14</sup>

This is illuminating, if only for the fact that clearly intelligent design is seen as a serious issue. If it really had been proven wrong, no-one would spend time attempting to disprove it. But debate they will not.

### Repression in publication

With respect to publishing in main-stream journals, in-house journals and the media generally, any criticisms of evolution are all too often suppressed. This is done by coercion, establishment scientists threatening any reporters or publishers with future non-cooperation if they publish contrary evidence. Since science reporters and major publishers of textbooks live or die according to whether they can publish at all, this arm-twisting is a very potent way of building the picture that evolutionists want disseminated and suppressing ideas with which they disagree. There are endless examples of this, despite the claims of Richard Dawkins and others. A significant difficulty in proving this is getting publishers to publicly admit the reason for their rejection of material, but the evolutionary mafia ensures that the rejection happens.

### Notes and references

- 1 Martin, C.P., "A non-geneticist looks at evolution," *American Scientist*, January 1953, p. 100.
- 2 Leisola, M., *Heretic*, Discovery Institute, 2018, ch. 4.  
<http://www.richardsternberg.com/smithsonian.php>.
- 4 Meyer, S., "Intelligent Design: The Origin of Biological Information and the Higher Taxonomic Categories," *Proceedings of the Biological Society of Washington* 117, no. 2 (August 4, 2004): 213–239.  
<http://www.richardsternberg.com/smithsonian.php?page=letter>.
- 6 *Ibid.*
- 7 Haggerty, B.B., "Intelligent Design and Academic Freedom," *All Things Considered*, National Public Radio, November 10, 2005.
- 8 White, T.P., "Letter to the University of Idaho Faculty, Staff and Students," October 4, 2005, <http://www.president.uidaho.edu/default.aspx?pid=85947>.
- 9 <https://www.youtube.com/watch?v=4HErmp5Pzqw>.
- 10 <https://freescience.today/stories/>.
- 11 *Heretic*.

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- 12 Halvorsen, R.T., "Confessions of a Skeptic," *Harvard Crimson*, April 7, 2003, accessed November 11, 2017, at <http://www.thecrimson.com/article/2003/4/7/confessions-of-a-skeptic-does-our/>.
- 13 Milton, R., *Forbidden Science*, pp. 85 et seq.
- 14 <https://evolutionnews.org/2020/05/scientist-admits-biologists-are-obsessed-with-intelligent-design/>.

## Appendix 8: Information and order

There is a tendency for biologists, and for evolutionists in particular, to misunderstand both information and order, and to claim that the sequence of subunits in DNA is an example of both. This is emphatically not true of order, and only partly, and misleadingly, true of information. To understand this properly we must look at the meaning of both terms and whether we can properly apply them to the DNA. Let's begin with the idea of information.

### Syntactic information

Claude Shannon was a scientist who was interested in the transmission of information, and was particularly concerned with the accuracy with which it could be done. So he defined information to suit his purpose, and the sort of information he was concerned about, which is now known as 'Shannon information', could either be a sequence of symbols like letters, which carried some meaning, or a meaningless string of symbols, and could even simply be a sequence of full stops.<sup>1</sup>

Either way, he wasn't really concerned about the nature of the information he was dealing with. All he was bothered about were systems which could accurately transmit any sequence of symbols through wires or space. It is on this that the definition of Shannon information rests. Technically this is known as syntactic information. Syntactic or 'Shannon' information does not necessarily convey any real meaning. The idea of information being syntactic is that it simply obeys the basic rules of grammar. It could be meaningful, but it could be absolute nonsense.

"The cat sat on the grass", is syntactically correct, as is "the grass sat on the cat", but only the first is meaningful. Syntactic information follows appropriate rules of grammar, but doesn't necessarily have any meaning in the context.

### Semantic or meaningful information

But information to the rest of us is all about meaning. Meaningful information is known as semantic information, and this is the sort of information carried by the DNA. In the technical literature on this subject the information in the DNA is referred to as complex and specified information, but in simple terms, which I shall employ here, it is information which carries meaning, and is otherwise described as semantic.

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Semantic information may look at first like an incomprehensible series of symbols apparently randomly arranged, but by definition it always carries real knowledge. For that reason meaningful information always requires some sort of translation system for its meaning to be extracted.

This paragraph is an example of meaningful information. You can only obtain meaning from one of these sentences because you know the meanings of the individual words and by their positions in the sentence. The 'translation system' is in your head. Without that incredible facility all these letters that you are now looking at would be completely meaningless. To most of us a Chinese sentence would be utterly incomprehensible, but would still be meaningful information, because someone who knew Chinese could extract the meaning. So both this paragraph and a Chinese sentence are examples of semantic information.

It is a fact that all the knowledge and experience we have gained in science tells us that meaningful information occurs only when intelligence is involved.<sup>2</sup> Every last piece of meaningful information, from a baby's first word through to the millions of lines of code making up the latest version of Microsoft Windows, is generated either directly or indirectly by an intelligent mind, and, further, has to be translated by one. We know of no exceptions to this. As this is knowledge, it qualifies as science.

The DNA contains meaningful or semantic information. Purely syntactic information, the sort Shannon was concerned with, is of no use. It would not provide the DNA and the genes with information to make all the necessary complex substances which compose living things. Unfortunately some biologists confuse the two types of information.

### **Can we find a law or algorithm for information?**

Attempts to use random means of generation of information goes nowhere, and in private evolutionists admit it. Eigen, in his book, *Steps towards Life*, states, "Evolutionists' task is to find an algorithm or natural law that leads to the origin of information."<sup>3</sup> This is a very clear admission that they do not know the way in which life's information is generated.

