### IN DEFENSE OF THE FAITH

# DRAFT

**Bryan P. Mistele** 



**Beyond Today Publishing Third Printing** 

### Copyright © 2008 by Bryan P. Mistele

All rights reserved. No part of this book may be reproduced without permission from the publisher, except by a reviewer who may quote brief passages in a review; nor may any part of this book be reproduced, stored in a retrieval system or copied by mechanical photocopying, recording or other means, without permission from the publisher.

Beyond Today Publishing 21311 NE 84<sup>th</sup> St. Redmond, WA 98053

To order additional copies of this book on-line or obtain additional information about the author go to: www.bryanmistele.com

To send comments, questions or feedback to the author, e-mail: bryan@mistele.com

Cover: The entrance to a cave in the hills above the ancient settlement of Qumran, Israel, supposed home of the Essenes, Jewish scribes responsible for recording the Dead Sea Scrolls. Fragments of the scrolls have been found in the area since 1947. Cover Image © Richard T. Nowitz/CORBIS

Printed in the United States of America

Library of Congress Control Number: xxxxxxxxxx

ISBN 978-0-9766845-2-7

Unless otherwise noted, Scripture quotations are taken from the Holy Bible, New International Version (North American Edition), © 1973, 1978, 1984 by the International Bible Society. Used by permission of Zondervan Publishing House.

### **Dedication**

To my sons Matthew & Stephen, whose questions inspired this book. Never stop asking questions.

### **Author's Note**

Much of the writing in this book is not my own.

In attempt to teach a class covering such broad fields as the cosmos, physics, astronomy, biology, paleontology, biochemistry, philosophy, Intelligent Design, history, prophecy, apologetics and archeology, as well as numerous other subjects and provide these printed materials for further study, I have relied heavily on the work of numerous other authors.

Where a section is marked with a reference note, one can assume that much of that section is based on the work of the author cited. In some cases, I have combined the work of several authors to formulate a complete section.

Where there is no reference note provided, one can assume that section is based largely on the work of this author.

### **TABLE OF CONTENTS**

INTRODUCTION: HOW DO WE KNOW?	1
Part 1: The Case for a Creator	
EVIDENCE FROM THE UNIVERSE	19
EVIDENCE FROM PHYSICS	
EVIDENCE FROM ASTRONOMY	
EVIDENCE FROM BIOLOGY	
EVIDENCE FROM THE FOSSIL RECORD	
EVIDENCE FROM BIOCHEMISTRY	74
EVIDENCE FROM CONSCIOUSNESS	
Part 2: The Case for a Personal God	
EVIDENCE FROM PHILOSOPHY	97
THE CHARACTERISTICS OF GOD	
Part 3: The Case for the Bible	
SCIENCE & THE BIBLE	
EVIDENCE FOR THE OLD TESTAMENT	
EVIDENCE FOR THE NEW TESTAMENT	
EVIDENCE FROM PROPHECY	130
Part 4: The Case for Jesus	
WHO WAS JESUS?	
EVIDENCE OF HIS RESURRECTION	
CORROBORATING EVIDENCE	
EVIDENCE FROM ARCHEOLOGY	
EVIDENCE FROM PROPHECY	
EVIDENCE FROM HIS MIRACLES	
EVIDENCE FROM HIS FOLLOWERS	
EVIDENCE FROM HISTORY	215
Epilogue	
COMPARING THE RELIGIONS	
CONCLUSION	237
Appendix	
• •	242
IS THE CREATION ACCOUNT REAL?	
CREATION SCRIPTURES SCIENTISTS WHO BELIEVED THE BIBLE	
FINELY TUNED PARAMETERS OF THE UNIVERSE	
DINOSAURS AND THE BIBLE	
EVIDENCE OF A WORLDWIDE FLOOD	
TIMELINE OF PROPHETIC EVENTS	
RECOMMENDED READING	
SOURCE NOTES.	

### **INDEX OF FIGURES & TABLES**

### **Figures**

Figure 1: Deciding Between the Major Religions of the World	5
Figure 2: An Atom	27
Figure 3: A Spiral Galaxy	34
Figure 4: An Elliptical Galaxy	
Figure 5: An Irregular Galaxy	35
Figure 6: The Stanley Miller Experiment	51
Figure 7: The Geologic Time Scale	58
Figure 8: Tree Diagram from the Origin of Species	59
Figure 9: Ernst Haeckel's Embryos	
Figure 10: Horse Evolution	61
Figure 11: The Archaeopteryx	
Figure 12: Java Man	
Figure 13: Ramapithecus	
Figure 14: Piltdown man	
Figure 15: Nebraska Man	
Figure 16: Lucy	
Figure 17: Cilium and Flagellum	
Figure 18: DNA	
Figure 19: Timeline of the Babylonian Captivity	
Figure 20: Ezekiel's Prophetic Timeline	142
Figure 21: Options Regarding the Identity of Jesus Christ	
Figure 22: The Isaiah Dead Sea Scroll	
Figure 23: The Shroud of Turin	
Figure 24: Daniel's Prophetic Timeline	
Figure 25: Growth of Christianity	
Figure 26: Pascal's Wager	238
Tables	
Table 1: Major World Religions	4
Table 2: The Implications of Belief Systems	
Table 3: Reasons to Believe	
Table 4: Finely Tuned Parameters in the Universe	
Table 5: The Building Blocks of Biological Systems	
Table 6: A Comparison of Building Blocks of Different Systems	
Table 7: The Purpose of Pain in Life	
Table 8: Examples of Disease Resulting from Sin	
Table 9: The Authors of the New Testament	126
Table 10: Documentary Evidence of Various Ancient Works	131
Table 11: Christ's Appearances Following His Resurrection	
Table 12: Prophecies of the Messiah's Lineage & Birth	187
Table 13: Prophecies of the Messiah's Ministry	
Table 14: Prophecies of the Messiah's Conviction & Trial	
Table 15: Prophecies Concerning Messiah's Death	
Table 16: Prophecies Concerning Messiah's Resurrection & Ascension	
Table 17: The Miracles of Jesus	
Table 18: The Fate of the Early Disciples	
Table 19: Top 10 Christian Persecuting Groups	209

### INTRODUCTION: HOW DO WE KNOW?

Always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have. But do this with gentleness and respect... – Peter, 1 Peter 3:15

If a man will begin with certainties, he shall end in doubts; but if he will be content to begin with doubts, he shall end in certainties. – Francis Bacon

We know next to nothing about virtually everything. It is not necessary to know the origin of the universe; it is necessary to want to know. Civilization depends not on any particular knowledge, but on the disposition to crave knowledge. – George F. Will

### How Do We Know?

My study of Intelligent Design & apologetics all started with a simple question: "How do we really know Christianity is the right religion?"

I have two boys (age 7 and 9). Every morning when we wake up, we have what we call "cuddle time" – about half an hour where we sit in an oversized rocking chair together and just talk. Most of the time we talk about school, Star Wars, sports or some other such topic, but one day, my boys asked me this simple question: "How do we *really* know that Christianity is the right religion?"

Many people have never thought about this question, but it's interesting to consider how one actually goes about choosing a religion. As I thought about that question, I realized for me personally, the answer to how I became a Christian was pretty straightforward. I became a Christian at age 7. How did I decide to become a Christian? Simple – my parents were Christian, and sent me to a Christian camp where I accepted Jesus. So my parents really decided for me, and I chose to embrace the religion they had chosen.

This, of course, begs the question: how did they choose to become Christians? This question took on additional meaning for me after my Grandfather died this past year at age 95. At his funeral, my Grandmother pulled me aside and, in a matter-of-fact fashion, informed me that "I've selected you to become the new family historian". In this new role, she sent me a bunch of genealogical material to copy and distribute to the rest of the family. We have a rich family history, but I learned a lot related to this question of mine as I read through all the material she sent. I learned many things:

- My father was a Christian. He went to Wheaton College, served as an elder at our Church, and sat on the board of several Christian organizations.
- My grandfather was a Christian. Running a business in Detroit, he would sponsor Christian
  messages on billboards around the city during the holidays reminding people of the reason for the
  season. In addition, he served on the board of several Christian organizations, donated
  significantly to Christian camps, sponsored the Billy Graham rally in Detroit, and frequently
  witnessed to waitresses when we went out to eat.

- My great-grandfather was a Christian, with a similar story to that of my grandfather. He sat on the boards of Christian organizations, donated to Christian causes, etc. I also discovered that he funded Billy Graham's first international crusade.
- Going through the materials my Grandmother had sent me, I found an obituary for my Great, Great, Great grandfather Jacob Mistele who was the first Mistele to move to the new world. The following is an excerpt from this obituary:

Jacob Mistele was born in Wurtenburg, Germany, and came to Canada with his wife when a young man of 29...the sturdy young German and his wife set to work cheerfully to make a home for themselves in the wilderness. Like other noble pioneers, they suffered many hardships incidental to pioneer life, but through all they were faithful to their God, their family and their adopted country.

When the Middle street Evangelical congregation was formed fifty years ago...Jacob and his wife...became charter members of the Middle street church and for many long years were among the leading supporters and workers...

Mr. Mistele was a man of the most sterling honesty and uprightness of character, and a friend to all in need. Many are the stories told of his kindness to those who were in the poorer circumstances and of his high sense of honor in business dealings. His children were reared in the faith of their parents and with the same high standard of honor, and today the same name of Mistele is one of the most respected in Western Ontario.

Clearly, the Christian tradition ran deep in my family. As I dug through the genealogy materials, I found I could trace my family tree back to Abstatt Germany and the year 1731. Abstatt is 100 miles southwest of where Martin Luther started the Protestant Reformation 200 years earlier by posting his famous Ninety-five Theses Against Indulgences on the door of the Castle Church in Wittenberg Germany in 1517. These Theses were printed and circulated widely throughout Germany and ignited a revolution throughout the world.

So, the likely start of our family's faith was some Mistele reading these, and being spiritually ignited sometime in the 1500s. But that was just the start of my family's belief in Protestantism. This doesn't necessarily explain the decision for Christianity in the first place. I can't go back any further in my family genealogy, but the point is this – generations upon generations upon generations of Mistele's have been Christians, so it was the thing to do – we were all "reared in the faith of [our] parents". There really wasn't a decision to become Muslims, Buddhists, Hindus, Jews or Atheists.

So...back to my boy's simple question: how do we *really* know that Christianity is the one true religion? The answer for many people is similar to mine – they simply embraced the religion of their parents, who embraced the religion of theirs. There wasn't really an opportunity to study and consider all the different religions and pick the best one. For a thinking person, this isn't really sufficient. For something as important as our faith, shouldn't we have rational explanations for the things we believe? Shouldn't we consider all the alternatives for a decision as important as this? How do we rationalize all the other religions of the world?

I remember struggling with these questions in university. As a Computer Engineering major, I was required to take numerous Chemistry, Biology, Physics and Mathematics courses. Continually, I was presented with the arguments from my professors that Christianity and Science were in conflict with one another, and that the latest evidence supported evolution as opposed to religion. God, it seems, had become obsolete through the growth and development of Darwin's theory of evolution, which had for the first time, presented a naturalistic explanation for the origin of the universe and mankind.

As a student, I didn't attempt to rationalize my Christian beliefs with that of science. Rather, I did what most students do, and compartmentalized them. I believed God "created the heavens and the earth", but

kept my religious beliefs separate from the information I was confronted with in class. I answered the test questions in such a way to maximize grades with one notable exception and reasoned that perhaps God created the world through evolution, rather than what was described in the book of Genesis.

As a freshman, I took an introduction to Philosophy course and wrote a paper entitled "Can the existence of God be inferred from the order in the universe". I received a failing grade, which was very unusual for me. When I went to the teaching assistant to discuss my grade during office hours, I was told "that wasn't an appropriate topic for a Philosophy course." "Really?" I thought to myself as I shuffled out of his office, "If the existence of God isn't an appropriate topic for a philosophy course, then what is?" Regardless, I learned to keep my Christian ideas to myself in the classroom from then on and never dove deeper into exploring whether Christianity really did conflict with science until I pondered my two boy's questions. That is, until my boy's simple question, which is the core question of this book: how do we *really* know that Christianity is the one true religion?

### The World Faiths

There are about 4,300 different faith groups in the world.<sup>1</sup> That's an amazing number. If you do the math, you quickly realize that if one were to study a different world religion every week, it would take more than 83 years to study them all – and that's assuming one could read religious texts like the Bible and explore them fully in one week. How can anyone possibly study them all, and then try and decide which one was really true (if any)? Do they all lead to God? Do they all lead to *the same* God? Do they all answer where the universe came from? More importantly, do they all lead to heaven and if not, how do we tell which lead to the *real* heaven?

Despite the enormous number of different faiths in the world, there are only four religious groups that can claim more than a 1% penetration of the world-wide population as believers: Christians (the largest), Muslims, Hindus and Buddhists. Two other groups, however, are worth noting: (1) Judaism which, despite its small size, has had a significant impact on the world and where daily events in the tiny nation of Israel become front-page stories in the papers around the world; and (2) Atheists, who reject belief in any God, but in so doing have built up a separate set of principles and beliefs in Darwinism and naturalism that have had a growing impact on the world.

Table 1: Major World Religions

	% of World	
Religon	Population	Adherents
Christianity	33%	2,232,440,000
Catholics	17%	1,138,330,000
Protestants	6%	387,260,000
Orthodox	4%	236,510,000
Anglican	1%	83,750,000
Muslim	21%	1,407,670,000
Sunni	18%	1,196,519,500
Shiite	3%	211,150,500
Hindu	13%	888,420,000
Buddhists	6%	391,280,000
Sikhs	0%	23,450,000
Jews	0%	15,410,000
Baha'is	0%	8,040,000
Other	12%	789,260,000
Non-religious	12%	788,590,000
Athiests	2%	155,440,000

Total World Population: 6,700,000,000

Each of the above religions have very different origins, belief systems and conclusions to answer the questions of how did we get here? Is there a God? Is there a heaven or hell? How do we know?

### **Deciding Between the Major Religions of the World**

How can one decide between all the major religions of the world? The following flowchart may prove helpful in understanding the basic differences between the six major faith systems of the world: Christianity, Islam, Hinduism, Buddhism, Judaism and Atheism:

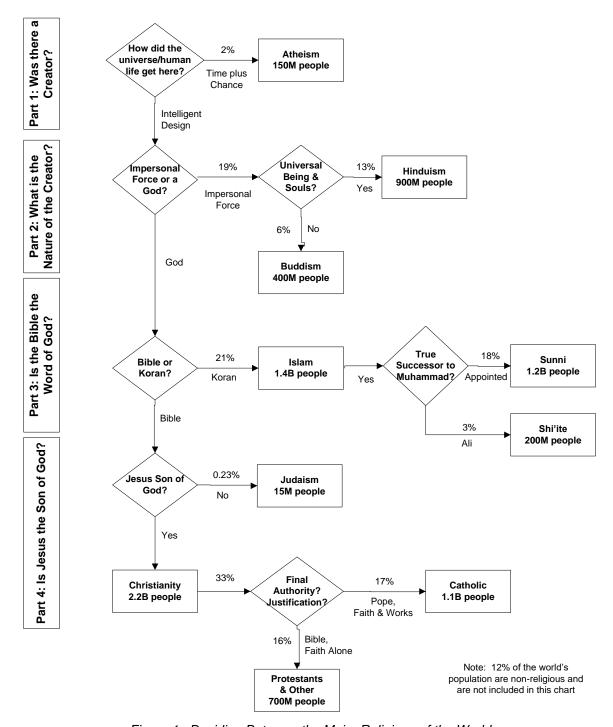


Figure 1: Deciding Between the Major Religions of the World

This flowchart outlines the all the major belief systems of the world that claim more than 100 million followers (plus Judaism). Although there are many other smaller religions not included in this flowchart, as one studies the world religions, it quickly becomes apparent that most of the smaller religions share core belief systems with one of these six. Hare Krishna, as an example, is an offshoot of Hinduism; while Mormonism and Jehovah's Witnesses are offshoots of Christianity.

The questions and sections listed on the left of the flowchart correspond to the sections in this book where these basic questions will be discussed.

There are really four basic questions that one needs to decide upon that will answer the question that my sons asked: "How do we *really* know that Christianity is the right religion?"<sup>2</sup>

### Question 1: How did the universe/human life get here?

First, we start with a very basic question: How did the universe/the earth/life/human life get here? Was there a Creator or did everything get here by accident? Either everything came about through time plus chance, to use Francis Schaeffer's term, or everything came about through intelligent design of some sort (e.g., old earth creationist, young earth creationist, "guided evolution," Hindu/ Buddhist concepts, etc.). Only two percent of people worldwide are atheists, which means that 98 percent of the people on this planet see intelligence of some kind behind the universe and everything in it.

### Question 2: Is intelligent design from an impersonal force or a personal God?

Second, we need to ask what is the nature of the creator? Is the intelligent design we observe in the universe a product of an impersonal force of some kind, as Hindus/Buddhists (approximately 20 percent of the world's population) believe, or is it the creation of a God with personality and the ability to communicate? 54 percent of the world's people adhere (many very loosely or quirkily) to one or the other of two popular understandings, Christianity or Islam. This means that close to 4.9 billion human beings — 3/4 of the world's population — are connected in some way to Christianity, Islam, Hinduism, or Buddhism. The remaining non-atheists among the world's people tend to be loosely deistic, polytheistic, or animistic.

### Question 3: Is the Bible or the Koran the word of God?

For the 54 percent, the next question is whether the Bible or the Koran is the word of God? Approximately 2.2 billion people adhere in some way (often loosely) to the Bible, and 1.4 billion to Islam. It's vital in today's war-torn world to know the radically different conceptions of God and Allah that the two religions offer. For example, Islam does acknowledge Christ as one of 25 messengers from God, but that's very different from considering him the centerpiece of world history and God incarnate.

### Question 4: Is Jesus the son of God?

The final question is whether Jesus is the son of God. Although Judaism is insignificant in size relative to Christianity (claiming 15 million people – less than seven tenths of one percent the size of Christianity), it is an enormously influential group of people especially in the United States, where Jews comprise 13 percent of the U.S. Senate and 22 percent of the Supreme Court, not to mention the top leadership positions in the fields of entertainment, news and finance.

### **Other Questions**

Beyond these four questions, there are others: What is the final authority for Christianity? Are Christians justified by faith alone or faith and works? These questions are critical to understanding the differences between the two major divisions within Christianity: Catholicism and Protestantism. Similarly, within Islam there are two major divisions which hinge on the question of whether the Prophet Muhammad's true successor was intended to be Muhammad's cousin and son-in-law, Ali ibn Abi Talib, as the Shiites believe, or appointed, as the Sunni's believe.