But actually this statement is a category mistake. It displays a serious misunderstanding of what a law or algorithm really does. A law or an algorithm merely describes something. Of itself it is not capable of generating anything. It is a description, a summary if you like, of a

situation which has a specific condition. Newton's Laws of motion describe what happens to objects when they are moving and when for some reason that movement is changed.

A law uses information and codifies it in a productive way, providing us with a tool to help us understand what is going on. To use it we have to apply our own intelligence, both in applying it appropriately and also in supplying parameters from which we can extract answers to problems. A law is really in the category of a tool. It has to be deployed by an intelligence.

A law or algorithm is the very opposite of information, which technically speaking relies absolutely on non-specific conditions, that is, on many variations. It is true that in one sense laws or algorithms may enable us to generate information, as a prediction of future events, just as the DNA contains the information which generates the proteins. But no law or algorithm can of itself generate semantic information, like a paragraph in a book or the information actually found in DNA.

Turned around, situations which have more than a very few variables, as they are known, are very difficult to code into laws or algorithms. Laws by their very nature are restricted to situations in which there are few possibilities. So it is a category mistake to look for "a law which might lead to the origin of information", because information can contain almost endless possibilities.<sup>4</sup>

### **Order**

But there is another problem here with which we must deal, and that involves yet another confusion. This one is about order, which, again, biologists tend to equate with information. The issue particularly reared its head when some biologists proposed that life's molecules could have spontaneously formed on rocks that had a particular crystal structure. But these people were confusing the order inherent in crystals for the information contained in the molecules of life.

### **So what do we mean in science by order?**

A good example of the evidence of order is the snowflake. Although snowflakes are all subtly different, there are certain things about them which are consistent, one of which is the hexagonal (six-symmetric) arrangement of the branching. This arrangement is dictated directly by the intrinsic properties of water, the way in which the molecules of water join together. The variations in snowflakes are due to the subtle environmental conditions through which they pass as the flake is

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growing. Another example of order is the crystal structure of certain rocks, again due to the way their molecules are arranged in the solid.

Patterns are an example of order, and in some respects the word 'pattern' is a synonym for the scientific use of the word 'order'. To illustrate this, the sequences '010101010101' and '001100110011' are examples of order, and can be thought of as patterns, where '0010110100110101' and '11110011000001110' are not.

Order only conveys information in an extremely limited way. The first of our ordered patterns above could be written as '01(repeat)', and the second as '0011(repeat)', neither of which has much information content. The third and fourth examples above cannot be written out in this way. These could contain semantic information. If you looked at a computer program at the simplest level it would look like these last two examples (it is known as byte code).

In contrast to true information, order does not look random, because very often order has to do with repeating patterns. Indeed, order is shown in something *by* repetition. A second point about order is that it may be inherent in materials purely by the way they are constructed, in other words by their internal properties. John Lennox discusses the issues of order and information very clearly in chapter 9 of his book, *God's Undertaker*.<sup>5</sup>

The most important difference between order and information is that while order is usually intrinsic, automatic if you like, brought about by certain in-built properties of something, this is never true of meaningful information. Semantic information, information carrying meaning, has only ever been found to be a product of intelligence. At least, this was believed until evolutionists began claiming that DNA information can come 'out of the blue'. But this has never been shown to be true of meaningful information generally, or of the information found in DNA.

### **DNA is not an example of order**

It is true that many things outside life are spontaneously ordered, and biologists, either deliberately or in ignorance, might claim that the information in the DNA is an example of order, and it could therefore arise spontaneously. Therefore their claim is that DNA need not have come from an intelligence, but could have come spontaneously.

You should now see that this is a false claim. While we know many examples of order, DNA is emphatically not an example, and in fact is just the opposite. It is a supreme example of meaningful information. As with any information, DNA needs a translating system to be of any

use, and in the case of DNA the translator is RNA. The RNA molecules convert the DNA information into proteins which are vital to the body's operations. This need for a translation system makes it clear that DNA contains meaningful information.

In the *Journal of Theoretical Biology*, Dr Yockey warned, "Attempts to relate the idea of order ... with biological organization ... must be regarded as a play upon words which cannot stand careful scrutiny."<sup>6</sup> In other words, biologists who use the word 'order' to describe the information carried in the DNA, the genes, confuse two very different, and incompatible, ideas. It is another category mistake.

### Notes and references

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- 2 Stephen Meyer in conversation with Ben Shapiro: <https://youtu.be/FDSpLBNQk5I>.
- 3 Eigen, M., *Steps towards Life*, Oxford: Oxford University Press, 1992, p. 12.
- 4 Moreland, J.P., Meyer, S.C., Shaw, C., Gauger, A.K., Grudem, W., (Eds), *Theistic Evolution, A Scientific Philosophical, and Theological Critique*, Crossway, Wheaton, Illinois, 2017, p. 228, quoting Dretske, F., *Knowledge and the Flow of Information*, Cambridge, MA: MIT Press, 1981, p. 12.
- 5 Lennox, J., *God's Undertaker*, Lion, Oxford, 2007, ch. 9.
- 6 Yockey, H., 'A Calculation of the Probability of Spontaneous Biogenesis by Information Theory', *Journal of Theoretical Biology*, 67 (3), 7 Aug 1977, pp. 377–98; quoted by Lennox in *God's Undertaker*, p. 146.

### Appendix 9: Structuralism

If life depends on meaningful information, which cannot be generated by random effects, then those effects must be directed in some way. So the next question is, who or what directs them? Some very well qualified academics have stated quite unequivocally that all the principles of physics and chemistry of which we are aware do not hold any clue within themselves as to how life is organised.

If we discount an intelligent Creator we are moving into what is known as structuralism. Structuralism is the idea that somehow the instructions, templates, organising principles, what you will, for living organisms are part of the structure of matter or of the organisms themselves, or possibly somehow part of the structure of the universe. Hence the term 'structuralism'.

If structuralism were true, it would mean, somewhere in the structure of the universe, there would be, for example, the template for a fox to which all foxes have to comply. And the same goes for all the other millions of species, of course. This in itself raises all sorts of other questions, particularly with respect to the change from one species to another.

If these templates really exist, how could organisms make the change out of the clutches of one template into another? The whole idea is fraught with difficulty, not the least being that it is known that each species has upwards of 20% of unique proteins in its cells, which implies that there is a similar number of new genes in every species (pointed out in Fallacy 8). How could they appear all of a sudden, which would have to occur if the animal or plant changed?

This illustrates the desperation of neo-Darwinists when faced with the facts. Needless to say, we possess absolutely no evidence for any embedded, directing properties. Structuralism is the product of throwing away the idea of a God, of realising that neo-Darwinism doesn't have any answers, and then searching around to find anything which explains things. This isn't science, but unfounded conjecture.

We now know that even the DNA, the store of biological information, does not contain all the information to make an organism.<sup>1,2,3</sup> For a start, the bioelectric code, that is the electric fields across the membranes and through the cell substance, controls embryo development.<sup>4</sup> Some of the astonishing discoveries in this regard are given on the *Evolution News* website.<sup>5</sup>

Membranes have patterns which exert this control, but the patterns come from the cells of the parents. Molecules (proteins) made by the embryo are only fitted into the embryos' cells' structures if they fit the pattern.<sup>6</sup> But this does not explain where these patterns came from in the first place.

### **The source of information**

And this is really the central question with regard to information. Where does meaningful information come from? Can it just appear from material, inanimate sources? Or does it depend absolutely on some form of intelligence?

Our intuition is that meaningful information always has its origin in intelligence. We know of no exceptions to this. And there is a very simple reason for this insight, which is that meaningful information is essentially *non-material*. That is to say, it is independent of any material object or substance. Information may have to reside *in* material things, like books, memory chips and brains, but it is independent *of* them. It can be transferred between material objects without the information being altered, or without permanently altering the object itself.

We know that the physical and chemical properties of matter do not of themselves produce information. Putting ink on sheets of paper without our controlling how it is done will not produce a newspaper or a book. The memory in a computer holds rubbish, and will always do so, until a program and data are loaded into it, and that program and the data must always have their ultimate source in intelligence.

No material, solid objects in this universe will, of their own intrinsic properties, either contain or generate anything meaningful. This clearly tells us that information is immaterial, something not inherent in material things. The fact that information is immaterial, or abstract, is our total, consistent experience, the sum of our knowledge.

Evolutionists claim that information can be generated by inanimate objects, that it is somehow part of the structure of the universe. But even that claim exposes weak thinking here. For if information were buried in the universe in some way, it still doesn't answer the question of how it got there.

This was at the core of Paley's argument about the watch.<sup>7</sup> If one found a watch lying on the ground, there would not be the slightest doubt in one's mind that it was a product of intelligence. Richard Dawkins has attempted to dismiss this self-evident truth, using

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arguments against other propositions which Paley made, but which fail to destroy Paley's basic contention. In any case our own experience and intuition forbids any other explanation for the existence of a watch.

It is not reasonable to suppose that a watch could come about without any sort of intelligently directed process, and random, purposeless action has not produced one during the entire time the Earth has existed. Since living things are many orders of magnitude more complex than a watch, it is illogical to believe that life could also just happen without any sort of purposeful action.

### Notes and references

- 1 Cavalier-Smith, T., "The Membrane and Membrane Heredity in Development and Evolution", in *Organelles, Genomes and Eukaryote Phylogeny*, ed. Hirt, R.P., and Horner, D.S., Boca Raton, FL: CRC Press, 2004, pp. 335–351.
- 2 Collins, F.S., *The Language of God*, New York: Free Press, 2006, p. 2.
- 3 Kiefer, J.C., "Epigenetics in *Development*", *Developmental Dynamics* 236, 2007: pp. 1144–1156, doi:10.1002/dvdy.21094.
- 4 Nuccitelli, R., "Endogenous Electric Fields in Embryos during Development, Regeneration and Wound Healing", *Radiation Protection Dosiometry* 106, 2003: 375–383. doi: 10.1093/oxfordjournals.rpd.a006375.
- 5 <https://evolutionnews.org/2019/05/welcome-to-the-electric-cell/>.
- 6 Palade, G.E., "Membrane Biogenesis: An Overview", *Methods in Enzymology* 96, 1983: xxix–lv, doi:q0.1016/S0076-6879(83)96004-4.
- 7 Lennox, J., *God's Undertaker*, pp. 80–86.

## Appendix 10: Emergent properties

Another way of trying to circumvent the fact that information cannot be generated by chance is to imagine that complexity itself gives rise to 'emergence', spontaneous appearance of a property or ability. The idea here is that greater complexity can somehow build quite spontaneously on lesser complexity, and, by implication, that this will give rise to meaningful information.

It is assumed that this propensity for greater complexity is buried in material things, but doesn't show up until a certain level of complexity already exists. On this basis people have started to speculate that the internet could suddenly show signs of intelligence, although of what sort, and how it might affect us, we are not told.

Unfortunately this depends entirely on the presence of complexity in the first place. If we depend on complexity to give greater complexity, we have the problem of generating the necessary complexity to begin the process. If we are talking about complexity, we cannot be talking about order, and therefore we must be considering information, and meaningful information at that. If we have to start with any level of information, how did it come about? All these claims about emergent properties emphasise the fact that we have to have some level of information in the first place, which rather defeats the claim itself.