Within each denomination of almost any faith, one has to then wrestle with the question: theologically conservative or theologically liberal? The simplest way to answer this is do you think that the Scripture to which you are connected tells you the story by which you are to live your life, or does it give you some general principles from long ago that, given changed conditions, are probably no longer valid?

There are many other questions that will further differentiate sects within each denomination, but the questions above represent the key questions differentiating the different major religions of the world.

This book seeks to present evidence to answer the four primary questions listed above. My goal in writing this book is not to help guide the reader through all of the various faiths and tradeoffs presented above, but rather to focus on the four key questions that lead down the left-hand side of the flowchart to Christianity and answer the question: "How do we *really* know that Christianity is the right religion?"

### Why it Matters What You Believe<sup>3</sup>

Some may ask why it really matters what you believe? After all, 12% of the world's population (approximately 789 million people), are non-religious – apparently feeling that answering this question isn't as important as other priorities in life. Alternatively, some may believe that all faiths lead to heaven, so why bother trying to learn about them and understand them? I'm sure you've met people who've told you that "it doesn't really matter what you believe, as long as it is meaningful to you."

The problem is that it really *does* matter what you believe for three reasons:

- First, how can it be that the universe/the earth/life itself is filled with immutable laws of physics/chemistry/etc., and yet somehow, in matters of spirituality, people have the idea that it doesn't matter what you believe as long as it's meaningful to you? Is gravity only relevant if it's meaningful to you? Does E not equal MC² if that doesn't work for you? No, the earth is filled with laws that are either true or they're not. They either work or they don't and if there is a creator, it's logical to assume that he would have similar characteristics to those reflected in his creation.
- Second, if either the Bible or the Koran is true which the majority of people on this planet believe, then there is a real heaven and a real hell. What you believe really does matter because your eternal destiny may depend on it. If the Bible is true, it should impact the way you live, the way you relate to others and your priorities in life.
- Third, one has to reconcile Christianity's claim of exclusivity. According to the Bible, there is only one God. He created the universe, the earth and mankind. He created Adam and Eve and had a direct relationship with them. They sinned and as a result, were separated from God. God desired a right relationship with his creation, so he sent his Son Jesus into the world to be born of a virgin, to teach, to perform miracles and ultimately be put to death on a cross to die for our sins. By his death, we were released from the eternal consequences of our sin through belief and acceptance of his pardon for our sin. If you believe in the Bible, there is no middle ground there are no mixing and matching bits and pieces from other religions either you accept the above or you reject it. The idea that no religious system can claim to express reality or that there are multiple paths to heaven is not supported by Christianity. Either it is true or it is not true. If it is not true then there is no purpose in reading the Bible, attending church or any of the like. If, however, it is true, it should impact every part of a person's life.

There was an interesting point made in a debate a few years back between a prominent Christian, Cliffe Knechtle, and a prominent atheist, Dr. Michael Newdow. Dr. Michael Newdow is an emergency room physician who, as an atheist, felt the phrase "under God" in the Pledge of Allegiance was an endorsement of religion by the government and sued to have it removed. His suit was upheld by the 9<sup>th</sup> District U.S. Court of Appeals before being overturned by the Supreme Court. In the debate with Cliffe Knechtle, Dr. Newdow asked: "If God is real, why doesn't God come down and show us he exists!?" Cliffe Knechtle's answer was simply: "He did!"

You see, there is no option when it comes to Christianity to avoid the core question of Christ. You can't mix-and-match beliefs from different faiths. Either Jesus Christ was the son of God who came to earth and rose from the dead, or he wasn't. If you say he was, you are left to accept Christianity's claim of exclusivity and the Bible as the Word of God. If you say he wasn't, then you must reject the entirety of Christ's message since he didn't leave the option of claiming that he was only a "good teacher", since he claimed to be the Son of God. Some may say that Christianity isn't literally true, but it is helpful. This is as absurd. Christ claimed to be the son of God, so either he is or he isn't and if the latter, then no one

should follow him any more than one should follow a mentally deranged hospital patient who believes they are God. Who would follow someone who is either a liar or mentally crazy?

### The Implications of Belief <sup>4</sup>

Evolution/Darwinism/Naturalism/Materialism (terms that I'll used synonymously throughout this book for sake of simplicity) say we have no need of God. We can explain everything through natural sciences. Naturalism is the belief that the existence of life and the universe came about through natural means. In essence:

- From eternity were the particles
- And from the particles became complex living stuff
- And the living stuff became aware
- · And the living stuff conceived of God

Compare this with the explanation given in the Bible in Genesis 1:1: "In the Beginning God created the heavens and the earth." There are real implications of belief that lead to different worldviews across a range of issues. Below are some examples:

Table 2: The Implications of Belief Systems

Area	Bible	Naturalism	
Creation	Mankind was created "very good"	Life is an accident that was the result of	
	Genesis 1-2, 1 Chronicles 29:11, Job 38, Psalm 19:1, Psalm 24:1-2, Psalm 104:24- 25	pure chance. Humans evolved from a primordial pool of chemicals through accidental mutations and natural selection.	
Sin & Death	Mankind sinned, which leads to death	There is no 'sin' or absolute truth – those	
	Genesis 2:15-17, Genesis 3, Romans 3:23	are artificial constructs. People should do what seems right to themselves.	
Need for Savior	To overcome death requires a savior		
	Romans 5:12,14; 1 Corinthians 15:21, 1 Timothy 2:3b-4, Romans 3:23b, Acts 3:21		
Marriage	Marriage is a lifelong bond between a man and a woman	Our heritage is in the animals. Divorce is OK since we are only acting like animals.	
	Genesis 1:27, Genesis 2:24	Marriage is just a convenience.	
Sanctity of Life	Life is important to God	Abortion and euthanasia are OK, since	
	Genesis 1:27, Psalm 139:13-16, Ecclesiastes 3:1-3, Exodus 20:13	there is no 'soul' – people are just chemical reactions and there is no absolute truth or basis for morality.	

Self Image  We are created in the image of God  Philippians 2:3, Matthew 22:36-40 Jesus gives two great commandments: (1) Love God with all your heart, soul, and mind; (2) Love your neighbor as yourself there is no third command to love yourself. Jesus is saying, "as you already love yourself" "as" is used in the same way in Eph 5:25,28,33, indicating a state of current existence, not a command.		We all came from apes. Our self-image comes from nothing more than an accident that was a result of pure chance.
Hope & Purpose in Life	We have purpose in God. In his love, God provided a way to spend eternity with him. John 3:16, Ephesians 1:11, Colossians 1:16, 3:17, Mark 12:29-31	When we die, that's all there is, so there is no hope for anything more. There is no purpose in life. Mankind was an accident and when a person dies, that's all there is.

The point is that what you believe regarding faith has significant implications on your outlook on life, your self-image, and whether or not there is purpose in life. Belief in Christianity as opposed to Naturalism leads to completely different conclusions for how you should live your life.

### The State of Faith in Our Country<sup>5</sup>

More than half of Americans say religion is very important in their lives and attend religious services regularly and pray daily, but a strong majority of those who are affiliated with a religion, including majorities of almost every religious tradition, do not believe their religion is the only way to salvation. The Landscape Survey demonstrates that the social and political fault lines in American society run through, as well as alongside, religious traditions. Specifically:

- Among those affiliated with a religion, 70% say many religions can lead to eternal life including 57% of evangelical protestant churches and 83% of mainline churches. Only among members of the Mormon faith (57%) and Jehovah's Witnesses (80%), who together comprise roughly 2.4% of the U.S. adult population, do majorities say that their own religion is the one true faith leading to eternal life.
- More than nine-in-ten Americans (92%) believe in the existence of a God or a universal spirit with 60% of adults believing in a personal God (i.e., one they can have a relationship with) while 25%, including about half of Jews and Hindus, see God is an impersonal force.
- While 70% of Americans say they are absolutely certain of God's existence, more than 22% are less certain in their belief.
- Nearly two-thirds of the public (63%) take the view that their faith's sacred texts are the word of God. But those who believe Scripture represents the word of God are roughly evenly divided between those who say it should be interpreted literally (33%), and those who say it should not be taken literally (27%). And more than a quarter or adults including two-thirds of Buddhists (67%) and about half of the Jews (53%) say their faith's sacred texts are written by men and are not the word of God.
- Nearly eight-in-ten Americans (79%) agree that miracles still occur today.
- More than three-quarters of American adults (78%) believe there are absolute standards of right and wrong. A majority (52%) say they rely primarily on practical experience and common sense for guidance regarding right and wrong. Far fewer say they rely mainly on their religious beliefs (29%). Only among Jehovah's Witnesses (73%), Mormons (58%) and members of evangelical

churches (52%) do majorities say they rely primarily on their religion for guidance about right and wrong.

### **Questioning Christianity**

It's OK to doubt Christianity. Many believe that we simply need to accept Christianity "by faith" and not seriously question our faith, but the Bible encourages critical questions, discourages naiveté and offers factual reasons for belief. Christianity is based on fact:

- The book of Proverbs warns against naiveté (Proverbs 1:22; 8:5; 14:15,18; 22:3) and encourages believers to acquire knowledge (Proverbs 2:10; 8:9; 10:14; 12:1).
- The Gospels were written as historical fact (Luke 1:1-4; John 19:34-35; 21:24).
- The Apostles warned against believing in myths (1 Timothy 1:4; 4:7; 2 Timothy 4:3-4; Titus 1:14) and stated their message was based on fact (Acts 26:26; 2 Peter 1:16), and
- The disciple Peter commands us to "always be prepared to give an answer to everyone who asks you to give the reason for the hope that you have" (1 Peter 3:15).

Christianity is not a religion for the intellectually weak, but rather the intellectually strong. As a Christian, we should be confident of the reasons for why we believe, but no one should feel guilty about questioning the reason for their faith. After all, even Billy Graham – a giant of the Christian faith – struggled at one point with the question of whether Christianity was real after he had gone to three different Christian colleges, served as a pastor of a Church, served as the president of a seminary and started his work as an evangelist.<sup>6</sup>

Maybe the best way to evaluate the claims of Christianity is to approach it as if you were a juror in a court of law. If you were selected for a jury trial, you would be asked to affirm that you didn't have any preconceptions or prejudices about the case. You would be required to vow that you would be open minded and fair, drawing your conclusions based on the weight of the facts. You would be asked to carefully consider the credibility of the witnesses, sift through the testimony and examine the evidence using sense and logic.

Ultimately, it's the duty of every juror to reach a verdict. That doesn't mean they have one-hundred percent certainty, because we can't have absolute proof of most things in life. Rather, in a trial, jurors are asked to weigh the evidence and come to the best possible conclusion based on the preponderance of the evidence.

Don't take anyone's word for it – consider the arguments, investigate the evidence, check out the facts, seek alternative opinions and never stop learning. Certain points will weigh differently with different people – that's human nature and is due to our individual experiences, etc. The purpose of this book is to help you decide based on the evidence if Christianity is true or not.

### **Reasons to Believe**

The focus on this book will be to provide a broad overview of a variety of subjects including the cosmos, physics, astronomy, biology, paleontology, biochemistry, philosophy, Intelligent Design, history, prophecy, apologetics and archeology, as well as numerous other subjects and discuss the key evidence and arguments for Christianity, a God, the Bible and Jesus Christ.

The following table summarizes the key arguments (or 'proofs') we'll look at in this book. The second column indicates the chapters where each specific 'proof' will be discussed:

Table 3: Reasons to Believe

	In a God			
1.	Proof from Creation	A beginning (the Big Bang) implies a beginner.		
	Chapter 1	<ul><li>Whatever begins to exist has a cause.</li><li>The universe began to exist; therefore the universe had a cause.</li></ul>		
2.	Proof from Design	Design (a Universe and an Earth "just right" for life) implies a designer.		
	Chapters 2 & 3	<ul> <li>The parameters of the universe are exquisitely fine-tuned to produce and sustain life, but randomness does not produce fine-tuning.</li> <li>A planet that can sustain life in our universe is very, very rare (no more than one in 10 billion).</li> </ul>		
3.	Proof from Life	Evolution (time plus chance) can't explain the creation of life.		
	Chapters 4 & 5	<ul> <li>Life never spontaneously arises from non-life. Life always comes from life.</li> <li>There has never been an observed case of macroevolution. Never.</li> <li>Beneficial mutations don't occur; and mutations never form new species.</li> <li>Survival of the fittest (natural selection) can't explain the arrival of the fittest.</li> <li>The fossil record does not support macroevolution - there are no transitional life forms. Evolution predicts millions upon millions of transitional life forms.</li> </ul>		
4.	Proof from	DNA is information, and information is always the product of intelligence.		
	Information  Chapter 6	<ul> <li>Numerous examples of "irreducible complexity" disprove Darwinism.</li> <li>Cells are horrendously complicated – more complex than any computer we've ever created; and many biological machines could not have evolved.</li> <li>Random chance never produces information, and DNA contains more than 3 billion "lines of code" (equal to 4,000 books or 60X that of Windows Vista).</li> </ul>		
		In the Bible		
5.	Proof from Historical Records  Chapters 11-12	<ul> <li>The Bible is the most accurate and reliable text in all of ancient history.</li> <li>The Dead Sea scrolls confirm the accuracy of the Bible text.</li> <li>More original copies, documentary evidence and third-party collaboration exists for the Bible than any other book in history.</li> <li>6 of the New Testament's 8 authors were eyewitnesses of Jesus Christ; all 8 were verified by at least two of the others from the group of 8.</li> </ul>		
6.	Proof from Prophecy	Prophecy confirms the divine inspiration of scripture.		
	Chapter 13	<ul> <li>The Bible contains more than 1,000 prophecies – more than half have already been fulfilled with 100% accuracy.</li> <li>Many prophecies predict specific events to the exact day, even though they were given hundreds or thousands of years before their fulfillments.</li> <li>The accuracy of prophecy is the test by which to measure all other religions.</li> </ul>		

7.	<b>Proof from History</b>	<ul> <li>The most likely explanation from history is that Jesus Christ is God.</li> <li>The other alternatives for Christ's identity (legend, good teacher, lunatic, liar) are</li> </ul>	
		not credible given the historical, archeological & corroborating evidence.  • The other alternatives for Christ's resurrection (Christ didn't die, wrong tomb,	
	Chapters 14-17	<ul> <li>stolen body, hallucinations) are not credible given the historical evidence.</li> <li>The inescapable conclusion of the resurrection is that Christ was divine.</li> </ul>	
8.	Proof from Prophecy	Prophecy confirms Christ was the only person who could be the Messiah.	
		<ul> <li>The prophet Ezekiel predicted the exact day the Messiah would come more than 500 years ahead of time. Christ fulfilled this prophecy on Palm Sunday.</li> <li>More than 60 very specific prophecies in the Old Testament of the Messiah were fulfilled in every detail by Jesus Christ.</li> </ul>	
	Chapter 18	No one else (both mathematically and historically) could be the Messiah.	
9.	Proof from Miracles	Christ's miracles confirm his claim of divinity.	
		<ul> <li>There were more than 515 eyewitnesses to Christ's resurrection.</li> <li>The historical evidence and eyewitness accounts validate Christ's miracles.</li> </ul>	
	Chapter 19	Only God could have performed the miracles Christ did (healings, exorcisms, controlling nature, resurrections, supernatural knowledge).	
10.	Proof from His Followers	The life of Christ's followers and Christianity's impact on history testify to the Gospel message.	
		All of Christ's disciples (save one), died for their belief in Christ's resurrection.  People do not die for what they know is a lie.	
		The conversion of skeptics (Paul, James, Jews in general) and Christianity's impact on Rome & England is compelling evidence of the resurrection.	
	Chapter 20-21	<ul> <li>The way Christians live and die for their faith demonstrates the power of Christian faith.</li> </ul>	
		In Christianity	
11.	Proof by Comparison	Of all the major religions, Christianity is the most consistent with the preponderance of the evidence.	
		A personal God is the best explanation for how the universe and human life got here.	
	Introduction, Chapter	The Bible is the most accurate and reliable text in all of ancient history; prophecy confirms its divine inspiration.	
	9, 10, 22, Conclusion	The most likely explanation from the historical evidence is that Jesus was indeed the son of God.	

### The Scientific Method<sup>7</sup>

Before beginning our study of the four core questions that lead to Christianity, it is first important to establish the proper criteria for evaluating the evidence. There are two main types of evidence we will consider in this book: scientific evidence and historical evidence. For the former, the Scientific Method is the appropriate tool.

The Scientific Method is a systematic approach to problem solving that involves observation and experimentation, and seeks to construct an accurate representation of the world. The Scientific Method is not appropriate as the basis from which to determine the validity of historical events, but it is appropriate for evaluating natural phenomenon and building principles with which to understand the world.

The Scientific Method is simply this: Observation of matter/energy  $\rightarrow$  Gather evidence  $\rightarrow$  Hypothesis  $\rightarrow$  Build models  $\rightarrow$  Theory  $\rightarrow$  Natural Law

- 1. First, one makes an observation of matter or energy that they wish to understand.
- 2. Second, one gathers evidence is an observation of matter/energy that results in specific isolated facts or evidence
- 3. Third, one makes a hypothesis, which is an unverified, scientific proposal of relationships between evidence based on assumptions which may or may not be true. A hypothesis is a limited statement regarding the cause and effect in specific situations. It refers to our state of knowledge before experimental work has been performed.
- 4. Fourth, one builds models are representations of reality. Models can be mathematical, chemical or other constructs that help test and determine if the hypothesis has at least some or limited validity.
- 5. Hypotheses that proves capable of *explaining observations* and *making predictions without contradictions* over considerable periods of time are referred to as theories. A theory is accepted based on the results obtained through observations and/or experiments *which anyone can reproduce*. The key is that the results obtained *must be repeatable*.
- 6. When a theory is said to be established, it means that it agrees with all known experimental evidence. An important characteristic of a scientific theory is that it must be "falsifiable". This means that there must be some experiment or discovery that could prove the theory untrue.

Understanding the Scientific Method is important as we look at the fields of Physics, Astronomy, Biology and Biochemistry to understand how the universe was created.