An emergent property is thought of as one which comes about due to the combined effect of other properties already present in an object or system. To cut it down to very simple terms, it is like claiming that adding certain sorts of 2 and 2 will make 5, that somewhere embedded in these particular 2s is more information which increases the result when they are added.

As an 'emergent property' is supposedly based on something that already exists somewhere, this argument isn't strictly anything to do with the random generation of information. Neither has it anything to do with true science, for we have absolutely no knowledge of any emergent property, or anything which might give rise to one.

In the context of biology, the claim for emergence is made by evolutionists who recognise that information, and the life upon which it depends, could not have just happened by random means. But these evolutionists still have to deny that intelligence was responsible for creating the initial information. According to them, from that information, in effect, more 'emerges' spontaneously. Where this comes from, they cannot explain.

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For example, in an attempt to support this idea, Richard Dawkins, in a lecture in 1999, stated that word-processing was an emergent property of a computer, on the basis that you need a computer for word-processing to be possible, and without one you can't do it. But as John Lennox points out, as an argument for emergent properties this is nonsense.<sup>1</sup>

Firstly the computer by itself cannot produce anything meaningful, which is really the whole point of the claim. It needs someone typing on it to do that. Secondly the computer is a highly designed object, without which no word-processing would happen. Thirdly the computer needs a word-processing program, like the one being used to write this book, which is a very complex piece of software, and which needs intelligence and much effort to create.

Further, this completely ignores several other things, including the not insignificant fact that a computer needs a source of generated electricity, and the means of getting that power to the computer, again involving huge amounts of intelligence and effort, if it is to work at all. Take away all the intelligent inputs and nothing happens. Indeed, removing just one of these stops everything happening.

So the underlying claim that in some way life's higher properties 'emerged' as the organisms became more complex simply does not add up. One of these higher properties, supposedly, is the ability of the brain, and another is the increase in complexity of the DNA. But these claims are all hot air.

The bottom line is that we know of no emergent properties appearing elsewhere of the type that evolutionists require, and the examples on which they rest their case are unfortunately spurious.<sup>2</sup> Darwin's own doubt about the whole idea of evolution centred on the concept of emergent properties.<sup>3</sup> One doesn't read much about that in the media.

### Notes and references

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- 1 Lennox, J., *God's Undertaker*, pp. 55, 155.
  - 2 *Ibid*, pp. 130–132.
  - 3 *Ibid*, p. 57.

## Appendix 11: The Nature of Science

This section has been written for those who want to know how science is done. It is included for the sake of completeness, but might also help non-scientists appreciate the limitations and some of the pitfalls with which scientists have to contend.

Science these days is treated as if it were supreme, a system which has all the answers. However, anyone who has worked in science will know that it is simply not true that science can give us absolute answers.<sup>1</sup> To begin with, many conclusions drawn from scientific research are all too often subject to the mindsets and beliefs of the researchers.

Richard Milton, in his book *Forbidden Science*, quotes modern research and makes the point that “our perceptions when we make observations depend at least in part on what we already believe.”<sup>2,3</sup> This is now accepted by the scientific community who are becoming really concerned about this issue. We explored this in more detail in the sociological section under ‘Fraudulent Research’.

The problem is that it is in the interest of scientists to foster this superior image of science and scientists, and the media tags along. Undoubtedly science ‘works’. If it didn’t we would be immeasurably the poorer. But the fact that science works is both its strength and its downfall. It gives us many benefits, but also gives scientists too much power, morally and physically.

### No proof

At the outset it is necessary to appreciate how science is done, to understand scientific ‘methodology’, as it is more formally known. Scientific methodology may come as something of a surprise to many. The simple truth is that in science we can never prove anything.<sup>4</sup> The purpose of doing science is to produce an idea of how something works, or why something is what it is.

Unfortunately we never know whether there is another uncomfortable little fact just waiting in the woodwork, so to speak, which will come to light at some point and destroy our idea completely. In science we are always on the hop and can never be sure that we are absolutely right.

Isn’t this rather unsatisfactory? Indeed it is, but there is nothing we can do about it. All science has to be done with that clearly in mind. We have to accept that there are no absolute answers. That said, we can

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get close, and of course we do have answers which are good enough in particular contexts. But it is important to remember the basic caveat: science can never be absolute in its findings. So when you read claims that neo-Darwinism is a scientifically-proven fact, it should be clearly understood that this is a contradictory statement, and therefore cannot be true. Neo-Darwinism cannot be proven.

### No explanations

Something else that is rather surprising about science is that it never ultimately explains anything. All it does, at the most fundamental level, is to describe. In the end all we can do is to observe. At the most fundamental level we find a set of facts which we cannot explain. The facts just exist.

It will appear counter-intuitive to claim that science does not explain things. After all, haven't we been using science for many years now to explain what we see? The answer is yes, of course we have, but only up to a point.

Take friction for example. We can 'explain' friction by reference to rough and smooth surfaces, and the weight of the object we are testing, because there is unquestionably a relationship between them. But this does not explain, in the fullest sense of that word, why friction occurs in the first place.

Friction is due to tiny attractions between surfaces, known as Van de Waal's forces, which are themselves caused by electrical charges on the atoms. But we have no idea why the atoms have these charges, for we cannot explain the electrical charges. They are just things we have to accept.

Neither do we know why electrons jump about in atoms to produce light, nor why two lumps of matter attract each other by what we call gravitational forces. We don't really know why sound and light waves bend around an object, we have only a vague idea as to how magnetism occurs (something to do with unpaired electrons, but we don't know exactly why), and we have no idea what time is or why it operates so remorselessly in the way it does.

We may be able to describe all of these, even condense their behaviour into mathematical equations, but ultimately we merely *describe*. We do not *explain*. And if we cannot explain even the basic facts, then to claim that we can fully explain everything is false.<sup>5</sup> All we can do is observe and report what we see.

Therefore any evolutionary ‘explanations’ are just speculations. Speculations abound in evolutionary thinking, but they are nothing more than guesswork. For the reasons given above, even if evolution really had happened, we would have no idea how, why or how fast. But we have many very good reasons to believe that neo-Darwinistic change is impossible. That should be kept firmly in mind when reading any literature put out by evolutionists.

### **Hypothesis to theory to law**

So how is science performed? The ideal way of doing science, of doing research, is that facts are collected, an idea connecting them is thought up, and then that idea is tested in one or more ways. Part of this process is to generate a hypothesis. This is an all-encompassing idea which explains how the facts are related and how they are logically tied together. This hypothesis should then be thoroughly tested. If it always seems to hold up as an idea, then we may promote it to the level of a theory. And if we find, over many years of testing that it is never proven wrong, then we may consider it to be a law.<sup>6</sup> Newton’s Laws of Motion, always found to be true at the level at which we live, are cases in point.

But large areas of science are not open to this way of doing things, and neo-Darwinism is one such area. How can we test neo-Darwinism, or any evolutionary scheme, if it has happened in the past? Even if we could show that it can occur now, we have no handle on how it might have happened millions of years ago, or even if it ever did. For sure, we have no way of going back in the past and testing it. And there are many other areas of scientific interest which suffer analogous problems, the so-called ‘Big Bang’ being one.

### **Inference to the best explanation**

When dealing with this type of problem we have to resort to another method of ‘doing’ our science. Here we have to do our research, and then sift the possible answers and choose which answer, which explanation, appears to be the most likely. This is known as the *inference to the best explanation*. A scientist many years ago advocated the idea that we should also prefer the most simple explanation (a method known as ‘Occam’s razor’). John Lennox has a very good chapter on all this in his book, *God’s Undertaker*.<sup>7</sup>

But, as you can probably appreciate, inference to the best explanation is fraught with problems. Firstly, we don’t know that we have thought up all the possible answers. Secondly, the answer we choose is inevitably subject to our own cast of mind, the way we think and our

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own world view. Thirdly, it suffers from the basic problem that we cannot be sure that all the facts are in, and it is almost certain that they aren't. Fourthly, the simplest explanation may not be the true one. Since we have no way of testing neo-Darwinism, it is subject to all these uncertainties. Therefore claims that macro-evolution of any type is 'certain', 'cut and dried', and 'the only explanation', are nothing more than unsupported assertions.

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- 2 Milton, R., *Forbidden Science*, Fourth Estate, London, 1994, p. 118.
- 3 Lennox, J.C., *God's Undertaker*, p. 35 et seq.
- 4 <https://www.psychologytoday.com/us/blog/the-scientific-fundamentalist/200811/common-misconceptions-about-science-i-scientific-proof>.
- 5 *God's Undertaker*, p. 52–56.
- 6 <https://www.livescience.com/20896-science-scientific-method.html>.
- 7 *God's Undertaker*, ch.2.

## Appendix 12: The False Basis of Modern Science

Belief in a God implies that man is not the supreme intelligence in the universe. This thought punctures man's pride. Belief in a Creator also imposes obligations on us, and constrains or limits us in what we are allowed to do. If we are created beings then we have obligations towards our Creator. We have to exercise self-control towards others and have to act morally, and all this is the very opposite of the effect of a materialistic world view.

That a materialistic world view excludes morality may be denied by some. It seems counter-intuitive. How could society survive without some sort of moral basis? The simple answer is that it wouldn't, at least not in a form acceptable to most people. In *The Lord of the Flies*, William Golding explores what happens when morality crumbles, specifically in the absence of an overarching authority. In *1984*, George Orwell does the same, but applies it to people higher up the age range. In both scenarios, however, the result is the same, a hell on Earth.

And it takes little effort, if only by trawling the Web, to throw up all too many examples of abuses of power which are making the lives of many on Earth not just miserable but almost untenable today, all of which are very clearly the result of ignoring basic morality. Modern society is only surviving by free-loading on Christian ethics.

If there is any doubt about the effect of ignoring morality, the reader is invited, for example, to peruse Ian Urbina's book, *The Outlaw Ocean*, which amongst other things exposes the abuses and outright slavery of hundreds of thousands of third-world men and women by a few powerful owners of shipping and fishing fleets, magnates operating with impunity in the twenty-first century.<sup>1</sup>

The point here is that neo-Darwinism is fundamentally amoral<sup>2</sup> in nature. As noted elsewhere, evolution is plainly stated by its adherents to have no purpose.<sup>3</sup> Neo-Darwinists claim that they are here purely by accident. This has inexorably led, in recent years, to ethical breakdowns, especially by those who have power and see no reason why they should be held to account by any moral code to look after others.<sup>4,5</sup>

Because materialists do not acknowledge a God, they believe that they can set their own limits on what they may do. Although materialists may deny it, there is ample evidence that this type of thinking produced the Holocaust.