### **Evaluating Historical Evidence**8

The second type of evidence we will consider in this book is historical evidence. Over time, many critics of Christianity have fallen into the habit of applying inappropriate standards to the question of evidence regarding the Gospels. For example, some people ask the question: Can you establish scientifically to an absolute standard of demonstrated proof that Jesus rose from the dead? This question reveals a misunderstanding of the proper evaluation of historical evidence. Demonstrative scientific evidence cannot be offered to prove that President Abraham Lincoln was assassinated in the Ford Theatre in Washington in 1865. The problem we face is that demonstrative scientific evidence requires a hypothesis capable of being tested repeatedly in a laboratory by other scientists to verify the results. The nature of historical events is that they can never be repeated and, therefore, cannot be tested by scientific methods. The great error of skeptics is that they demand scientific proof about historical accounts about Jesus in the Gospels when such absolute proof about any historical event is impossible to obtain.

However, the question about the historicity of the Gospel's claims about Jesus is a question of fact – precisely the type of question that has been considered and judged by courts of justice every day for thousands of years.

Courts judge the truthfulness of witnesses and questions of fact according to a fundamental rule: in trials of fact, by oral testimony, the proper inquiry is not whether it is possible that the testimony may be false, but whether there is sufficient probability that it is true.

Therefore, we should judge the Gospels just as we judge other records of historical events. Namely, a proposition of fact is proved, when its truth is established by competent and satisfactory evidence. In other words, evidence that would satisfy a normal, unprejudiced juror beyond any reasonable doubt.

Two other important principles concern the credibility of witnesses and evidence:

 In the absence of circumstances which generate suspicion, every witness is to be presumed credible, until the contrary is shown; the burden of impeaching his credibility lying on the objector. Every document, apparently ancient, coming from the proper repository or custody, and bearing
on its face no evident marks of forgery, the law presumes to be genuine, and devolves on the
opposing party the burden of proving it to be otherwise.

These are well established principles of legal evidence and are held pervasively among the fields of modern legal thought.

As we evaluate the evidence in this book for (1) a Creator, (2) a personal God, (3) the Bible and (4) Jesus, we will use both the Scientific Method and the above principles of evaluating historical evidence to evaluate the case for Christianity.

### Atheism/Naturalism

The alternative to belief in a Creator or God is belief in Darwinism/evolution/naturalism which says we have no need of God. Atheists would argue that "faith" is for the scientifically "weak" and that belief in Darwin's model of time plus chance is rooted in science, not faith.

However, as we look at the evidence, one is quickly confronted with the question of which belief system really requires more faith?

- Evolution requires belief that life arose from non-life even though such a belief violates the natural laws of Biogenesis, the laws of Thermodynamics and mankind has never once been able to create life even the simplest bacteria using the most sophisticated equipment available today. There has never been a case in history where life has arisen from non-life.
- Evolution requires belief that species evolved even though there is no evidence that one species has ever evolved into another species in the fossil record. Rather, what we find in the fossil record is an explosion of new species called the Cambrian explosion where multiple forms of animals and life all sprung forth in a relatively short period of time. Paleontologists continually seek "the missing link" or a transitional life form when naturalism would require that there be millions upon millions of these in the fossil record. There are none.
- Evolution requires a belief that man has evolved even though there is no evidence of this. In
  fact, the recent field of biochemistry has revealed that DNA and various biological systems are
  "irreducibly complex", meaning they couldn't possibly have evolved since numerous parts are
  required to create a functioning systems that could not have formed through natural selection.

As we evaluate the evidence, it becomes clear that belief in Atheism/Darwinism/evolution/naturalism is just that – a belief system that requires faith just like all other religions. In fact, as one studies the evidence objectively, Atheism requires significantly *more* faith than that of other religions.

### **Theistic Evolution**

Some people try to mix Christianity and Evolution – arguing for what is called 'theistic evolution', which means that God initially created the universe, but then left the rest up to evolution. This is an attempt by some in the Christian community to try and rationalize what they believe science says with what the Bible says. The problem with this view is that it requires the following:

- Rejection of a literal heaven & hell
- Rejection of Adam and Eve as the first people
- Rejection of God's claim of creation
- Rejection of God's plan of death as the penalty for sin
- Rejection that God made everything very good

- God becomes inadequate
- Compromise forces a reinterpretation of many parts of the Bible
- · Genesis must be rejected

As will hopefully be evident from this book, science actually supports creation, rather than evolution or theistic evolution, so an attempt to rationalize the Christian faith with that of science by embracing theistic evolution (1) isn't warranted, and (2) requires rejection of core Christian doctrines which destroy the true meaning of Christianity.

### Conclusion9

The bottom line is that the creation vs. evolution debate is not about science. Many use science as just another cover-up for rejecting God. People who do not believe in God start with evolution and force the data to fit their needs – namely, a rejection of God.

With which model are you willing to risk being wrong? Evolutionists say you have no hope. God says you have a choice – you can reject him or you can accept him and have eternal life in Heaven. Evolution is not an option for the Christian, and it's not even a good scientific option. Evolutionists say you are no more important than the animals. God says you were created in his image and that he loves you.

This is an eternal matter, not something to take lightly. Do not let others make up your mind for you – you need to investigate the evidence for Christianity for yourself. My goal in writing this book is to help in that process. I have studied dozens of books and tried to organize the core arguments and evidence in such a way to help you answer the four basic questions that naturally leads one to Christianity. Namely:

- 1. How did the universe/human life get here?
- 2. Is intelligent design from an impersonal force or a personal God?
- 3. Is the Bible the word of God?
- 4. Is Jesus the son of God?

Romans 1:19-20 says: "Since what may be known about God is plain to them, because God has made it plain to them. For 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 men are without excuse."

God has provided the evidence to support belief in him. Are you willing to evaluate the evidence yourself and draw your own conclusions?

"Set your minds on things above, not on earthly things." (Colossians 3:2)

Bryan P. Mistele

### **Discussion Questions**

- 1. If you are a Christian, have you ever seriously questioned why you believe? Have you ever had doubts? If you are not a Christian, what process did you go through to arrive at the belief system you now hold?
- 2. Have you ever seriously considered or investigated another faith system other than the one you were brought up in?
- 3. In your view, what are the most important implications on your worldview of the Christian belief system as opposed to a naturalistic belief system?
- 4. Why do you think so many people are lukewarm in their faith? Why do you think so many people fail to understand even the basic tenants of their faith?
- 5. Why do you think so many people immediately conclude Christianity requires "faith" and naturalism is firmly rooted in science?

## Part 1 The Case for a Creator

### **CHAPTER 1**

### EVIDENCE FROM THE UNIVERSE

In the beginning God created the heavens and the earth. – Moses, Genesis 1:1

The vast mysteries of the universe should only confirm our belief in the certainty of its Creator. I find it as difficult to understand a scientist who does not acknowledge the presence of a superior rationality behind the existence of the universe as it is to comprehend a theologian who would deny the advances of science. — Werner von Braun, the father of space science

### The Big Bang<sup>1,2</sup>

Set aside the many competing explanations of the Big Bang; something made an entire cosmos out of nothing. It is this realization – that something transcendent started it all – which has hard-science types...using terms like 'miracle.' – Journalist Gregg Easterbrook

For the history of mankind, people have wondered about the universe and speculated whether it had a beginning, or whether it's always existed. Philosophers have debated this over the years – from twelfth-century Christian philosopher Thomas Aquinas who argued that there were plausible arguments on both sides of the question, to the influential German Enlightenment philosopher Immanual Kant who argued the universe was infinite in size and infinitely old.

Starting in 1913, astronomers noticed galaxies were moving away from us at high speeds. Later, Edwin Hubble verified this using his 100-inch telescope. This theory led to the conclusion that the universe was expanding – and it was proven not just by math but by actual evidence. The implication is obvious – if the universe is expanding, then the universe had a beginning and was created from an initial point of origin. Further, if the universe had a beginning, then there had to be some sort of catalyst – something that would have caused this event to occur.

The discovery of the Big Bang was not met kindly – many scientists rebelled against the notion and tried to propose alternative explanations such as the oscillating-universe theory that argued the universe expands and contracts over and over again every billion years or so. In 1965, this theory was dealt a fatal blow by the work of two Bell Telephone scientists Arno Penzias and Robert Wilson and their study of background radiation that would be left behind by an initial explosion. In 1990, the Cosmic Background Explorer (COBE) satellite, designed to specifically measure background radiation very precisely delivered its first findings: the radiation was so even through space that the universe must have begun from an extremely hot explosion from a central point of origin – too hot to be one in an endless series of explosions. COBE also revealed that there were enough irregularities to account for the formation of

"clumps" of hot matter that formed into our universe's galaxies. This lead to the complete triumph of the Big Bang theory.

Nobel Prize-winning physicist Steven Weinberg in his book *The First Three Minutes* describes the Big Bang as follows:

In the beginning there was an explosion. Not an explosion like those familiar on Earth, starting from a definite center and spreading out to engulf more and more of the circumambient air, but an explosion which occurred simultaneously everywhere, filling all space from the beginning with every particle of matter rushing apart from every other particle.

Within the tiniest split second, the temperature hit a hundred thousand million degrees Centigrade. This is much hotter than in the center of even the hottest star, so hot, in fact, that none of the components of ordinary matter, molecules, or atoms, or even the nuclei or atoms, could have held together.

The matter rushing apart, consisted of such elementary particles as negatively charged electrons, positively charged positrons, and neutrinos, which lack both electrical charge and mass. Interestingly, there were also photons. The Universe was filled with light.

"In three minutes", writes Bill Bryson in *A short History of Nearly Everything*, "ninety-eight percent of all the matter there is or will ever be has been produced. We have a universe. It is a place of the most wondrous and gratifying possibility, and beautiful, too. And it was all done in about the time it takes to make a sandwich.

As a result, scientists are now forced to conclude that the universe had a beginning, and some form of a "beginner," or catalyst that intentionally caused the Big Bang to occur. There are simply no viable alternative explanations at this point. Stephen Hawking, who dislikes the notion of a personal God involved in his creation, even now credits the existence of the universe to "the mind of God". He has said "almost everyone now believes that the universe, and time itself, had a beginning at the Big Bang." This logically leads one to theism as opposed to atheism, which would lead one to believe that the universe has always existed.

Robert Jastrow, an agnostic, who was Chief of the Theoretical Division at NASA, chairman of NASA's Lunar Exploration Committee and latter a Professor at Dartmouth College, summed it up this way:<sup>3</sup>

For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries.

There is a strange ring of feeling and emotion in these reactions [of scientists to evidence that the universe had a sudden beginning]. They come from the heart whereas you would expect the judgements to come from the brain. Why? I think part of the answer is that scientists cannot bear the thought of a natural phenomenon which cannot be explained, even with unlimited time and money. There is a kind of religion in science, it is the religion of a person who believes there is order and harmony in the universe, and every effect must have its cause, there is no first cause...

This religious faith of the scientist is violated by the discovery that the world had a beginning under conditions in which the known laws of physics are not valid, and as a product of forces or circumstances we cannot discover. When that happens, the scientist has lost control...

Consider the enormity of the problem. Science has proven that the universe exploded into being at a certain moment. It asks, what cause produced the effect? Who or what put the matter and energy in the universe? Was the universe created out of nothing, or was it gathered together out of pre existing materials? And science cannot answer these questions.

In 1985, Allan Rex Sandage, the greatest observational cosmologist in the world – who had deciphered the secrets of the stars, plumbed the mysteries of quasars, revealed the age of globular clusters, pinpointed the distances of remote galaxies, and quantified the universe's expansion throughout his work at the Mount Wilson and Palomar observatories, shocked the scientific community by announcing publically that he had decided to become a Christian at age 50. The Big Bang, he told the audience, was a supernatural event that cannot be explained within the realm of physics as we know it. Science had taken us to the First Event, but it can't take us further to the First Cause. The sudden emergence of matter, space, time, and energy pointed to the need for some kind of transcendence. "It was my science that drove me to the conclusion that the world is much more complicated than can be explained by science," he would later tell a reporter. "It was only through the supernatural that I can understand the mystery of existence."

Interestingly, the universe had a beginning and it will also have and end. Our Sun will eventually burn out (like all fires) and the hydrogen in our universe will eventually be consumed, so although the universe started with a big bang, it will eventually just fizzle out.

### The Kalam Cosmological Argument<sup>5</sup>

The 'Kalam' argument was originated by fourth century Christian philosopher John Philoponus of Alexandria, Egypt who sought to counter Aristotle's argument that God isn't the creator of the universe – he just imbues order into it. In this view, both God and the universe are eternal. Al-Ghazali, a Muslim theologian who lived from 1058 to 1111 picked up these arguments which eventually got passed into Latin-speaking Christendom. 'Kalam' is an Arabic word that means 'speech' or 'doctrine', but it came to characterize the whole medieval movement of Islamic theology.

The Kalam Cosmological Argument has three simple steps:

- 1. Whatever begins to exist has a cause.
- 2. The universe began to exist
- 3. Therefore the universe has a cause.

The first step seems obvious enough – metaphysically, anything which begins to exist *has* to have a cause that brings it into being. However, some have attempted to attack this premise.

- How could anything come out of absolute nothingness, spontaneously? Intuition makes this somewhat obvious.
- Empirically, the evidence for this premise is overwhelming. It's a principle that is constantly confirmed and never falsified. We never see things coming into being uncaused out of nothing, otherwise things would be popping up unexpectedly (a horse in your house, etc.)
- Although it can't be proven scientifically, obviously, the evidence point to this premise being true since there has never been a case to the contrary.

The second step wasn't obvious until recently. Since the time of the ancient Greeks, most believed the universe was eternal. It's only been with the discovery of the expansion of our universe and the subsequent development of the Big Bang theory that it's become clear that the universe, did in fact, have a beginning. The discovery in the twentieth century that the universe is not an unchanging, eternal entity was a complete shock to most and was utterly unanticipated:

- In 1915 when Albert Einstein developed his general theory of relativity, he was shocked to discover that it didn't allow for a static universe. According to his equations, the universe should either be exploding or imploding. In order to make the universe static he had to fudge his equations by putting in a factor that would hold the universe steady.
- In the 1920s, Russian mathematician Alexander Friedman and Belgium astronomer George Lemaitre developed models based on Einstein's theory that predicted the universe was

expanding. The implication of this is that if you went backward in time, the universe would go back to a single origin before which it didn't exist. Astronomer Fred Hoyle called this 'the Big Bang' and the name stuck.

- In 1929, American astronomer Edwin Hubble discovered that the light coming to us from distant galaxies appeared to be redder than it should be, and this is universal of all features of galaxies in all parts of the sky. Hubble explained this was due to the fact that the galaxies are moving away from us, this confirming the expansion of the universe. The fact the light appeared redder than it should be is due to the Doppler Effect in which the frequency of light shifts for an observer who is moving relative to the source of the light. This is the same effect many notice looking out the window of a plane when it is landing at night, and the lights below don't appear yellow as they should be, but rather green, blue or red depending on the speed of the plane.
- In the 1940s, George Gamow predicted that if the Big Bang really happened, then the background temperature of the universe should be just a few degrees above absolute zero. Sure enough, in 1965, two scientists discovered the universe's background radiation and it was only 3.7 degrees above absolute zero. There is no explanation for this apart from the fact that it is a vestige of a very early and a very dense state of the universe, which was predicted by the Big Bang model.
- So, predictions about the Big Bang have been consistently verified by scientific data, with all alternative models having proven wrong.

The third step again seems somewhat obvious. If the universe began to exist, there must be some sort of transcendent cause for the origin of the universe. This cause must transcend time, matter, space, energy. It must also necessarily be a being endowed with freedom of will and enormous power – that is the core concept of God. Of course, the argument is made that 'if *everything* had a cause, then how did god become exempt?' The key point here though as it relates to the Kalem argument is not that *everything* has a cause, but that *whatever begins to exist* has a cause. We can show that the universe began to exist, but this is fundamentally different than saying *everything* has a cause, which no philosopher or scientist would necessarily argue.

What does it mean to be a cause of the universe? How do we know that the cause is a personal creator? A striking number of divine attributes can be identified:

- A mind: There are only two types of things that are timeless and immaterial, which is what the
  Creator must be. The first is abstract objects, like numbers or mathematical entities. However,
  these can't cause anything to happen. The second kind of immaterial reality would be a mind. A
  mind can be a cause, and so it makes sense that the universe is the product of an unembodied
  mind that brought it into existence.
- A will: How do you explain the origin of a finite universe from a timeless cause? The only explanation is that the cause of the universe is a personal agent who has freedom of will.
   Otherwise, there is no explanation for the timing of the particular beginning of the universe. For what would distinguish that moment from all other moments in eternity?

### Counter Arguments<sup>6</sup>

To many scientists, the Big Bang theory is distasteful. The fact that the universe has a beginning necessitates a Creator. Likewise, scientists are perturbed because the laws of physics can't account for the creation event itself. Einstein admitted that the idea of an expanding universe "irritates me" (presumably, said one prominent scientist, 'because of its theological implications').

A leading alternative theory is Carl Sagan's Oscillating Model. This theory eliminates the need for an absolute beginning of the universe by suggesting that the universe expands, then collapses, then expands again, and continues in this cycle indefinitely. The problems with this model are well known.

- First, it contradicts the laws of physics. Theorems by Hawking and Penrose show that as long as
  the universe is governed by general relativity, the existence of an initial beginning is inevitable.
  No known physics can reverse a contracting universe and suddenly make it bounce back.
- Second, in order for the universe to oscillate, it would have to contract at some point. For this to happen, the universe would have to be dense enough to generate sufficient gravity that would eventually slow its expansion to a halt and then, with increasing rapidity, compact into a big crunch. Recent tests by five different laboratories in 1998 calculated a 95% certainty that the universe will never contract, but rather will expand forever. In fact, these tests showed that the expansion of the universe is not decelerating, but actually accelerating. This really ends the Oscillating Model theory.
- Finally, even if the universe could contract, entropy would be conserved from one cycle to the next. This would have the effect of causing each expansion to get bigger and bigger. Trace that backward in time and what do you get? You would get smaller and smaller universes until the smallest cycle and the beginning of the universe.

### A Beginning Implies a Beginner

The evidence from the Big Bang and the creation of the universe logically brings us to the conclusion of our first "proof" for a creator discussed in the introduction.

Proof from Creation	A beginning (the Big Bang) implies a beginner.	
	Whatever begins to exist has a cause.	
	The universe began to exist; therefore the universe had a cause.	

A beginning, logically implies a beginner. Since the universe had a definite beginning, there had to be some form of catalyst, or "beginner" that caused the Big Bang to happen. What's interesting is to compare the scientific evidence with that of the Biblical account.

All scientists today will agree with the following statement: "At the Big Bang, time, energy, space and matter were created." What does the Bible say? "In the beginning God created the heavens and the earth." (Genesis 1:1). Simple enough, but look at that verse from Genesis again using scientific terms: "In the beginning [time] God created [energy] the heavens [space] and the earth [matter].

Scientists believe that at the Big Bang, time (as we know it), energy, space and matter were created. The first verse of the Bible says that God created time, energy, space and matter. The only difference is that the scientific account provides an explanation for *what* happened but not *how* or *why* it happened. The Biblical account, of course, does provide an explanation for the *how* and the *why* – namely, the universe was intentionally created by God.

### **Discussion Questions**

1. How convincing is the first premise of the Kalam argument – that whatever begins to exist must have a cause? Can you think of any exceptions to that rule?

- 2. The second premise of the Kalam argument says that the universe began to exist. Do you think the evidence from this chapter sufficiently supports the claim that the universe had a beginning at some point in the past? Why or why not?
- 3. The Kalam argument says that if two premises are true, then it's logical to conclude that the universe has a cause. Can you think of any alternative theory that would support another conclusion?
- 4. Do you agree with the statement that "the cause of the universe can be deduced from the evidence: a cause of space and time must be an uncaused, beginningless, timeless, spaceless, immaterial, personal being endowed with freedom of will and enormous power"?

### **CHAPTER 2**

### **EVIDENCE FROM PHYSICS**

We see how God, like a human architect, approached the founding of the world according to order and rule and measured everything in such a manner – Johannes Kepler

A commonsense interpretation of the facts suggests that a superintellect has monkeyed with physics, as well as chemistry and biology, and that there are no blind forces worth speaking about in nature.

— Sir Fred Hoyle, astronomer

The universe in some sense must have known that we were coming. This notion horrifies some physicists, who feel it is their mission to find a mathematical explanation of nature that leaves nothing to chance or the whim of the Creator. – Freeman Dyson, theoretical physicist and mathematician

Would it not be strange if a universe without purpose accidentally created humans who are so obsessed with purpose? – Sir John Templeton

### A "Just Right" Universe<sup>7,8,9</sup>

Through my scientific work I have come to believe more and more strongly that the physical universe is put together with an ingenuity so astonishing that I cannot accept it merely as a brute fact. I cannot believe our existence in this universe is a mere quirk of fate, an accident of history, an incidental blip on the great cosmic drama. – Paul Davis, professor of theoretical physics

It is hard to resist the impression that the present structure of the universe, apparently so sensitive to minor alternations in numbers, has been rather carefully thought out...The seemingly miraculous concurrence of these numerical values must remain the most compelling evidence for cosmic design.

— Paul Davies, physicist

The universe is unlikely. Very unlikely. Deeply, shockingly unlikely. – Discover Magazine<sup>10</sup>

When one studies the universe, it becomes apparent that the universe has been "fine-tuned" for life. When scientists talk about the "fine-tuning", they generally refer to the extraordinary balancing of the fundamental laws and parameters of physics and the initial conditions of the universe to support life. Our minds can't comprehend the precision of some of these parameters. The constants of the laws of physics have been finely tuned to a degree not possible through human engineering. The result is a universe that has just the right conditions to sustain life. The coincidences are simply too amazing to have been the

result of happenstance. As Paul Davies said, "the impression of design is overwhelming". The argument of fine tuning is a rather new one – it has only come about in the last eight to ten years with recent observations about the observable universe and cosmological constants.

A good analogy of the fine tuning of the universe would be astronauts landing on Mars and finding an enclosed biosphere, sort of like the domed structure that was built in Arizona a few years ago. At the control panel, they find all the dials for its environment are set just right for life. The oxygen ratio is perfect; the temperature is seventy degrees; the humidity is fifty percent; there's a system for replenishing the air; there are systems for producing food, generating energy, and disposing of wastes. Each dial has a huge range of possible settings, and you can see if you were to adjust one or more of them just a little bit, the environment would go out of whack and life would be impossible. What conclusion would you draw from that? The obvious answer is that someone took great care in designing and building it. You would conclude that the biosphere was not there by accident. Volcanoes didn't erupt and spew out the right compounds that just happened to assemble themselves into the biosphere. Some intelligent being had intentionally and carefully designed and prepared it to support living creatures.

If this were actually to happen, newspapers would declare it as absolute proof that extraterrestrial life exists. The fact that the dome got there in the first place and the settings on the dials were just right for life would provide incontrovertible evidence that intelligent life existed to create that biosphere.

Over the past thirty years, scientists have discovered that just about everything about the basic structure of the universe is balanced on the razor's edge for life to exist. The coincidences are far too fantastic to attribute this to mere change or to claim that it needs no explanation. The dials of our universe are set too precisely to have been a random accident. Somebody, as Fred Hoyle quipped, has been monkeying with the physics of our universe.

There are several fundamental forces that are constant throughout the universe and affect all physical objects everywhere. What is interesting is that these were set in place essentially at the initial moment all with parameters that had to be what they are, to within a very narrow margin, in order for any sort of life to exist. The degree of fine-tuning of these variables is difficult to imagine. Dr. Hugh Ross gives an example of one of the least fine-tuned of the following examples in his book, *The Creator and the Cosmos*, which is reproduced here:<sup>11</sup>

One part in 10<sup>37</sup> is such an incredibly sensitive balance that it is hard to visualize. The following analogy might help: Cover the entire North American continent in dimes all the way up to the moon, a height of about 239,000 miles (In comparison, the money to pay for the U.S. federal government debt would cover one square mile less than two feet deep with dimes.). Next, pile dimes from here to the moon on a billion other continents the same size as North America. Paint one dime red and mix it into the billions of piles of dimes. Blindfold a friend and ask him to pick out one dime. The odds that he will pick the red dime are one in 10<sup>37</sup>.

How many hypothetical universes would support life? Possibly only one, says authors of a recent study. Published in the July 2000 issue of *Science*, the report says that if the physical forces within stars were only slightly different, our universe would be almost devoid of carbon and oxygen, and life would not exist. "I am not a religious person, but I could say this universe is designed very well for the existence of life," said Heinz Oberhummer, astrophysicist at the University of Vienna, Austria. Mr. Oberhummer and his colleagues used computers to simulate the process by which helium burns to produce carbon and oxygen during the red-giant stage of a star's life. They found that even the slight changes in either the strong or weak nuclear forces would destroy nearly all the carbon and oxygen inside stars-making life impossible.

The following are just some of the forces that have been discovered to be finely tunes. The first four forces below are known as the "fundamental forces" in physics. In all cases, if any of these parameters were "out of tune"; the universe would not be able to support life.

<b>Parameters</b>	Tuning	Consequence
Strong nuclear force	Within 1:1000	Universe would be all hydrogen or no hydrogen.
Electromagnetic force	Within 1:10 <sup>40</sup>	No molecules would exist in universe.
Weak nuclear force	Within 0.14%	Nuclear fusion would stop. There would be no stars.
Gravitational force	Within 1:10 <sup>27</sup>	Stars would be too hot or too cold to support life.
Expansion rate of universe	Within 1:10 <sup>55</sup>	No galaxies would form or universe would collapse.
Distribution of matter and radiation	Within 1:10 <sup>123</sup>	Stars would not have formed, universe would be empty space.
Ratio of Electrons to Protons	Within 1:10 <sup>37</sup>	Electromagnetism would dominate gravity, preventing galaxies from forming.

Table 4: Finely Tuned Parameters in the Universe

• Strong Nuclear Force: The strong nuclear force is the force that binds subatomic particles - such as neutrons and protons – together within the nuclei of atoms. For the universe to exist requires hydrogen to be converted to helium in a precise manner – specifically, in a way that converts seven one-thousandths of its mass to energy. Lower that value very slightly – from 0.007 percent to 0.006 percent, say – and no transformation could take place: the universe would consist of hydrogen and nothing else. Raise the value very slightly – to 0.008 percent – and bonding would be so widely prolific that the hydrogen would long since have been exhausted. In either case, with the slightest tweaking of the numbers of the universe as we know and need it would not be here.<sup>12</sup>

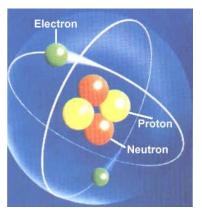


Figure 2: An Atom

- The Electromagnetic Force: The electromagnetic force that binds electrons to the nuclei of atoms is precisely set. It is tuned to within 1 in 10<sup>40</sup>. If this force were slightly weaker, the electronics would fly away and so would any chance for molecules. If the electromagnetic force were slightly stronger, atoms could not "share" electrons and there would be no molecules. Either way, no molecules means no universe.
- Weak Nuclear Force. The weak nuclear force is based on the difference in mass between neutrons and protons and makes radioactive decay, fission, and fusion possible. If one were to increase or decrease the mass of the neutron by about one part in seven hundred (.14%), the universe would have produced far too little or far too much helium in its early history; either way, you would have no planets since nuclear fusion in the stars would stop. If nuclear fusion were to stop, there would be no stars and no energy source for life.
- **Gravitational Force**: The gravitational force of the universe is also just about right. If gravity were somewhat stronger, the stars would be so hot that they would burn out too quickly. If gravity

were somewhat weaker, the stars would not become hot enough to ignite nuclear fusion. Such stars would burn quietly for a long time but make no heavy elements needed for planets. Even changing the gravitational force by one in 10<sup>27</sup> and the universe could not support life. Compared to the total range of force strengths in nature, gravity has an incomprehensibly narrow range for life to exist.

- Expansion Rate of the Universe: The expansion rate of the universe is part of Einstein's equation for General Relativity. This constant is fine-tuned to one in 10<sup>55</sup>. If this were changed by one part in either direction a little faster, a little slower we could not have a universe that would be capable of supporting life. If the universe had expanded just a bit more slowly, gravity would have slowed the expansion and caused the universe to cave back in on itself a long time ago. On the other hand, if the universe were expanding just a bit faster, gravity would not have been able to attract material together into gases, galaxies, and the like. In other words, if the expansion rate and the gravitational force had not been very precisely balanced, the universe would have been either very short-lived or very dull. The fact this constant has such an unexpected, counterintuitive and stunningly precise setting is widely regarded as the single greatest problem facing physics and cosmology today.
- **Distribution of Matter and Radiation**: If the universe did begin with a Big Bang, it would have needed to result in an almost, but not quite, perfect distribution of matter and radiation. In the 1980s, the COBE (Cosmic Background Explorer) satellite showed that the distribution of the universe was just right, to within a practically infinitesimal degree. The Oxford mathematician Roger Penrose calculated the allowable margin of error as 1 in 10<sup>123</sup>. If the distribution were more or less uniform in its distribution, no stars or galaxies would have formed and the universe would be mostly black holes and empty space by now.
- Ratio of Electrons to Protons: If the ratio of electrons to protons were different, electromagnetism would dominate gravity, preventing the formation of galaxies, stars and planets. This parameter is tuned to within one in 10<sup>37</sup>.

The above list is just a sampling of the finely tuned parameters of our universe. In total, there are more than thirty separate physical or cosmological parameters that require precise calibration in order to produce a life-sustaining universe. A complete list of these parameters is contained in Appendix D. All of these forces work at just the right strength to make our universe the interesting place that it is. As Stephen Hawking observed, "The remarkable fact is that the values of these numbers seem to have been very finely adjusted to make possible the development of life."

"Imagine a universe-creating machine, with thousands of dials representing the gravitational constant, the charge on the electron, the mass of the proton, and so on," said Steven Meyer of Whitworth College. "Each dial has many possible settings, and even the slightest change would make a universe where life was impossible." Yet each dial is set to the exact value needed to sustain life for no known reason. As Mr. Oberhummer put it, "we have no idea why the strengths of the forces are fine-tuned" to support life. The reasonable answer is someone seems to have intended it that way.

The point is that the universe seems to be perfectly, exquisitely set to just the right parameters for it to have even the *potential* to sustain life. It appears that the universe could have started out in a trillion or more different ways that would have failed to produce even a potential home for life. But it didn't. Rather, it started out in just the perfect manner to support the universe we live which supports life.

The logical conclusion is obviously intelligence in the design process. Any other explanation requires the need for the skeptic to invent a whole new set of physical laws and a whole new set of mechanisms that are *not* a natural extrapolation from anything we have known or have experienced. Thus, an intelligent designer *is* a natural extrapolation of what we already know.

### Counter Argument: The Many-Universe Hypothesis<sup>13</sup>

The multiverse [many universe] idea rests on the assumptions that would be laughed out of town if they came from a religious text. [The theory] requires as much suspension of disbelief as any religion. 'Join the church that believes in the existence of invisible objects fifty billion galaxies wide!'

— Gregg Easterbrook<sup>14</sup>

The universe does seem to be perfectly set to just the right parameters for it to have even the potential to sustain life. To explain this, some cosmologists adopt the "many universe" (or 'multiverse') hypothesis, suggesting that there exist an infinite number of universes. Most would be dark and lifeless, but by sheer probability a few might be suitable for life and we happen to live in one.

How do scientists account for these zillions of universes? What's the evidence for other universes? There is no evidence and this hypothesis violates the principle of simplicity. The multiverse hypothesis is just fanciful speculation to avoid the logical conclusion that an intelligent being created our universe.

However, even if you accepted the premise, the issue is still how do these universes get created? By what laws? How are the raw materials created?

- First, you would need a mechanism to supply the energy needed for the creation of these bubble universes.
- Second, you would then need a mechanism to form these universes and to convert energy to the normal mass/energy that we find in our universes.
- Third, you would need a mechanism to allow enough variation in the constants of physics among the various universes. You would also need to have the right background laws in place (e.g., gravity, nuclear force laws, etc.).
- Finally, you would need to make trillions upon trillions upon trillions upon trillions of universes in order to increase the odds that the cosmological constant would come out right at least once, since it is fine tuned to an incomprehensible degree. And that's just one parameter.

Thus, it is highly unlikely that such a universe-generating system would have all the right components and ingredients in place by random chance. So if a many-universe-generating system exists, it would best be explained by design.

### The Laws of Thermodynamics<sup>15</sup>

The first and second laws of thermodynamics are among the most thoroughly tested in all of science. The classical interpretation reads them at face value to mean the universe is winding-down irreversibly toward a heat death where all the mass-energy is still present but unavailable to perform work. These laws indicate the universe is not a perpetual motion machine. – Walter James ReMine<sup>16</sup>

The science of thermodynamics is indeed the Achilles Heel that destroys evolutionary theory...Evolutionists must postulate that order spontaneously arose from chaos. – Duane T. Gish<sup>17</sup>

Thermodynamics is the study of heat movement and how heat can be transformed into different forms of usable energy. *Therme* is Greek for Heat, *Dynamis* is Greek for Power. Since a naturalistic explanation for the origin of the universe would require an upward movement in order, complexity and information, it can only be accomplished through some type of work. If the naturalistic model adheres to true scientific principles, it must explain how this work is accomplished. The question is what mechanism was available to take raw energy, add it to random chemicals, and create complex structures with enormous amounts of information?

There are two laws of thermodynamics that are significant to the topic of origins:

- The first Law of Thermodynamics (the law of conservation): Matter and energy can neither be created or destroyed (the total sum is constant).
- The second Law of Thermodynamics (the law of entropy): Energy goes from a state of usable energy to a state of less usable energy for doing work in an isolated system.

These are considered empirical laws of nature. This means everything observable in the universe operates according to these laws and there are no known exceptions.

### The First Law

The first law states that nothing is now coming into existence or going out of existence; matter and energy can be converted into one another, but there is no net increase or decrease in the combined total of what exists. The question is if matter or energy is neither being created or destroyed in the universe, where did the original matter and energy come from? You can't get something from nothing!

There is no known physical or chemical process whereby matter and energy could come into existence from nothing. This means that without empirical evidence, the assertion that matter came into existence through some natural materialistic process is really a statement based on faith – because it defies the physical laws of nature.

The first law teaches that a natural process cannot bring into existence something from nothing. If the first law is correct, which seems to be the case, and if the universe had a beginning, which seems to be scientifically accepted, then one conclusion is that something unnatural created the universe...The thought that the universe may have originated supernaturally is unsetting to many people. Yet, taken at face value, this conclusion is consistent with the total sum of evidence before us. – Robert Gange (Ph.D. research scientist specializing in cryophysics and information systems).<sup>18</sup>

The first law has been the object of considerable thought since it was introduced to the world by William Kelvin and Rudolf Clausius. It forbids a natural process from bringing something into being from nothing. -- Robert Gange (Ph.D. research scientist specializing in cryophysics and information systems).<sup>19</sup>

### The Second Law

If your theory is found to be against the second law of thermodynamics I can give you no hope; there is nothing for it but collapse in deepest humiliation. – Arthur Eddington<sup>20</sup>

The second law of thermodynamics teaches that the entropy of the entire universe always increases. Entropy is a measure of the unavailability of a system's energy to do work. In short, energy becomes less available for work over time. This may sound confusing, so the following examples may help:

- The heat (energy in the molecules) in a cup of coffee over time will dissipate and the coffee will become cooler.
- The energy stored up in a runner will be used up as the person runs. At some point, the runner must refuel him or herself again by eating.
- Stars use vast amounts of energy to produce light and heat. The energy they burn up can no longer be used to perform this work.

Isaac Asimov explained it this way: 21

Another way of stating the second law then is: 'The universe is constantly getting more disorderly!' Viewed that way, we can see the second law is all about us. We have to work hard to straighten a room, but left to itself it becomes a mess again very quickly and very easily. Even if we never enter it, it becomes dusty and musty. How difficult to maintain houses, and machinery, and our bodies in perfect working order: how easy to let them deteriorate. In fact, all we have to do is nothing, and everything deteriorates, collapses, breaks down, wears out, all by itself – and that is what the second law is all about.

If the universe as a whole is decaying and losing available energy for doing work, then how can:

- Simple elements become complex, organic compounds?
- Complex, organic compounds organize into a living cell?
- Living cells organize into higher, more complex forms of life?

In each of the above, work is required to build something more complex. Life requires structures with incredible complexity.

The first law teaches that a natural process cannot bring something into existence from nothing. Matter and energy can be transformed one to the other, but the total energy content in the universe remains the same. There is no destruction or creation of matter or energy now going on in the physical universe. The laws of physics we observe operating in the universe today prevent any possibility of matter springing into existence out of nothing. Thus, the universe could not be eternal since it cannot create itself.

The second law teaches that the amount of energy available to perform work in the universe is decreasing. This means the useful energy in the initial universe is decreasing. In other words, the useful energy in the universe was once much greater than it is today. It also means that the universe cannot be eternal or all energy would be unavailable for work. Thus:

- The universe is running down
- The universe had to have a beginning

The first and second laws are some of the most compelling arguments for a God. Since the universe had to have a beginning and matter cannot be self-existing, there must have been an event that created the universe from a beginner that was self-existing. As a Christian, we call this God.