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When men do not want to be constrained in any way they have an enormous incentive to dispose of the idea of a God. This is the essence of evolution, because man is considered to have been the result of a purposeless process.<sup>6</sup> In his book, *The Blind Watchmaker*, Richard Dawkins states that neo-Darwinism has “no long-term goal”.<sup>7</sup>

Like him, most scientists deny that there is any intelligence in the universe apart from our own. This view is used as a basis for any official opinion or work done in almost all universities, other academic institutions, government bodies or commercial enterprises. Such scientists, that is to say materialists, have an almost absolute stranglehold on any thinking, work or publishing in science. This is denied by its leading men, but there is ample evidence of this.<sup>8,9</sup>

This position, that there has to be a denial that a God exists in any research which may be done, is known as a demarcation argument. It is an attempt to ‘load the dice’, to twist any arguments away from what could be one of the main explanations for an event or object. It is entirely artificial, and there is no reason why researchers should be subject to it. But this is the demand of the evolutionary establishment in particular.

### An authority system

Stemming directly from all this, feeding on it and supporting it, is another problem we have with science. Well-known scientists and those who promote science are treated almost like ‘A’ list entertainment celebrities. Characters like Richard Dawkins, Richard Attenborough and the late Steven Hawking are prime examples of this effect. The aura around such people leads to the abuse of science when it becomes an authority system controlled by a few.

A common misconception, advertised by the evolutionary establishment, is that all accredited scientists believe neo-Darwinism. This is simply untrue, attested to by many of the references quoted in these pages. In his book, *Unbelievable*, historian Mike Keas makes it quite clear that there are many scientists, holding a PhD or higher, who publicly reject the neo-Darwinian idea.<sup>10</sup> At the last count, the *Dissent from Darwinism* website listed over a thousand such scientists.<sup>11</sup>

The word ‘publicly’ is important, for there is good reason to believe that many others also either reject neo-Darwinism outright, or seriously doubt it, but who cannot ‘come out’ for fear of job loss. Again, Mike Keas spells this out very clearly in his book, as does Matti Leisola in *Heretic*.<sup>12</sup>

The *Evolution News* website, which is run by the Discovery Institute and devoted to articles supporting Creation, carries a number of articles on this subject, documenting the way in which the establishment ruthlessly suppresses the slightest hint of disagreement with neo-Darwinism. Richard Milton gives examples of the same effect in many other fields.<sup>13</sup>

Despite David Coppedge only being an information scientist in NASA's Cassini mission to Saturn, he is one who was drummed out of his job due solely to his beliefs.<sup>14</sup> This issue has been dealt with in Appendix 7.

It is also a mistake to imagine that science as now practised is neutral, fair and unbiased. That was certainly a perception in times past, although it may be less of one now. The belief that science is unbiased is especially prevalent when most people consider biology and particularly neo-Darwinism. In one way this is understandable, because the man in the street almost always has less knowledge than the 'experts'. He is therefore in no position to question what they say.

This issue of not questioning the experts explains how 'science' is used as authority. Anyone who questions its conclusions and opinions is treated in a very similar manner to the way in which the Dissenters were treated. These were Protestant Christians who separated from the Church of England in the 16th, 17th and 18th centuries and who were persecuted for their beliefs. Members of the evolutionary establishment react to dissent "like high priests scenting heresy".

Richard Feynman, having tangled with managers in NASA who wanted to ignore evidence of negligence over the 1986 Challenger disaster, warned against the abuses of authority and said that "we should disregard authority whenever the observations disagree with it."<sup>15</sup>

Another incident which showed this abuse of authority very clearly was the 1999 discovery of dinosaur bones containing blood. This might sound trivial, but there are two issues here.

Firstly, true fossils are not bone, but rock. In the supposedly millions of years since the death of the original dinosaur, the bones should long ago have been replaced by other minerals to produce the fossil. The presence of true bone sets an absolute limit to the length of time the remains have been in the ground, and the accepted time limit is about 3 million years.<sup>16</sup> Dinosaurs are supposed to have died out about 65 million years ago,<sup>17,18</sup> so dinosaur bones should have long since fossilised, that is turned into stone. The fact that dinosaur *bones* have been found is the first problem.

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To make matters worse, the soft parts of an animal, the blood and tissues generally, are far less robust than the bones. So to find blood corpuscles in a dinosaur bone presents the evolutionary establishment with a double problem.

Neo-Darwinists initially dismissed that discovery as fraudulent, and also mocked the researcher, Mary Schweitzer, who originally made it.<sup>19,20</sup> It was only in 2006 that there was any acceptance of the findings, and in the intervening time the discoverer was very fortunate not to have lost her post. It should be made clear that this is far from the only case of this sort. Milton records the same sort of event in many other fields, which strongly reinforces this picture.<sup>21</sup>

### Distorted and incomplete stories

Another issue concerns the material displayed in museums, and what is relegated to the basement because “it doesn’t tell the right story.” Gazi, writing in 2014 in the *Journal of Conservation and Museum Studies*, says:

“Even when they make claims to scientific objectivity and precision, exhibitions inevitably reflect the beliefs, assumptions and ethical values of the persons making the decisions [in producing the displays]. In this way they inevitably promote some truths at the expense of others. This is usually not understood by visitors, as information presented in museums is normally perceived as accurate and true.”<sup>22</sup>

He goes on:

“Few are aware of the great number of mammal species found with dinosaurs. Paleontologists have found [evidence of] 432 mammal species in the dinosaur layers, almost as many as the number of dinosaur species.”<sup>23</sup> (emphasis added)

He points out that these include nearly 100 complete mammal skeletons. But where are these fossils? The issue here is a neo-Darwinian insistence that dinosaurs died out long before mammals arrived on the scene. In 60 museums not a single complete mammal skeleton from the dinosaur layers was displayed. Only a few dozen incomplete skeletons, or single bones, of the mammals were put on show. It is believed that it was only with the dying out of the dinosaurs that the ‘first, primitive’ mammals appeared. In museums the story has to be consistent, so almost all the mammal fossils found with dinosaur remains are kept under wraps.