## **Discussion Questions**

- 1. It has been said that the fine-tuning of the universe is widely regarded as "by far the most persuasive current argument for the existence of God." How do you personally assess the evidence? What facts are most compelling to you in reaching this conclusion? Do you think the finely balanced parameters of physics could be the result of random happenstance?
- 2. Do you agree or disagree that the first and second laws of thermodynamics are compelling arguments for a God? Why or why not?

# **CHAPTER 3**

# **EVIDENCE FROM ASTRONOMY**

Where were you when I laid the foundation of the Earth? - God, speaking to Job (Job 38:4)

An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going.

- Francis Crick (co-discoverer of the double helix structure of DNA)

There's no such thing as chance. And what to us seems merest accident springs from the deepest source of destiny. - Johann von Schiller

The best data we have are exactly what I would have predicted had I nothing to go on but the first five books of Moses, the Psalms and the Bible as a whole. – Nobel Prize winner Arno Penzias

Evidence for an intelligent designer becomes more compelling the more we understand about our carefully crafted habitat. – Walter Bradley

As we survey all the evidence, the thought insistently arises that some supernatural agency – or, rather, Agency – must be involved. Is it possible that suddenly, without intending to, we have stumbled upon scientific proof of the existence of a Supreme Being? Was it God who stepped in and so providentially crafted the cosmos for our benefit? – Astronomer George Greenstein

Astronomy leads us to a unique event, a universe which was created out of nothing, one with the very delicate balance needed to provide exactly the conditions required to permit life, and one which has the underlying (one might say "supernatural") plan. – Nobel laureate Arno Penzias

# The Copernican Principle<sup>22</sup>

The Copernican Principle has been the foundation of astronomy for hundreds of years. Open any introductory astronomy textbook and you'll see it stated over and over. The principle is simply this: with regards to astronomy, we should assume there's nothing special about our location in the universe, or the particular features of the Earth, the solar system or humans themselves.

The problem is that the Copernican Principle has taken on a meta-physically bloated form over the years, which essentially says our metaphysical status is as insignificant as our astronomical location. In other words, we're not here for a purpose, we're not special in any way, and we don't occupy a privileged place in the cosmos.

This path of thinking started with Copernicus's discovery that the sun doesn't revolve around the Earth, but that the Earth revolves around the sun. This discovery quite naturally demoted humankind from the days of Aristotle, Ptolemy and medieval Christians who thought that we were the center of the universe. Then Copernicus and Kepler came along and said they can explain the movement of the planets better by assuming that the sun is at the center and that the planets – including Earth – revolve around it. Scientists later discovered that the sun isn't at the center of the universe either; that we weren't at the center of the galaxy; and that the universe ultimately has no center, because scientists came to believe in the nineteenth century that it was infinite and eternal. So, mankind has been displaced from the center of the universe and removed from our position of privilege. This subsequently caused a revolution in thinking as the Copernican principle came to represent the conflict between science and religion. Humans were stripped of their false sense of uniqueness and importance.

The problem is that this historical description has recently been proved to be simply false. Both scientifically in terms of the Earth and mankind's uniqueness, but also in the metaphysical sense.

Christianity never taught that mankind was the center of the universe. Quite the oppose – Christian theology puts God in the center. Mankind was created not out of compulsion, but out of desire by God. In fact, Copernicus, Galileo and Keper all saw their discoveries as elevating humanity because of its inward focus that man is all there is, rather than demoting humanity.

From the view of astronomy, the key question is this: is there anything unusual about the Earth? Is the Earth an average unassuming rock that is spinning mindlessly around an unremarkable star in a run-of-the-mill galaxy – "a lonely speck in the great enveloping cosmic dark" as the late Carl Sagan put it, who estimated that there are one million planets where life flourishes in our Milky Way alone; or is there something unique about the Earth itself?<sup>23</sup>

# A "Just Right" Galaxy<sup>24,25</sup>

The sheer size of the universe is amazing – our galaxy, the Milky Way, has over 100 billion stars in it and there are hundreds of billions of galaxies in the universe. Given the existence of hundreds of billions of galaxies containing billions of stars each, it may seem that there are virtually endless possible places for life to flourish. But this isn't true. It turns out that the Earth is anything but ordinary, that our sun is far from average, and that even the position of our planet in the galaxy is eerily fortuitous.

The idea that the universe is a flourishing hot house of advanced civilizations is now being undermined by surprising new scientific discoveries and fresh thinking. New findings are suggesting that we *are* special. More and more scientists are studying the mind-boggling convergence of scores of extraordinary "coincidences" that make intelligent life possible on Earth and concluding that this can't be possibly an accident. They're seeing signs of design, a kind of unlikely fine-tuning for life similar to the find-tuning for the cosmos that we explored in the previous chapter. Once again, we find the evidence of science pointing in the direction of a creator.

As we know it on Earth, complex life might be very rare, and very precious. – David Levy, of comet Shoemaker-Levy fame.

Rather than being one planet among billions, Earth now appears to be the uncommon Earth. The data imply that Earth may be the only planet 'in the right place at the right time.' – Science educators Jimmy H. Davis and Harry L. Poe

How many galaxies might be right for life? No one is sure, but an estimate of one in every thousand is reasonable. The right galaxy will have billions of stars, but most of these are not suitable for stable solar systems.

It turns out; the parameters necessary for biological life to exist are surprisingly small.

- Some galaxies are too close to one another or too close to another large galaxy so that galaxies interfere gravitationally with each other.
- Some galaxies are too large and hot, making stable star systems impossible.
- Galaxies that are too elliptical or too irregular also would have a difficult time sustaining a stable star system (ours is a nicely organized spiral).

There are three types of galaxies:

Spiral galaxies (like our Milky Way). These are dominated by a central spherical bulge and a
disk with "spiral arms" extending outward from the nucleus in a spiral pattern resembling a
pinwheel.



Figure 3: A Spiral Galaxy

- o This type of galaxy is optimal for habitability, because it provides 'safe zones' for planets.
- Stars in the center or deep within the spiral arms of the galaxy, will generally be too close together (our star is on the fringe of a spiral arm, not too close or not too far) whereas stars far from the spiral arms won't be able to produce enough heavy elements to make planets.
- The Earth happens to be located in a safe area, which is why life has been able to form here. Places with active star formation are very dangerous, because that's where you have supernovae exploding at a fairly high rate. In our galaxy, those places are primarily in the spiral arms, where there are also hazardous giant molecular clouds. The Earth is situated safely between two spiral arms.
- We're also very far from the nucleus of the galaxy, which is also a dangerous place because there's a massive black hole at the center of our galaxy, much like nearly every large nearby galaxy. The problem is near these black holes, anything will be torn up by strong tidal forces. There is also a lot of high energy released in the form of radiation which is very dangerous for life forms.
- The center is also very dangerous because there are more supernovae exploding there.
- **Elliptical galaxies** (most of the galaxies in the universe), are sort of egg-shaped with the stars circling like bees around a hive.



Figure 4: An Elliptical Galaxy

- The problem with these galaxies is that the stars visit every region, which means they'll occasionally visit the dangerous, dense inner regions. In addition, most of these galaxies lack the heavy elements needed to form Earth-like planets.
- Irregular galaxies, which appear disorganized and distorted.



Figure 5: An Irregular Galaxy

 Like elliptical galaxies, irregular galaxies don't provide a safe harbor for planets, in fact they are worse. There are no safe places where there are fewer supernovae exploding, like what we have between our spiral arms.

As a result, the Earth is in the best position in the best type of galaxy to provide life. The location provides enough building blocks to yield an Earth, while providing a low level of threats to life. This is the opposite of the Copernican Principle, which was to show how common our situation is. The trend is in the opposite direction. The more we learn about the threats in the universe, the more we realize we're in a very special location – a cocoon of safety. Turns out, mankind isn't at the center of the universe, but what really matters turns out to be that we're in the place that's most conductive to life and that's exactly where the Earth finds itself!

Our galaxy is in the top one or two percent of the most massive and luminous. The bigger the galaxy, the more heavy elements it can have, because its stronger gravity can attract more hydrogen and helium and

cycle them to build heavy elements. These heavy elements are essential to the creation of planets. In the low-mass galaxies, which make up the vast majority, you can have whole galaxies without a single Earth-like planet. They just don't have enough heavy elements to construct an Earth-like planet.

## A "Just Right" Solar System<sup>26,27</sup>

Even with the right star in the right galaxy, finding a good solar system is even harder. Only in recent years have we begun to appreciate just how special our solar system is.

- First, you need planets, and a reasonable guess is that there might be an average of one planet per star. But you don't just need planets you need multiple planets because having a planet the size of Jupiter (about 300X the size of the earth) out beyond our planet is vital to Earth's survival since Jupiter's large gravity sucks away a large percentage of asteroids and comets that might otherwise intersect with our orbit. If Jupiter were smaller or farther away, Earth would be at risk. This was illustrated by the Comet Shoemaker-Levy 9 which crashed into Jupiter in July, 1994. This comet was attracted by Jupiter's tremendous gravitational pull and broke into fragments, with all of them hitting Jupiter, which protected the Earth. On the other hand, if Jupiter were any larger or closer, it would interfere with our orbit. If Jupiter had a more elliptical orbit, the Earth wouldn't be able to maintain a circular orbit or have the steady temperature and predictable climate that come with that.
- The inner planets in our solar system protect us from getting bombarded by asteroids from the asteroid belt which is mostly between Mars and Jupiter. Mars takes a lot of hits for the Earth as does Venus. This protection is critical to sustaining life on Earth.
- The Earth has a near-perfect circular orbit. Even small variations in our orbit can (and have)
  caused ice ages because of temperature shifts on the planet. If the Earth didn't have a nearperfect circular orbit, it would not be able to sustain life.
- The Earth also is the perfect distance from the Sun for water. Less than 5% closer and too much
  water would evaporate into the atmosphere and it would cause a runaway greenhouse effect.
  Scientists believe this is what happened to Venus. Less than 5% farther out and the Earth would
  get too cold. Water and carbon dioxide would freeze and you would eventually develop runaway
  glaciations.
- The Earth is the perfect distance from the Sun to sustain life. If it were really close, it would be pulled into the star's gravitational forces and if it were too far, it might escape the star's gravity. Yet it turns out, to sustain life, the band with which the Earth must consistently orbit is very, very narrow in a region between 90 to 100 million miles away from the sun (the Earth is about 93 million miles away). How small a margin is this? Imagine dropping a few grains of fine sand randomly from a low-flying plane over a football field and needing one of them to land on the paint of the three-yard line at one end that is the level of orbital accuracy needed for our planet to sustain life.

# A "Just Right" Sun<sup>28,29</sup>

Even with the right location in a solar system, you would need the right kind of star or sun to support life.

- About 80% of stars are too small (usually red dwarfs) to support life. Another 8-9% are called G dwarfs, most of which are also less massive than the sun.
  - The problem with red dwarfs is that they emit most of their radiation in the red part of the spectrum, which makes photosynthesis (the process in green plants and certain other organisms by which nutrients are made from carbon dioxide and water) less likely.

- Another problem is given the size of these stars, they are a lot less luminescent. A planet would have to orbit much closer to the sun to have enough heat to maintain liquid water on the surface.
- The problem with a closer orbit is that tidal forces get larger as you move in, and you end up in what's called a tidally locked state where one side will always face the star as opposed to the Earth which rotates upon its axis. A tidally locked state is bad because it would produce a 'dark side' and a 'light side' with one side dry and hot while the other side would be icy and cold.
- Red dwarfs also have flares with much more intensity than our own star, and again, your planet would have to be closer, which would make them more susceptible to these flares.
- Red dwarfs also don't produce much ultraviolet light, which would be required to build up oxygen in the atmosphere to support life.
- Larger stars than our own are typically too hot and unstable. As such, they don't live as long.
   Even stars just a few tens of percent more massive than ours have considerably less lifetime.
- Moreover, binary stars systems in which two stars are locked into orbit around one another are very unlikely places to sustain planets where life could live.
- Our star is also metal-rich with a higher abundance of heavy elements compared to other stars of
  its age in this region of the galaxy. This is critical to create an Earth-size terrestrial planet.
- Our star is also highly stable, more so than most comparable stars. Its light output only varies by
  one-tenth of one percent over a full sunspot cycle, which is about eleven years. This prevents
  wild climate swings on the earth.
- Our sun's orbit is also more nearly circular in our galaxy than most other stars its age. This helps by keeping us away from the galaxy's dangerous spiral arms.

As such, the vast majority of stars in the universe would automatically be ruled out as being capable of supporting life-bearing planets. It would take a star with the highly unusual properties of our sun – the right mass, the right light, the right composition, the right distance, the right orbit, the right galaxy, the right location – to nurture living organisms on a circling planet. Perhaps only one in a billion stars is the right kind of star in the right kind of place, which makes our star very rare indeed.

# A "Just Right" Moon<sup>30</sup>

For centuries, people speculated about whether the moon supported life. Johannes Kepler, the seventeenth-century astronomer believed he discerned caves that were populated by moon people. A century later, William Herschel, who discovered Uranus, thought he made out cities, highways, and pyramids on the lunar landscape. Does the moon support life? Turns out recent discoveries have shown that it does – ours!

In 1993 it was discovered that the moon actually stabilizes the tilt of the Earth's axis to within one and a half degrees. The tilt is responsible for our seasons. If the moon were not there, our tilt could swing over a large range, resulting in major temperature swings.

The moon is unique in the following ways:

- Its size is large compared to its host planet. This is unique in our inner solar system. Mercury and Venus have no moons. Mars has two tiny moons which do nothing to stabilize the axis of Mars. As such, all three planets have chaotic variations in their tilt.
- The moon also increases our tides, contributing 60% to our tidal patterns (the sun accounts for the other 40%). Tides serve an important role by flushing out nutrients from the continents to the oceans, which keep them nutrient-rich. These tides also help keep the large-scale ocean circulation going. This is important because the oceans carry a lot of heat, which is necessary to keep the temperature at the higher latitudes relatively mild.

As such, our climate stability is dependent on a large extent to the moon.

# A "Just Right" Earth<sup>31,32</sup>

The Earth is more than just a spinning rock. Its interior is dynamic and complex, with a solid iron core surrounded by iron that has been liquified by the heat. At its center, temperatures soar to 90,000 degrees Fahrenheit. Many factors work together to make the Earth unique:

- If the Earth were bigger and heavier, the atmosphere would be rich with noxious elements like ammonia and methane, which would make life impossible. Likewise, the larger the planet, the more surface gravity, which would tend toward creating a smooth sphere rather than the mountainous one that we enjoy. The problem with a smooth planet is in a world covered by water, you need continents and mountains to rise above it to sustain life.
- If the Earth were smaller and lighter, the atmosphere wouldn't retain water or heat from its interior. The planet would cool down too quickly like Mars, which is basically a dead planet.
- To support life, a planet must turn on its axis and be tilted just enough to prevent extremes of temperature and weather.
- To support life, a planet must be composed of various heavy elements to make complex molecules and compounds (such as water) possible. This means carbon and water must be plentiful on the planet.
- To support life, a planet must have a crust that's thick enough to keep volcanoes from dominating the surface and thin enough to retain oxygen.
- Tectonic plates are also critical. 'Plate tectonics' refer to the movement of a dozen or so massive plates in the Earth's lithosphere, which is the outer, rigid shell of our planet. Think of these as enormous rafts that the continents float on. "It may be," said Ward and Brownlee in *Rare Earth*, "that plate tectonics is the central requirement for life on a planet".
  - o Of all the planets and moons in our solar system, plate tectonics is found only on Earth.
  - Plate tectonics are critical because they produce mountain ranges, which result from when plates collide and buckle. Mountains are important because they create biodiversity in our world which supports different types of life forms. In addition, mountains create mineral deposits, and have a significant influence on our climate.
  - o In addition, plate tectonics drive our carbon dioxide-rock cycle. This is critical in regulating the environment through the balancing of greenhouse gases and keeping the temperature of the planet at a livable level. The planet's internal heat is vented to the atmosphere through volcanoes. In an elaborate process, this is a kind of thermostat that keeps the greenhouse gases in balance and our surface temperature under control.
- The Earth's magnetic field is also fairly unique. This magnetic field shields the Earth from much of the solar wind from the sun (solar wind is a stream of ionized gases that blows outward from the sun at about 400 km/second). When the solar wind encounters Earth's magnetic field, it is deflected like water around the bow of a ship.
- The carbon cycle, something unique to the earth, is also critical for supporting life. The carbon cycle is the process by which carbon moves between the oceans, air, rocks, soil and all living things. Carbon doesn't stay in one place. It is always on the move:
  - Carbon moves from the atmosphere to the oceans. The oceans, and other bodies of water, soak up some carbon from the atmosphere.
  - Carbon moves from the atmosphere to plants, where a process called photosynthesis, makes plant food from carbon.
  - Carbon moves from plants to animals through the food chain. When an animal eats a plant, it is absorbing carbon.

- Carbon then moves from plants and animals to the ground. When plants and animals
  die, their bodies decay bringing the carbon into the ground, which creates fossil fuels.
- o Carbon moves from fossil fuels to the atmosphere when fuels are burned.
- Carbon moves from living things to the atmosphere. Each time you exhale, you are releasing carbon dioxide gas (CO<sub>2</sub>) into the atmosphere through a process called respiration.
- Carbon dioxide is a greenhouse gas and traps heat in the atmosphere. Without it and other greenhouse gases, Earth would be a frozen world.

In short, the Earths' location, its size, its composition, its structure, its atmosphere, its temperature, its internal dynamics, and its many intricate cycles that are essential to life – the carbon cycle, the oxygen cycle, the nitrogen cycle, the phosphorous cycle, the sulfur cycle, the calcium cycle, the sodium cycle, and so on – testify to the degree to which our planet is exquisitely and precariously balanced.<sup>33</sup>

All considered, probably no more than one in ten billion planets would be hospitable to life.

John A. O'Keefe, after earning degrees from Harvard and University of Chicago, went on to become a renowned astronomer and pioneer in space research. It was the recent discoveries in astronomy that bolstered his faith in God. He ran calculations analyzing the probability of life elsewhere and concluded that "only one planet in the universe is likely to bear intelligent life. We know of one – the Earth – but it is not certain that there are many others, and perhaps there are no others." He added further:

We are, by astronomical standards, a pampered, cosseted, cherished group of creatures; our Darwinian claim to have done it all ourselves is as ridiculous and as charming as a baby's brave efforts to stand on its own feet and refuse his mother's hand. If the universe had not been made with the most exacting precision we could never have come into existence. It is my view that these circumstances indicate the universe was created for man to live in.

### Probabilities<sup>35</sup>

The odds against a universe like ours emerging out of something like a big bang are enormous...I think clearly there are religious implications whenever you start to discuss the origins of the universe.

— Stephen W. Hawking

The fine tuning of the universe provides prima facie evidence of deistic design. Take your choice: blind chance that requires multitudes of universes or design that requires only one. – Ed Harrison

OK, so the Earth may be somewhat unique in terms of its ability to support life given our galaxy, our sun, the solar system we live in and our planet itself, but how unique? It turns out, the odds that there is another planet like the Earth are extremely small. Consider the following estimates of the probabilities of finding another planet like the Earth:

- Right kind of galaxy: 1 in a thousand (10<sup>3</sup>) in the universe.
- Right kind of star: 1 in a billion (109) in acceptable galaxies
- Right kind of solar system: 1 in a billion (109) in acceptable stars
- Right kind of planet: 1 in 10 billion (10<sup>10</sup>) in acceptable solar systems
- Right kind of planet: 1 in 10 quadrillion quadrillion (10<sup>31</sup>) in the universe
- Likely number of actual planets: 10 billion trillion (10<sup>22</sup>) in the universe
- Probability of one good planet: 1 in a billion (109) in the universe

Given that the universe began with something of a big bang, the likelihood that it would be a descent kind of universe where life might have a chance is something like on in a trillion. Even with this very nice universe that we have, the probability that one of its planets would be capable of sustaining life would seem to be one in a billion, if not less. Thus the probability of the big bang producing a stable universe and then having a planet where life could thrive is no better than one in a billion trillion (and probably much less). How is this possible? Is it just luck?

Atheists explain this by saying even though the odds are so much against it, some planet had to be the one. If you assume many universes (so far, we know of only one), then wouldn't the odds work out? It turns out, this isn't the case. As Boa and Bowman explain:<sup>36</sup>

Suppose you find a penny and begin flipping it over and over. To your surprise, it keeps coming up heads. After the hundredth toss yields another heads, you begin suspecting that the coin has been weighted or "fixed" in some way. (Rightly so; the chances of getting heads a hundred times in a row are less than one in a quadrillion quadrillion!). It would make no sense to reason that since there are over a hundred billion pennies in circulation, one of them was bound to come up heads a hundred or more times in a row. Even if a quadrillion quadrillion pennies were in circulation, the best and most sensible explanation for getting heads a hundred times in a row would be that the coin was fixed. Likewise, the fact that the universe has an extraordinary combination of highly precise parameters and features, all of which are necessary for any life to be possible at all, cannot be explained by postulating the existence of a quadrillion other universes.

Of course, the most likely answer – one that is enjoying significant support from many scientists themselves recently, is that the universe was "fixed" – it was designed by a supreme intelligence to make it possible for life to exist here. The logic is not difficult to follow – the universe is arranged in a highly specific fashion to make it possible for life to exist is entailed in the very concept of a Creator God. The evidence for this life-favoring arrangement is just the sort of finding one would expect if one believed in God. The fact is the world seems to have been engineered for us to be here.

# **Design Implies a Designer**

The evidence from Physics and Astronomy discussed in this and the previous chapter logically brings us to the conclusion of our second "proof" discussed in the introduction.

Proof from Design	Design (a Universe and an Earth "just right" for life) implies a designer.
	<ul> <li>The parameters of the universe are exquisitely fine-tuned to produce and sustain life, but randomness does not produce fine-tuning.</li> <li>A planet that can sustain life in our universe is very, very rare (no more than one in 10 billion).</li> </ul>

Design, as observed in our physical universe, implies a designer. It's no different than the Biosphere discussed in the second chapter – one can observe something and readily identify if there are characteristics of design. In the case of the Biosphere, we can observe a complex structure that has a specific purpose. We can see that all the dials and systems are designed to facilitate one thing – life.

The nature of our universe is no different. We can observe from the "finely tuned" parameters of our universe and the unique nature of our planet, that they are optimized for one thing – to facilitate life. Thus, it is only logical to conclude when we observe something so exquisitely designed that there was, in fact, a designer responsible for that design. Why? Because design always implies a designer.

## **Discussion Questions**

- 1. What were you taught in school? That the Earth is most likely unique or that it's only one of countless other inhabited planets?
- 2. What facts about the universe, our galaxy, the solar system, the sun, or the Earth intrigued you the most? Why?
- 3. The late John A. O'Keefe, a prominent pioneer in space research, said the evidence of astronomy led him to conclude that "the universe was created for man to live in." Assume for a moment that he's right. What are the reasons God might have been motivated to create the Earth and then populate it with creatures?

# **CHAPTER 4**

# EVIDENCE FROM BIOLOGY

The more I study nature, the more I am amazed at the Creator. - Louis Pasteur

If one believes in evolution, then one has to also account for the origin of life – the very first step. Without this, the whole subject of evolution hangs on nothing. – Stephen Grocott<sup>67</sup>

More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on Earth rather than to its solution. At present all discussions on principal theories and experiments in the field either end in stalemate or in a confession of ignorance. — Dr. Klaus Dose, Director, Institute for Biochemistry, Johannes Gutenberg University, West Germany

We should reject, as a matter of principle, the substitution of Intelligent Design for the dialog of chance and necessity; but we must concede that there are presently no detailed Darwinian accounts of the evolution of any biochemical system, only a variety of wishful speculations

— Biochemist Franklin M. Harold

In Chapter 1, we discussed the scientific evidence that the universe had a beginning in what is called the "Big Bang". If the universe had a beginning, it is reasonable to postulate that the universe had a beginner. In Chapter 2, we saw just how finely-tuned our universe is for life. In Chapter 3, we looked at the special nature of the Earth, our Sun and our position in our galaxy and saw just how very rare a life-supporting planet really is. Although it may be possible to imagine scenarios whereby the cosmos and the Earth came about without a creator, it cannot reasonably be denied from the evidence that the claim of the existence of God is the best explanation for the evidence.

In this chapter we'll look at the evidence for the origin of life. It's one thing to say that it is amazing that a place exists where life *could* flourish, but a nice environment is no guarantee that life *will* exist. The more scientists have learned about the origin of life on Earth in recent years, the more difficulties they have encountered explaining that the origin as a natural, random event.

# The Problem with the 'Primordial Soup'38

Just 25 years ago, many scientists were confident that the origin of the Earth could be explained through natural processes. The conventional scenario went like this: after earth cooled down from the heat of its initial formation, a long period of time (perhaps a billion or two billion years) passed before life emerged. During that period, the Earth's atmosphere was rich in heavy gases, particularly ammonia and methane, and very poor in oxygen. In this "primordial soup" environment, the first amino acids and then the first proteins formed spontaneously, perhaps with the help of lightning. One thing led to another and after a

few hundred million years or so, you've got cells multiplying like rabbits and these cells then evolved into complex life forms.

The problem with this scenario, as scientists know now, is that it never could have happened. There are three problems with the conventional scenario of how life was formed on the Earth:

- First, life appeared on Earth far too soon roughly half a billion years after the Earth was first formed (using the age of the Earth advocated by most scientists)<sup>1</sup>. The problem is that this leaves no significant time (statistically speaking) for life to originate spontaneously after the Earth had reached a state where life could survive for any length of time. Essentially, life appeared as soon as it was theoretically possible for it to appear, which is extremely unlikely.
- Second, Earth's atmosphere during the time that life first appeared had too much oxygen. Too
  much oxygen would have interfered with the chemical reactions that would have been necessary
  to get the first life forms assembled. In order for life to appear, the atmosphere couldn't have
  been oxidizing, but evidence from rocks dating to that period shows that the atmosphere was.
- Third, the components of life on the molecular level all need to exist simultaneously for each to function properly. As scientists have explored deeper into the cell, we've discovered that cells are horrendously complicated biological machines. DNA, RNA and proteins all need each other in order to do what they do, and it's unreasonable to postulate that one of these could originate in a natural occurrence without the other. Certainly, it's ridiculous to assume that these three components could have been generated spontaneously at the same time and in the same place. The further problem is that each of these components is highly complex and specialized in such a way that no gradual process is likely to ever explain their origin.

There are other problems as well, that pose significant problems for a natural explanation for the origin of life. These include:

- Life can't start with oxygen (since amino acids can't form with oxygen)
- Life can't start without oxygen (since no ozone in the atmosphere → no life)
- Life can't start in water (since oxygen corrodes amino acids)
- The natural tendency is *always* away from life, never towards life.

# What is Intelligent Design?<sup>39,40</sup>

Before discussing evolution, it's worth discussing the alternative view – Intelligent Design. Intelligent Design is a scientific theory which holds that certain features of the universe and living things are best explained by an intelligent cause, and are not the result of an undirected chance-based process such as Darwinian evolution. To use a mathematical comparison:

Evolution: Matter + Energy + Time = Life

Intelligent Design: Matter + Energy + Time + Outside Intelligence = Life

The fundamental question is which equation is true? Which equation better represents the observed evidence regarding the origin of life?

Intelligent design begins with observations about the types of information produced by intelligent agents. Even the atheist zoologist Richard Dawkins says that intuitively, "biology is the study of complicated

<sup>&</sup>lt;sup>1</sup> Note: I have made no attempt in this book to argue either for or against Young Earth Creationism (YEC), which is the belief that the Heavens, Earth, and life on Earth were created during a short period, sometime between 6,000 and 10,000 years ago, based on the text of Genesis 1 and the interpretation that the term "days" refer to six 24-hour Earth days. There are many arguments for and against YEC which are outside the scope of this book.

things that give the appearance of having been designed for a purpose." Darwinists believe natural selection did the "designing" but Intelligent Design theorist Stephen C. Meyer notes, "in all cases where we know the causal origin of 'high information content,' experience has shown that intelligent design played a causal role."

In all observed cases, the basic components of complex systems, or systems containing information, do not assemble by themselves. In all cases, it takes the addition of outside intelligence to create something more complex (whether it be a book, a software program, a robot, an automobile, DNA or a machine). As such, Intelligent Design is heavily dependent upon "information theory." One of its fundamental premises is that "information" which is complex (highly ordered) and specified (fits a pre-existing pattern) is not produced by natural occurring events (chance or law-governed processes), but rather this sort of observable information and complexity is best explained as the product of an intelligent action.

Intelligent Design implies that life is here as a result of the purposeful action of an intelligent designer, standing in contrast to Darwinian evolution, which postulates that life exists due to the chance, purposeless, blind forces of nature.

Opponents of Intelligent Design postulate that energy is the key ingredient that causes action to take place. Energy is indeed a necessary component to create a system, but it is not sufficient to create anything more complex. What happens if we add raw energy to the parts of a car? The parts of an airplane? The parts of a computer? The answer is "nothing", unless outside intelligence is also applied to select the right parts and put them together in the right order.

The correct formula to create a complex system is always Matter + Energy + Time + Outside Intelligence = Life. There are no observed examples where Matter + Energy + Time under the influence of natural processes have resulted in a complex system by itself. This is especially important as we look into the complex information system stored within a cell, known as DNA. Any information, of any form, always has an intelligent source.

#### What is Darwinism?

Charles Darwin (1809 – 1882) was an English naturalist. While on a five-year voyage on the HMS Beagle, he developed the theory that all species of life have evolved over time from common ancestors through the process he called natural selection. Darwin's Theory started when Charles Darwin observed that isolated populations of finches had varying shapes of beaks (short, fat, long, slender, etc.). The variations Darwin observed among finches on different Galapagos Islands is a common example of the process of natural selection resulting from genetic variation, not micro or macro evolution.

However, what Darwinism claimed was much more – it was the theory that *all* living creatures are modified descendents of a common ancestor that lived a long time ago. It's the theory that every new species that has ever appeared on the Earth can be explained by descent with modification. Darwinism claims these modifications are the result of natural selection acting on random genetic mutations. This is why Darwin titled his magnum opus *On the Origin of Species*, and not *How Existing Species Change over Time*. This theory now forms the foundation of biology, as it provides a unifying logical explanation for naturalists for the diversity of life.

Darwinsim is ironic, in some ways, since the famous voyage of the HMS Beagle in 1831-1836 that facilitated Darwin's study of the Galapagos island finches and his subsequent theory of evolution was, in addition to being a survey expedition, also a missionary trip in which the Captain, Robert Fitzroy, sought to establish a mission to the Fuegians at the tip of South America in obedience to the Great Commission (Matthew 28:19-20). Darwin and Fitzroy, in fact, collaborated on an article defending missionary work among the native peoples while in South Africa.<sup>41</sup>

Darwinism is more than a theory – it leads to a worldview. As more people are taught the "ironclad" evidence for evolution and that science is on the path to ultimately explain the origin of everything in the universe through naturalistic means, then belief in an invisible God will necessarily fade into superstition.

William Provine of Cornell University (a staunch atheist), spelled the five inescapable conclusions if Darwinism is true:<sup>42</sup>

- There's no evidence for God
- There's no life after death
- There's no absolute foundation for right and wrong
- There's no ultimate meaning for life
- People really don't have free will

The Darwinian worldview, that all things were created by random chance and time, is incompatible with Christianity. The following quotes make this evident:

By coupling undirected, purposeless variation to the blind, uncaring process of natural selection, Darwin made theological or spiritual explanations of life processes superfluous. – A recent textbook<sup>43</sup>

You can have God or natural selection, but not both. – Nancy Pearcey, who writes extensively on science and faith.

If we are to admit God into the process, then God would ensure that only 'the right variations' occurred...and natural selection would be superfluous. – Charles Darwin

The whole point of Darwinism is to show that there is no need for a supernatural creator, because nature can do the creating by itself. – Law professor Phillip Johnson

Darwin's greatest accomplishment was to show that living beings can be explained as the result of a natural process, natural selection, without any need to resort to a Creator or other external agent – Francisco Ayala, leading evolutionist

If humankind evolved by Darwinian natural selection, genetic change and environmental necessity, *not God*, made the species. – Pulitzer Prize winning sociobiologist Edward O. Wilson

Charles Darwin didn't want to murder God, as he once put it. But he did. - Time Magazine

Darwinism is a universal acid that eats through just about every traditional concept and leaves in its wake a revolutionized worldview. – Philosopher Daniel Dennett

The above explains why there is such animosity between atheistic evolutionists and proponents of Intelligent Design – because the implications of each belief system have logical conclusions. Belief in Darwinism leads one to reject faith in a God, while Intelligent Design leads one to embrace faith in a God. Each person has to decide for themselves which way the scientific evidence points.

#### **Problems with the Basic Tenants of Evolution**<sup>44</sup>

Evolution is usually defined as change over time. To be straight on definitions, no one disagrees with evolution defined in this manner. Everyone agrees that all organisms within a single species can change over time. This occurs in the ordinary course of reproduction.

However, it's important to note that there is a difference between microevolution and macroevolution. Microevolution is change within a species while microevolution is change across species – meaning that over time, one species can change into an entirely different species. Only one has ever been observed by scientists. They key to understanding evolution is to understand the differences between these two

types of evolution as well as the other basic tenants of evolution: mutation, inheritance of acquired characteristics and natural selection and their limitations.

#### Microevolution

Microevolution is due to random mutations caused by either radiation or copying errors in DNA. Thus, microevolution really refers to micro-random-mistakes that become introduced into the DNA of a cell. Microevolution does not involve increasing complexity of new information and usually the effects of radiation or copying errors in DNA are detrimental to the organism. Both creationists and evolutionists agree that microevolution occurs. Examples include bacterial strains that have become resistant to antibiotics, or the color changes in moths over time.

Microevolution is a well-substantiated theory. However, it is often mistakenly taken to mean variation or the ability to be variable within a living kind (genetic variation), such as different heights, sizes, colors, etc. within a single species. Microevolution and genetic variation are two different concepts. Microevolution is the result of random errors when DNA is replicated, while genetic variation involves selecting from existing genetic information, such as eye color, height, or hair color. For example, there are many shapes and sizes (varieties) of finches, but they are all finches.

#### Macroevolution

Within mainstream scientific culture, popular support for neo-Darwinism as the mechanism for evolution is not necessarily founded on solid scientific evidence. – Neil Broom<sup>45</sup>

Macroevolution refers to one species changing into another species over long periods of time. Macroevolution requires an "upward" change in the complexity of an organism and requires new information to be introduced into the DNA, which has never been observed. The model of macroevolution is the following:

Non-living matter  $\rightarrow$  living cell  $\rightarrow$  invertebrate  $\rightarrow$  fish  $\rightarrow$  amphibians  $\rightarrow$  reptiles  $\rightarrow$  mammals  $\rightarrow$  humans

Since we can observe small random mutations within a species (microevolution), evolutionists often extrapolate that over millions of years these small random changes would accumulate resulting in macroevolution (one species changing into a new species over time). This extrapolation, however, is not supported by actual observations, experiments, or by the fossil record.

When the scientific method is applied to macroevolution, it becomes obvious that the model cannot be confirmed. No one has ever observed macroevolution taking place. Since no observable evidence has ever been documented in support of macroevolution, it cannot be considered an actual theory. Macroevolution is simply a model of the origin of species and nothing more. Authoritative statements that macroevolution is "science", "a fact", or "a scientific theory" are not founded in true science.

## Mutations46

Some contemporary biologists, as soon as they observe a mutation, talk about [macro] evolution...This logical scheme is, however, unacceptable. First, because its major premise is neither obvious nor general. Second, because its conclusion does not agree with the facts. No matter how numerous they may be, mutations do not produce any kind of evolution.

- Pierre Paul Grasse (Zoologist who held the Chair of Evolution at the Sorbonne for 30 years).

There is no question that Darwin's mutation-selection mechanism continues to be a fruitful idea for biology...But Darwinism is more than just this mechanism. Darwinism is the totalizing claim that this mechanism accounts for all the diversity of life. The evidence does not support this claim. What

evidence there is supports limited variation within fixed boundaries, or what is typically called microevolution. – William Dembski<sup>47</sup>

...Among all the mutations that have been studied, there aren't any known, clear examples of a mutation that has added information [to the DNA of the species]. – Lee Spetner<sup>48</sup>

In biology, mutations are changes to the genetic material of an organism. Mutations can be caused by a variety of factors such as copying errors during cell division, by exposure to radiation, exposure to various chemicals, or viruses. Mutations create variation within a gene pool. Scientists have found that mutations in the earliest development of an organism – the kind needed to produce large-scale macro evolutionary change – typically have disastrous effects: the embryo of the species usually dies or is crippled.