This is a prime example of the dogma ruling and displacing the truth. From a simple scientific point of view there is absolutely no reason why the connection between mammal skeletons and dinosaur fossils should not be made available to the public. They should be seen in their rightful context, but they would act as a contradiction to the establishment's position, and so they are hidden. The usual justification for doing this sort of thing is that otherwise the museum visitors might become confused. But if that is true, then clearly the picture that they have been given previously is incorrect, and therefore the museum should be foremost in putting it right.

### **Specialism reigns**

It is true that one of the difficulties that 'the man in the street' suffers from is that he rarely has enough knowledge to question what is claimed by evolutionists. But what is not generally realised is that this problem also applies almost universally to the experts themselves. At one point the great naturalists could cover all the important information in science, but the extent and depth of modern knowledge is so immense that it isn't possible to be an expert in science as a whole, or even in a large part of it. Specialism rules, and one person can only be an expert in a relatively small area.

Therefore the opinions of others have to be accepted by a researcher as soon as that researcher steps away from their own specialism. This leads to another source of scientific abuse, where each person rests their opinion on that of others. Unfortunately everyone assumes that someone else has answers, when in fact no-one does.

To confirm this, we have only to go to the testimony of the late Colin Patterson FRS (died 1998). He was for some years the senior Palaeontologist at the British Museum of Natural History, a museum which houses some 60 million fossil specimens, the largest collection in the world. In that position he was probably in the best place to comment both on modern evolutionary thinking and on its value from the evidence in organisms. His thoughts and impressions are therefore very significant.

In an address in 1981 at the American Museum of Natural History he said:

"For over 20 years I thought I was working on evolution ... [But] there was not one thing that I knew about it ... So for the last few weeks I've tried putting a simple question to various people and groups of people. Question is 'Can you tell me anything you know about evolution, any one thing, any one thing that is true?' I tried

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that question on the geology staff of the Field Museum of Natural History and the only answer I got was silence. I tried it on the members of the Evolutionary Morphology Seminar in the University of Chicago, a very prestigious body of evolutionists, and all I got there was silence for a long time and eventually one person said, 'Yes, I do know one thing – it ought not to be taught in high school' ... During the past few years ... you have experienced a shift from evolution as knowledge to evolution as faith ... evolution not only conveys no knowledge, but seems somehow to convey anti-knowledge."<sup>2425</sup>

Quite apart from Patterson's own misgivings, this illustrates the problem of specialism rather well. His audiences were made up of many of the leaders in the evolution sphere, and all subscribed to the basic principle of neo-Darwinism. Each thought that others had proof, but when they were questioned directly as to whether any really had proof, Patterson drew a complete blank.

Theoretical physicist Richard Feynman pointed out that science is iconoclastic. He quipped that "science is the belief in the ignorance of experts."

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- 8 Examples of this are given in the film *Expelled, no intelligence allowed*, on <https://www.youtube.com/watch?v=V5EPymcWp-g>.
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### Appendix 13: Punctuated Equilibria

The general public and most academic evolutionists believe in neo-Darwinism, that is that many very small changes eventually produce new organisms, but there are a significant number of well-known evolutionists who challenge these ideas. This is not generally known because it causes embarrassment amongst the majority of neo-Darwinists.

In the early 1970s two foremost evolutionists at Chicago University, Niles Eldredge and Steven Gould, looked carefully at the evidence from the rocks. They concluded that the fossils did not show gradual change from one type of organism to another. They also saw very clearly that there were large gaps in the fossil record. It was clear that there had been changes, but that they were made in large jumps, between which were long periods without any apparent change. So purely on the basis of the evidence in the rocks they disagreed very strongly with neo-Darwinism, and put forward another idea which they called Punctuated Equilibria.<sup>1,2</sup>

The hypothesis of Punctuated Equilibria accepts the sudden large changes which we find in the fossil record, and it also accepts the long intervening periods when there appears to have been very little change. Eldredge and Gould then claimed that changes were happening deep in the DNA of the cells without being seen in the organisms. Then, they said, quite suddenly these changes took effect and produced many new life-forms.

The paradox is that the evidence from the rocks undoubtedly supports Eldredge and Gould, at least with respect to the long periods of stability and the sudden and large changes. Unfortunately they have no realistic biochemical mechanism for what they propose. The neo-Darwinists think that they have a mechanism, in mutations and natural selection, but their claims are denied by the evidence in the rocks.

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## Appendix 14: Speciation

As the entry in Wikipedia on 'Species' shows all too clearly, while originally defined as a group of organisms which were able to interbreed, that definition has eroded over the years as groups which had been defined as separate species were seen to interbreed (lions/tigers, horses/donkeys) and possibly to produce viable offspring.

With the realisation that epigenetic control of genes was much more powerful than had previously been supposed, a good many of the 'speciation events' are now viewed as almost certainly due to this phenomenon and not to neo-Darwinistic effects where the DNA might be modified.

Any claim for speciation, if it is to be valid at all, must take into account any changes *in the DNA*, and show quite clearly that these changes are both necessary and sufficient to prove that a new species has arisen *and* that these changes were produced by random effects. The author is well aware that this is a demanding condition, but it is actually the minimum that is required to prove the point. The present writer is not aware that this has ever actually been done.

We know that the cell itself can control changes in the DNA, producing effects very similar to those claimed for neo-Darwinistic processes, and a typical example is the way in which the binding surfaces of the T-helper cells in the immune system are produced. But the point here is that this ability is already *built into the cell*.