Mutations (random errors), are the proposed central mechanism for evolution. They have been studied for over 50 years. The fruit fly has been the subject of many experiments because its short life cycle allows scientists to observe many generations. To simulate the evolution of the fruit fly over millions of years in a short period of time, the flies were bombarded with radiation to increase the rate of mutations. The results demonstrated that no new structures were formed. The mutations merely altered existing ones. Mutations on fruit flies have produced crumpled wings, oversized wings, undersized wings, and double sets of wings. But they have not produced a new kind of insect. Scientists started with fruit flies and ended with fruit flies. The only difference was that these mutated fruit flies were weak, blind, sterile, diseased, deformed, or dead.

Fruit flies refuse to become anything but fruit flies under any circumstances yet devised – Lane Lester (Ph.D. in genetics).<sup>49</sup>

This is the central problem of evolution. Evolution relies on mutations to perform its work, but mutations have never proven to produce any new, beneficial genetic material that would help transform one species into another. Consider the addition of an extra chromosome to a human child – something we call Down syndrome. A child born with Down syndrome is caused by an extra chromosome.

Addition or loss of chromosomes usually lessens the vitality of the offspring, the reproductive powers of the new individuals would more frequently be impaired. – Frank Marsh (Ph.D. Biology)<sup>50</sup>

Geneticist John F. McDonald has called this "a great Darwinian paradox". The kind of mutations that macroevolution needs – namely, large-scale, beneficial ones – *don't* occur, while the kind it doesn't need – large-scale mutations with harmful effects or small-scale mutations with limited impact – *do* occur, though infrequently.

Throughout the 20<sup>th</sup> century, scientists have studied bacteria, which are the best place to look for evidence of random mutation and natural selection since they reproduce quickly, their DNA can be easily mutated, and they can be subjected to strong selection in the laboratory. Even though bacteria have been intensively studied throughout the 20<sup>th</sup> century, bacteriologists have never observed the formation of a new species. Never.

Molecular biology has shown that even the simplest of all living systems on earth today, bacteria cells, are exceedingly complex objects. Although the tiniest bacteria cells are incredibly small...each is in effect a veritable micro-miniaturized factory containing thousands of exquisitely designed pieces of intricate molecular machinery, made up altogether of one hundred thousand million atoms, far more complicated than any machine built by man and absolutely without parallel in the non-living world. – Michael Denton<sup>51</sup>

Despite the evidence, evolutionists still assert that mutations are the source of new genetic information even though advances in modern genetics demonstrate otherwise. An assertion without evidence is *not* science – it is wishful thinking. Why do evolutionists still hold out mutations as the answer to the puzzle? Simply because there is no other alternative to explain the wide variety of different species on our planet other than Intelligent design, which evolutionists find distasteful.

## Inheritance of Acquired Characteristics<sup>52</sup>

Jean-Baptiste Lamarck (1744-1829) proposed the idea of the inheritance of acquired characteristics. He was convinced that physical characteristics acquired by the present generation, such as a giraffe's long neck resulting from its stretching to reach higher leaves, would be inherited by its offspring. Darwin based his hypothesis of macroevolution upon Lamarck's proposal, but Lamarck's proposal has never been observed and has since been proven false.

Instead, science has found that nonhereditary variations are not caused by genetic differences but by the environment. These can include variations produced by different foods, humidity, light, temperature or training. Examples would be skin shade (as a result of tanning) in humans. A person exposed to a lot of sunlight might develop a deep tan. The ability to produce melanin pigment varies from person to person. However, the heavily tanned person's tan will soon fade when his or her skin is shaded from direct sunlight. Even in generations of suntanned ancestors, the acquired tan is purely environmental and not inherited. People of darker skin shade result from generations of offspring coming from parents that have the inherited potential to produce more melanin, but not from the inheritance of the acquired characteristic of a suntan.

#### Natural Selection

Darwin's choice of the word 'selection' was not particularly fortunate. It suggests some agent in nature who, being able to predict the future, selects 'the best'. This, of course, is not what natural selection does...There is no particular selective force in nature, nor a definite selecting agent. — Ernst Mayr<sup>53</sup>

Natural Selection is a term that describes the survivability or extinction of organisms usually associated with environmental change. Another way of saying this is that natural selection means:

- The ability to adapt to the environment
- The survival of the fittest

The natural genetic variation within a population of organisms means that some individuals will survive and reproduce more successfully than others in their current environment. For example, the peppered moth exists in both light and dark colors in the United Kingdom, but during the industrial revolution many of the trees on which the moths rested became blackened by soot, giving the dark-colored moths an advantage in hiding from predators. This gave dark-colored moths a better chance of surviving to produce dark-colored offspring, and in just a few generations the majority of the moths were dark.

A characteristic of natural selection is that it *only* works on the external appearance or physical characteristics of an organism, which are developed from existing genetic information. In other words, natural selection only works with existing information and does not add anything new. It can "select" from existing genes, but not create new genes. This means that natural selection does not generate new information and therefore cannot be a mechanism for micro or macro evolution because in order for evolution to occur, new information must be added to a species' DNA to build a new feature (arm, leg, wing, breathing mechanism, etc.). Natural selection does not generate new information in the DNA; it only operates among pre-existing characteristics. In essence, natural selection just "picks" among a population within a species to "select" those most favorable to survival.

It's also important to note that natural selection cannot occur until an organism exists and is able to reproduce (the ability to select favorable traits). This requires that the first complex life-form must exist as a functioning unit before any selection can occur. This fact rules out natural selection as a possible mechanism for the origin of life, because prior to the first living cell there were no reproducible traits for natural selection to select among.

The core problem, then, is that survival of the fittest cannot explain the arrival of the fittest.

#### Other Problems of Evolution

In addition to the problems with the basic tenants of evolution discussed above, there are other problems with evolution. These include the Law of Biogenesis, and the state of the world we observe today.

## The Law of Biogenesis<sup>54,55</sup>

The ancient Greeks believed that living things could spontaneously come into being from nonliving matter, and that the goddess Gaia could make life arise spontaneously from stones — a process known as *Generatio spontanea*. Aristotle disagreed, but he still believed that creatures could arise from dissimilar organisms or from soil. Variations of this concept of spontaneous generation still existed as late as the 17th century, but towards the end of the 17th century a series of observations, experiments, and arguments began that eventually discredited such ideas. This advance in scientific understanding was met with much opposition, with personal beliefs and individual prejudices often obscuring the facts.

Francesco Redi, an Italian physician, proved as early as 1668 that higher forms of life did not originate spontaneously. He did this by performing tests on flies. Common wisdom at the time was that maggots spontaneously arose from decaying food. Redi proved this wasn't the case by putting decaying food in covered jars to demonstrate that maggots didn't spontaneously arise, but rather they were the result of existing flies landing on the decaying food and laying eggs. Opponents of Redi eventually accepted that spontaneous generation didn't occur with flies, but claimed that this did not apply to microbes and continued to hold that these could arise spontaneously.

Attempts to disprove the spontaneous generation of life from non-life continued in the early 1800s with observations and experiments by Franz Schulze and Theodor Schwann. In 1745 John Needham added chicken broth to a flask and boiled it. He then let it cool and waited. Microbes grew and he proposed it as an example of spontaneous generation. In 1768 Lazzaro Spallanzani repeated Needham's experiment, but removed all the air from the flask. No growth occurred. In 1864, Louis Pasteur finally announced the results of his scientific experiments. In a series of experiments similar to those performed earlier by Needham and Spallanzani, Pasteur demonstrated that life today does not arise in areas that have not been contaminated by existing life. Pasteur's empirical results were summarized in the phrase, *Omne vivum ex ovo*, Latin for "all life [is] from eggs".

Redi's and Pasteur's findings that life comes from life is sometimes called the 'Law of Biogenesis' and asserts that modern organisms do not spontaneously arise in nature from non-life. The Law of Biogenesis states that all life comes from preceding life, and that of its own kind (meaning that chickens come from chickens, humans come from humans, etc.)

Why do we have this law? We have this law because we have not documented a single case of spontaneous generation or chemical evolution in nature. Cows give rise to cows, birds to birds, tulips to tulips, and corn to corn. After over a century of sensational discoveries (down to the molecular level) we have learned through empirical science that life arises only from life. Here lies our first major problem with science - evolution predicts exactly the opposite of the Law of Biogenesis on two counts:

• Evolution states that life originally came from non-life.

• Evolution states that life has not reproduced life like itself, but rather has (millions or billions of times) crossed genetic barriers to produce all the different species and orders of plants and animals we see today.

The creation model, however, predicts what the Law of Biogenesis states, which is reality in nature — that life comes only from proceeding life. Evolution predicts exactly the opposite, and makes its prediction on a total lack of evidence. Dr. Kerkut (a leading British evolutionist) said: "It is ... a matter of faith on the part of the biologist that biogenesis did occur and he can choose whatever method of biogenesis happens to suit him personally; the evidence for what did happen is not available."

The main point here is that the case for creation is not based on imagination (as is evolution), but rather on the scientific evidence which is available - The Law of Biogenesis.

#### The State of the Observed World

Another big problem for macroevolution is the scientific method and the fact that actual observation in the real world contradicts the theory itself. If macroevolution was the mechanism for how all species evolved from a common ancestor, as Darwin claimed, then what would you expect to see across all the species in the world? The answer is gradual evolutionary differences across all the species of the world – or a blurring of the lines between species. Theoretically, there would not be a distinct species of ape and mankind, but rather we would expect to find a variety of transitional forms. There should be on one continent species that were 75% ape and 25% man, species that were 50% ape and 50% man, species that were 75% ape and 25% man and so on with all the gradations in between.

Given the significant differences in the genetic and physical structures between species, we would not expect to see separate and distinct species living all over the world, which we observe, but rather a blending of the lines between species as the branches of Darwin's Tree of Life (discussed below) grew and branched further. We would expect to see different populations of species living in different parts of the world having evolved at different rates. Some species would be further along in their development than other species. However, this is not the case. Rather, what we observe are separate and distinct species, differentiated by genetic structure, across the globe.

Since the scientific method begins with "observation", macroevolutionists have to explain this fundamental problem before even getting off of the 'first base' of the scientific method.

### The Stanley Miller Experiment

It is extremely improbable that proteins and nucleic acids, both of which are structurally complex, arose spontaneously in the same place at the same time. Yet it also seems impossible to have one without the other. And so, at first glance, one might have to conclude that life could never, in fact, have originated by chemical means. – Leslie E Orgel, leading evolutionary biochemist<sup>56</sup>

It is becoming clear that however life began on earth, the usually conceived notion that life emerged from an oceanic soup of organic chemicals is not a most implausible hypothesis. We may therefore with fairness call this scenario 'the myth of the prebiotic soup'.

- Charles B. Thaxton, Ph.D. in Chemistry<sup>57</sup>

When considering the origin of life, evolutionists will point to what is called the "Stanley Miller Experiment" as evidence that life could have been created spontaneously without an intelligent creator. Back to the formula presented earlier in this chapter, this experiment seeks to prove that Matter + Energy + Time can lead to Life.

This experiment was first conducted by Stanley Miller, then a graduate student at the University of Chicago, in 1953 to artificially produce the building blocks of life. Almost all biology books today have a picture of Miller's famous spark chamber. In it Miller used simple raw materials and electrical sparks to produce amino acids and other simple molecules – the so-called "building blocks of life". Some newspapers reported that Miller had practically made "life in a test tube".

By reproducing the atmosphere of the primitive earth and then shooting electric sparks through it to simulate lightning, Miller managed to produce a red goo containing amino acids, the building blocks of protein. If living organisms could emerge by themselves out of the primordial soup and then develop naturally over eons into more and more complex creatures, there was no need for a God.

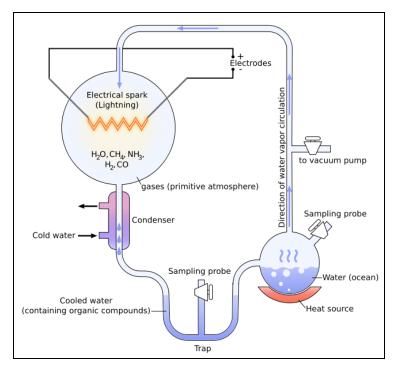


Figure 6: The Stanley Miller Experiment

There were many problems with this experiment as it relates to the conclusion that life can begin by combining matter, energy and time. These problems are as follows:

#### Problem #1: The Wrong Atmosphere

- One problem with the experiment is that the "primitive atmosphere" that Miller used was not at all
  like what the early Earth's atmosphere would have been like. Miller chose a hydrogen-rich
  mixture of methane, ammonia, and water vapor, which is consistent with what scientists thought
  back then, but which scientists don't believe anymore. As a geophysicist with the Carnegie
  Institution said in the 1960s "there is no evidence for a primitive methane-ammonia atmosphere,
  but much against it."
- Miller's experiment assumed that the early earth atmosphere did not contain oxygen. Evolutions
  must claim that the early earth did not contain oxygen since laboratory experiments demonstrate
  that organic compounds decompose in the presence of free-standing oxygen in the atmosphere.
  Oxygen in the early earth's atmosphere would eliminate the accumulation of organic compounds
  and the possibility of life arising by natural processes (evolution), so Miller left Oxygen out of the
  experiment.

 By the mid-1970s, Belgian biochemist Marcel Florkin was declaring that the concept behind Miller's theory "has been abandoned". The scientific evidence supports that the earth has always had oxygen in the atmosphere.

There is no scientific proof that Earth ever had a non-oxygen atmosphere such as evolutionists require. Earth's oldest rocks contain evidence of being formed in an oxygen atmosphere. Evidence of free oxygen has been found in rocks supposedly 300 million years older than the first living cells. - Harry Clemmey, Nick Badham <sup>58</sup>

The only trend in recent literature is the suggestion of far more oxygen in the early atmosphere than anyone imagined. - Thaxton, Bradley & Olsen <sup>59</sup>

 Science Magazine said in 1995 that experts now dismiss Miller's experiment because "the early atmosphere looked nothing like the Miller-Urey simulation." Current thinking is that there was very little hydrogen in the atmosphere because it would have escaped into space. Instead, the atmosphere probably consisted of carbon dioxide, nitrogen, and water vapor.

The problem with all of the above is that if you replay the experiment using an accurate atmosphere, you do not get amino acids. Instead what you get is possibly the organic molecules of Formaldehyde and Cyanide, which are deadly toxins. So, there is a Catch-22. If you assume the earth's early atmosphere did not contain any oxygen, then there would be no ozone, which protects us from the ultraviolet rays of the sun. Ultraviolet light will decompose many organic molecules including amino acids. Thus, the basic organic building blocks for life cannot start with or without oxygen in the atmosphere. In short:

- Oxygen in the atmosphere → Life cannot start (building blocks cannot accumulate)
- Oxygen not in the atmosphere → Life cannot start (building blocks destroyed by ultraviolet rays from the sun)

#### **Problem #2: The Wrong Conditions**

Miller successfully used an electric spark to get gas molecules to combine. The problem is that the same electric spark that put the amino acids together would also tear them apart. In fact, the spark would be much better at destroying the amino acids than making them, meaning few, if any, amino acids would actually accumulate in the spark chamber.

To get around this problem, Miller drew gases out of the spark chamber and into a trap that would save the amino acids from destruction by the same electric spark that made them. This ruled out any random chance and made the experiment depend on intervention of informed intelligence. Miller was supposed to be demonstrating that the gases could make the "building blocks of life" all by themselves without any help.

### Problem #3: The Wrong Amino Acids

There are over 2,000 types of amino acids. Only 20 types are commonly found in biological proteins (life). The atoms that make up each amino acid are assembled in two basic shapes – known as left-handed and right-handed amino acids. They are composed of the same atoms, but are mirror images of each other. Handedness is an important concept in molecules because all amino acids used in life (functional biological proteins) are 100% left-handed. The natural tendency is always toward a mixture of 50% right/50% left, but life requires 100% left-handed, which are not formed by natural processes.

The problem with Miller's experiment is that it produced a mixture of left-handed and right-handed amino acids, which is not used in life. Miller's experiment produced the wrong type of amino acids.

#### Problem #4: Still No Life

Even if one were able to create amino acids from a realistic atmosphere, which is not chemically possible, one would still be very, very far from creating a living cell:

- First, you would first have to get the right number and right kinds of amino acids to link up to create a protein molecule.
- Second, you would need dozens of protein molecules, all in the right sequence, to create a living cell. The odds against this are astonishing. The gap between nonliving chemicals and even the most primitive organism is absolutely tremendous. No biologist would even try to take a test tube with these molecules and turn them into a living cell.
- Third, on top of the challenge of somehow generating the cellular components out of non-living chemicals, you would then have an even bigger problem in trying to put the ingredients together in the right way.
- Most importantly, even if one were to try the above and be successful, it would require a
  tremendous amount of intelligence to do so, which can't be done even by today's leading
  biologists. Intelligence, of course, only proves the opposite of what is necessary to show that
  the steps could have occurred through random chance.
- But yet even if a scientist did assemble all these ingredients together properly, they would have a
  dead cell not a living one. The components you still lack for a living cell all the enzymes, the
  DNA, and so forth, make the dead cell still immeasurably far from life.

#### Conclusion

The simple truth is that the problem of assembling the right parts in the right way at the right time and at the right place, while keeping out the wrong material, is simply insurmountable. There is no theory today that can account for how life could have naturally come together by itself without any direction or guidance. The central thesis of the Stanley Miller Experiment – that life could have been created spontaneously without an intelligent creator by simply combining Matter + Energy + Time is false.

This is especially true as you consider what Miller did was use intelligent design in setting up his experiment to achieve his results. Miller determined through decades of knowledge of organic chemistry:

- What gasses to use
- What quantities of each gas to use
- What level of intensity to generate electrical input to add a source of energy
- How to use a trap to pull out the compounds that were generated because he knew another
  electrical charge would have been destructive to the amino acids he produced.

What the Stanley Miller experiment really showed is that an intelligent creator was responsible for creating life – a creator with an intelligence far, far superior to the best minds on Earth today, who have yet to create even one living cell in the laboratory, let alone demonstrate that it can be done through time and chance.