A significant problem here is that the biological and evolutionary world is still catching up with the implications of epigenetics and cell-induced DNA change. Unfortunately it is often the older and more influential members of the establishment who are the most resistant to new ideas, and particularly to those ideas which show the inadequacies of macro-evolution. So senior evolutionists trumpet every small permanent change as neo-Darwinistic, when it may be nothing of the kind.

As indicated in the section on mutations, many new plant varieties with changes to colour and morphology have appeared, especially in ornamental plants, and the same is true analogously in animals. Whether any of these can be considered new organisms, however, is arguable.

Where this all leaves us with respect to the 'kinds' of Genesis is interesting. It could very well be that the 'kinds' of Genesis 1 are at the genus level, and over the millennia the epigenetic and cell-induced

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DNA change effects have produced what most people would now call species.

This will be shouted down for several reasons, one of which is that, for example, different species will only mate within their species' clan. But the problem is that we don't know whether this is truly biological in the sense that they are physiologically incapable of mate with others, or whether it is a social effect, organisms somehow preferring those who look like themselves, or there is some other attraction (sounds? smell?) which we haven't yet figured out.

The example of dogs is very cogent here. Anyone coming in ignorance and looking at all the different dog breeds could well believe that they are different species, if very closely related. This would be reinforced in their minds by the discovery that the lines tend to breed true (an epigenetic effect), and that size does prevent certain couplings (a social effect). But we know that all dogs are merely variations of one species.

Behe has done a considerable amount of work on this, and reckons that 'evolution', 'change', however one likes to define it, never operates above the genus level. In his two books, *The Edge of Evolution: The Search for the Limits of Darwinism*, and *Darwin Devolves*, he admits that some trivial examples of change might be due to random mutations. But the idea that all changes, and particularly those above genus level, are due to neo-Darwinian evolution, is quite preposterous from mathematical considerations alone. All the information that we have shows clearly that the absolute limits are certainly no higher than genus level, and in many cases may not even be that high.

The point is that there is no reason why God, having made the 'kinds', could not have imbued them with the ability to change to a very limited extent, if only so that organisms could cope with varying environments. But this is hardly a reason to go down the LUCA road and the rest of the evolutionary speculation.



## Glossary

(These definitions apply particularly to the material in this book.)

- academic – related to higher learning
- allegorical – possessing hidden spiritual meanings
- ancillary – subsidiary, supplementary, in addition to a main event
- anthropology/anthropologist – the study of human beings and their supposed ancestors/one who does this
- archetype – an original pattern or model
- barbule – a minute filament in a feather
- bibliography – list of publications referred to
- biogeographical – the science of the distribution of living organisms
- class – the biological category above order and below phylum.
- concept – an idea or generalisation from a number of examples
- conformation – shape or structure from a number of parts
- co-opted – taken into a group
- cosmos – the universe
- critical – a type of Biblical analysis, now discarded
- deist – a belief in a Creator God who does not intervene in human affairs
- DNA – the very large molecules in the cell which contain much of the information needed in it
- double blind – a testing procedure designed to avoid experimenter bias or influence
- elucidated – made clear or plain
- enzyme – a large protein molecule which acts as a chemical catalyst
- epigenetic – of changes in gene function which occur without change in the DNA sequence
- exegesis – explanation or analysis
- family – the biological category below order and above genus.
- figurative – not literal, representative
- flagellum – a whip-like filament by which bacteria move
- gene – the part of the DNA which was once considered to contain instructions for making proteins
- genus – the biological category above species and below family.
- historicity – historically authentic, real

- hominid – of primates including chimpanzees and humans
- hominin – of humans and their supposed primate ancestors
- homolog – similar in structure
- hydrodynamic – relating to liquids in motion
- hydrostatic – relating to liquids not in motion
- inanimate – without life
- inerrancy – freedom from error
- intermediate/transitional form – a supposed organism linking two different forms, a 'missing link'
- materialism – belief in a universe without a creator
- mechanism (biological) – the sequence of steps in a chemical pathway
- metabolism – processes in an organism which sustain life
- metamorphosis – the change from an immature to a mature form in insects and other non-vertebrates
- metaphor/metaphorical – a word or phrase used to indicate something other than its plain meaning
- millennia – thousand year periods
- missing link – see intermediate form
- morphology/morphological – to do with structure
- myth (as used by academics) – a story, object or person considered to be fictitious
- nocturnal – awake at night
- order – a category of organisms ranking above a family and below a class
- organism – any living thing
- palaeoanthropologist – one who studies extinct and prehistoric hominins and their primate relatives
- palaeoentomology – one who studies extinct and prehistoric insects
- palaeontology/palaeontologist – study of extinct life forms, one who does this
- paradox – a seemingly contradictory statement or situation which may nevertheless be true
- pentadactyl – having five appendages (fingers or toes) at the end of limbs
- philosophical – to do with thought

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phylum/subphylum (plural phyla) – a category of organisms ranking below a kingdom and above a class.

pleiotropy – a single gene producing several distinct but apparently unrelated effects

primordial – belonging to the earliest stage of development

reagent – chemical used in a reaction

secular – worldly rather than spiritual

status quo – the existing situation

sociological – to do with society and how people act with respect to each other

source criticism – testing an information source for reliability

spontaneous (generation of life) – without apparent descent from a previous organism or input from a Creator

teleology – the study of something in terms of their purpose or goal

Tertiary – the geologic period from 66 million to 2.6 million years ago (an obsolete term now)

theist – one who believes in a god, especially God as Creator

transitional form/intermediate – see intermediate/transitional form

untenable – (as of an idea) incapable of being defended as valid

vortices – whirled or spiral arrangements

wild (the) – outside the laboratory, without human interference or influence

world view – a cultural perspective of a person or society

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