### **Discussion Questions**

- 1. Can you recall when you were first exposed to Darwin's theory of evolution? What was the setting? What was your reaction? How did your view of a God change as a result?
- 2. Do you feel Darwinism and faith in a God are really in conflict and mutually exclusive? Why or why not?
- 3. The U.S. National Academy of Sciences has stated that "creationism, Intelligent Design, and other claims of supernatural intervention in the origin of life or of species are not science because they are not testable by the methods of science." The existence of God may indeed not be testable by the methods of science, but do you believe Intelligent Design can be tested via the scientific method?
- 4. Why do you believe so many people embrace the theory of macro evolution when there has never been a single observed case of this phenomenon?
- 5. Despite extensive study throughout the 20<sup>th</sup> century of bacteria and fruit flies, simulating millions of years of mutations, scientists have never observed the formation of a new species. Yet, mutation remains a critical ingredient of evolution. Likewise, natural selection cannot occur until after an organism exists and is able to reproduce, eliminating it as an explanation for the origin of life. Thus, Darwin's theory fails on two critical assumptions necessary to explaining the *Origin of Species* which is purported to explain. Why do you think so many still point to these key elements as valid tenants of Darwin's theory?
- 6. Is the Stanley Miller experiment convincing proof that the "building blocks" of life could be created without the need for an intelligent creator?

# **CHAPTER 5**

# EVIDENCE FROM THE FOSSIL RECORD

The most obvious and gravest objection which can be urged against my theory [was that the fossil record failed to back up his evolutionary hypothesis]. Why, if species have descended from other species by insensibly fine gradations, do we not everywhere see innumerable transitional forms?

— Charles Darwin, The Origin of Species

## The Problem of Transitional Forms<sup>60,61</sup>

If Darwin's theory of evolution is correct, then we would expect that the fossil record would support his theory. After all, no one has ever observed macro evolution taking place, so the fossil record is really the only physical evidence we have to support the claims of evolution.

Does Darwin's theory match the story of the fossil record? To find out, we must first ask, "What kind of story should it match?" Darwin's theory proposed that living things formed a continuous chain back to one of a few original forms. From these original forms, there occurred evolution over millions of years from simple life forms to complex ones over time. If the theory is true, the fossils should show a continuous chain of creatures. In other words, there should be a vast number of transitional forms. The central problem of evolution, however, is that these transitional forms are simply not there.

In 1859, when Charles Darwin's *On the Origin of Species* was first published, the fossil record was poorly known, and Darwin described the lack of transitional fossils as "the most obvious and gravest objection which can be urged against my theory", but explained it by the extreme imperfection of the geological record at the time.<sup>62</sup>

One hundred and fifty years later, Darwinism is a philosophy still in search of convincing empirical data to back it up. The evidence for Darwinism is not only grossly inadequate; it has been systematically distorted as we will see in this chapter. Darwinism, rather than being a scientific theory grounded in empirical evidence from the fossil record, is merely a materialistic philosophy masquerading as science.

The problem is that the fossil record has utterly let Darwin down. Michael Denton, in his book, *Evolution: A Theory in Crisis*, sums the situation up this way:

...[T]he universal experience of paleontology...[is that] while the rocks have continually yielded new and exciting and even bizarre forms of life...what they have never yielded is any of Darwin's myriads of transitional forms. Despite the tremendous increase in geological activity in every corner of the globe and despite the discovery of many strange and hitherto known forms, the infinitude of connecting links has still not been discovered and the fossil record is about as discontinuous as it was when Darwin was writing the *Origin*. The intermediates have remained as elusive as ever and their absence remains, a century later, one of the most striking characteristics of the fossil record.<sup>63</sup>

Darwin himself conceded this point saying:

Why then is not every geological formation and every stratum full of such intermediate links? Geology assuredly does not reveal any such finely graduated organic chain.

The *fact* that paleontologists have not been able to find a single convincing intermediate form speaks against the model of evolution and supports the model of creation. Why? Because we have found fossils of apes and fossils of humans, but never anything intermediate. What we see in textbooks or what have been identified as "missing links" is not what we have found. None of these fossil finds have hair on them, nor do they have noses or eyes. What we are actually being exposed to in textbooks is an artist's conception of what it might look like if scientists were to ever find such a creature.

In addition, many of the best-known "icons" of evolution are outdated and have been discredited. Yet they continue to live on in textbooks and museum exhibits. For a theory as influential as Darwin's, the public certainly deserves the right to know what's true and what's little more than hype about the supposed "missing links" that have been found.

The important point though, is that according to Darwin's theory of evolution, we should not still be looking for a "missing link", but rather the fossil record should contain millions of "missing links" or transitional life forms showing the steady progression of evolution between species. The areas in which we should be finding numerous transitional forms include:

- Single cell to complex creatures
- Invertebrate to vertebrate creatures
- Fish to reptile creatures
- · Reptile to bird creatures
- Ape to man creatures

Unfortunately for Darwinists, the fossil record contains no evidence of these transitional forms. The gaps in the fossil record are so big, that the concept of evolution cannot really be taken seriously as scientific concept anymore. We have waited almost 150 years since Darwin to solve this puzzle - and after billions of fossils have been found - none qualify as a true intermediate form. Instead, the major observations we draw from the fossil record to-date are the following:

- Very early, in the Cambrian period, a dramatic array of new life forms suddenly appears fully formed in the fossil record, without any preceding ancestral life forms.
- Fossil species are fully formed and functional when they first appear in the record. There is a conspicuous lack of in-between or transitional life forms.
- After fossils first appear in the record, they persist largely unchanged through many strata, then frequently they suddenly disappear from the record.

Another problem is the nature of the fossil record itself. Instead of showing a perfect evolutionary transition from simple to complex, the fossil record reveals complex animals at all levels. As a matter of fact, some groups of animals – like mollusks who live I shells – are found at the top as well as at the bottom. Mammals and dinosaurs are found together. Think of the evolutionary "ages" as ecosystems – all buried sequentially by advancing flood waters. Groups and kinds of animals, like bony fish, appear abruptly in the fossil record and don't show evidence of changing into completely different types of animals. The evidence of the fossil record seems to disprove evolution.

If humans have not evolved from apes, which themselves evolved from simpler life forms and so on back through the evolutionary chain, then what is the alternative, and does science support such an alternative? The answer is science itself is more consistent with the creation model rather than the macro evolutionary model.

In this chapter, we will look at some of the fundamental problems of the fossil record and several of the "icons" set forth by evolutionists as evidence supporting their view.

## The Cambrian Explosion<sup>64</sup>

The fossil record has caused Darwin more grief than joy. Nothing distressed him more than the Cambrian explosion. – Stephen Jay Gould, Paleontologist

One of the biggest problems for Darwinism is the Cambrian Explosion – in which a dazzling array of new life forms suddenly appears fully formed in the fossil record, without any of the ancestors required by Darwinism. This is powerful evidence for a designer since this phenomenon would have required the sudden infusion of massive amounts of new genetic and other biological information that could only have come from an intelligent source.

The Cambrian explosion shows a huge and sudden appearance of radically new body plans. Where did this new information come from? How did the hierarchical arrangement of cells, tissues, organs and body plans develop? Darwinists aren't even close to an answer.

The Cambrian explosion represented a quantum leap in biological complexity. Before then, life on earth was pretty simple – one celled bacteria, blue-green algae and later some sponges and primitive worms or mollusks. Then, without any ancestors in the fossil record, we have a stunning variety of complex creatures in the blink of an eye, geologically speaking. To put this in perspective, if you were to compress all of the Earth's history into twenty-four hours, the Cambrian explosion would consume only about one minute where some experts believe that *all* living species may have originated. All of this contradicts Darwinism, which predicted the slow, gradual development of organisms over time.

This sudden appearance of life forms can be compared to a sort of Biological Big Bang and paleontologists now say the pattern of life looks more like a lawn than a tree, with the separate blades of grass – representing separate species – all sprouting up at the same time. In the fossil record, you have between twenty and thirty-five completely novel body plans that all arose during the Cambrian period. You have a huge jump in complexity, it's sudden, and you have no transitional intermediates.

If Darwinism were true, you would also expect to see a 'bottom up' pattern in the fossil record in which small differences in form between evolving organisms appear prior to large differences in form and body plan organization. For example, you might imagine that pre-Cambrian sponges would have given rise to several different varieties. These varieties would have evolved over time to produce different species. As this process continued, wholly different creatures with completely new body plans would have emerged in the Cambrian era. Instead, however, fossils from the Cambrian explosion have shown a radically different 'top down' pattern. Major differences in form and body plans appear first, with no simpler transitions before them. Later, some minor variations arise within the framework of these separate and disparate body plans. This has completely stumped Darwinisns, and yet, if you postulate Intelligent Design, the 'top down' pattern makes sense, because it's the same pattern we see in the history of human technological design (i.e. cars or airplanes where the major blueprint or plan appears fairly suddenly and remains essentially constant over history with variations on the theme occurring over time).

Darwin himself admitted that the Cambrian explosion was 'inexplicable' and 'a valid argument' against his theory. He insisted 'natura non facit saltum – nature takes no leaps' and thought he would be vindicated as more fossils were discovered. Unfortunately, the problem has only gotten worse as more fossils have provided further evidence of the breadth of Cambrian explosion. Darwinism says nature takes no sudden leaps. Yet there is a huge leap – which is what intelligent agents cause.

# The Geologic Time Scale<sup>65</sup>

The Geologic Time Scale is presented as fact in most biology textbooks. The time scale shows time, with the long ago past on the bottom and the present on the top:

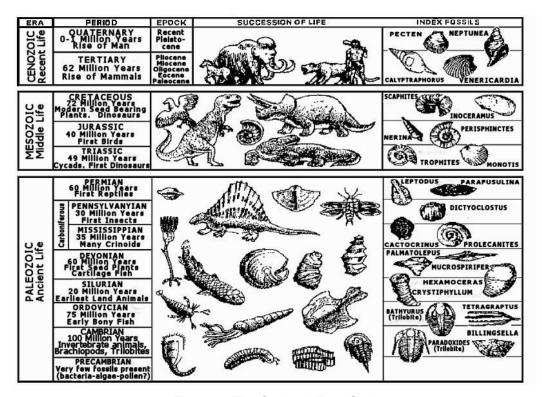


Figure 7: The Geologic Time Scale

In the above table, the fossil column is presented without question as if it were true – as if it were real data. Students are led to believe that the order of the first appearance of the fossils over time proves evolution. Unfortunately, the truth shows no such thing.

- First, the fossils do not occur in this order, simple to complex from bottom to top. The fossils that
  have been found at the bottom (i.e., long ago) are equally as complex as any animal today, and
  are essentially the same as their modern counterparts. In reality, the fossils appear abruptly in
  the record, fully formed and fully functional without less adapted ancestors in the lower levels that
  would have preceded them in time. The fossil column presented in the Geologic Time Scale is
  nothing more than a statement of wishful evolutionary thinking.
- Second, this presentation implies that all life has come from one (or perhaps a few) common
  ancestors. But the Cambrian Period, the lowest (i.e. oldest) level containing extensive multicellular fossils, exhibits a virtual explosion of life as discussed earlier. Suddenly, every type of life
  is found every basic body style, including vertebrate fish. The abrupt appearance of diverse
  forms of life does not match with the evolutionary predictions of one form descending into many.
- Third, these diverse forms continue up the column (i.e. throughout time) with much the same appearance possessed at the start. Some body styles go extinct as you come up the column, but no new basic styles are introduced.

Certainly, the fossil record does not prove evolution and the Geologic Time Scale is misleading at best. On the other hand, the character of the fossil record does support creation due to the appearance of multiple types of phylum at the start with no evolutionary lineage, and continuance of those rather static kinds with limited adaptations into the present.

#### Darwin's Tree of Life.

Everyone has probably seen illustrations of the evolutionary "tree of life", created by Charles Darwin in his *The Origin of Species*, showing how all living things supposedly arose from an original amoeba-like ancestor. The tree started with an ancient ancestor at the bottom and blossomed upward into limbs, branches and twigs as life evolved with increasing diversity and complexity. While Stanley Miller's experiment seemed to establish that life could have arisen spontaneously in the chemical oceans of the earth long-ago, Darwin's theory accounted for how so many millions of species of organisms could slowly and gradually develop over huge expanses of time.

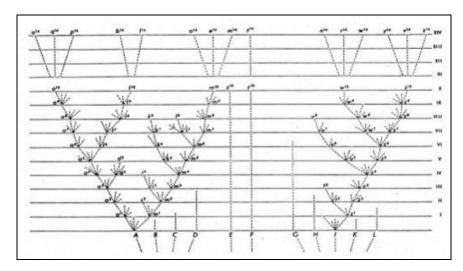


Figure 8: Tree Diagram from the Origin of Species

The key aspect of this tree is that if a population was exposed to one set of conditions, and another part of the population experienced other conditions, then natural selection could modify the two populations in different ways. Over time, one species could produce several varieties, and if these varieties continued to diverge, they would eventually become separate species. A key aspect of his theory was that natural selection would act, in his own words, 'slowly by accumulating slight, successive, favorable variations' and that 'no great or sudden modifications' were possible.

The problem with Darwin's tree is that the fossil evidence contradicts this pattern. As discussed above, in the fossil record, all the major groups of animals appear at about the same time – in the Cambrian explosion – with no fossil evidence of common ancestry, which contradicts Darwin's theory. Darwin himself knew the fossil record failed to support his tree. He acknowledged that major groups of animals – he calls them divisions – appear suddenly in the fossil record. That's not what his theory predicts, but Darwin believed that future fossil discoveries would vindicate his theory – but that hasn't happened. Instead, actual fossil discoveries over the last 150 years have turned his tree upside down by showing that the Cambrian explosion was even more abrupt and extensive than scientists once thought. The Cambrian explosion has uprooted Darwin's tree.

An interesting side note to ponder is the symbol that many Darwin followers have chosen to use to identify themselves on the back of their cars:

The symbol, of course, was created to make fun of the Christian symbol of a fish (called the 'lchthus' and used by the early Church to identify themselves). Consider, however, the symbol itself – a fish with legs. It turns out, that is *exactly* what Darwin's theory would lead one to believe in. We should find quite literally millions of these half-fish/half-legged creatures (known as transitional forms) in the fossil record as Darwin's gradual evolution over time would require. However, we find none. The fossil record itself and the symbol Darwin followers choose to identify themselves with contradict the very theory they believe in.

### **Galapagos Finches**

A good example of Darwin's Tree of Life is the Galapagos finches, which inspired Charles Darwin to frame his theory. The Galapagos Finches gave Darwin his inspiration for the theory of evolution. However, the problem is that subsequent observation of the finches found on the Galapagos Islands has actually refuted his theory. In the 1970s, after a drought hit the Galapagos Islands, researchers found that average beak size among the finches increased slightly (the thickness of a human thumbnail). Apparently, only larger birds could eat the tough, dry seeds that remained. This was hailed as a vivid demonstration of natural selection. But in the 1980s, heavy rains revived plant life on the islands, and the finch beaks returned to their normal sizes. In other words, the change was merely a cyclical variation in an overall stable population. The genetic structure of the finches didn't change, and the changes that did occur were only temporary – not permanent. Thus, the finches provide no evidence that small changes can add up for long periods in a single direction, which is the heart of Darwin's theory.

## **Ernst Haeckel's Drawings of Embryos**

German biologist Ernst Haeckel's sketches of embryos can be found in almost all biology books. By juxtaposing drawings of an embryonic fish, salamander, tortoise, chick, hog, calf, rabbit, and human, Haeckel graphically established that they all appeared strikingly similar in their earliest stages of development. It was only later that they became distinctly different.

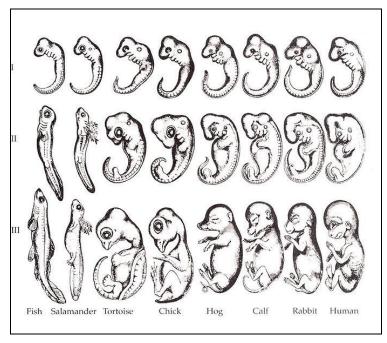


Figure 9: Ernst Haeckel's Embryos

The problem with Haeckel's drawings are that the similarities in the early stages were faked. Haeckel actually used the same woodcut to print embryos from different classes because he was so confident of his theory that he figured he didn't have to draw them separately. He literally doctored the drawings to make them look more similar than they really are. This was first exposed in the late 1860s when his colleagues accused him of fraud and yet this drawing is still used in Biology textbooks today.

Another problem with these drawings is that Haeckel cherry-picked his examples. He only shows a few of the seven vertebrate classes. He choose four mammal classes, but they are more similar than those that were omitted (they were all placental mammals, meaning mammals having a placenta). There are two other kinds of mammals that he didn't show. He used a salamander to represent amphibians rather than frogs which look very different. So, he stacked the deck in favor of his theory by picking representatives that came closest to fitting his idea. Then he went further by faking the similarities.

The final problem is that what Haeckel represents as the "early" stage of development is actually a midstage of development. In the earlier stages, the embryos look far more different from each other, but he deliberately omitted the earlier stages altogether. This is significant since Darwin's theory would require that the earliest stages show the most similarities as evidence of common ancestry.

### Horse Evolution<sup>66</sup>

Considering that there are 100,000 known fossil species, the fact that only a handful are proposed as examples of intermediate fossils serves to emphasize the remarkable lack of any direct evidence for evolutionary change in the fossil record. The two most often sighted fossil examples of evolution are the horse and the Archaeopyterx (Reptile to bird).

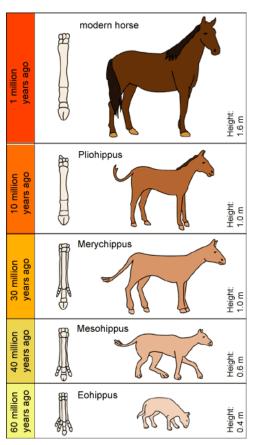


Figure 10: Horse Evolution

A great deal has been made of the horse series. The traditional view is that it provides powerful evidence of real evolution - and it is assumed that what happened in the evolution of the horse happened in other cases, but that the fossil links were not preserved (a fact without evidence).

The creatures represented in the horse series are based on bones that have been found in widely diverse locations (India, NA, SA, Europe, etc.) and have been randomly arranged in a series small to large. The earliest horse, the Eohippus, supposedly lived 60 million years ago and had three toes. The series represents horses going from 3 toes to 1 toe. However, this gradual reduction in number of toes is fictitious - there was no such trend.

The horse series is not as perfect as is commonly assumed or presented in school textbooks. The single line of gradual transformation (from small to larger, from dog-like to horse-like, from 3 toes to 1 toe) is largely made-up. Most of the morphological characteristics of the feet, skull and teeth which are traditionally supposed to exhibit a perfect sequence are simply not found in the fossil record.

Some basic problems with this horse series include:

- The range in size is no different than what is found in modern horses today (normal variation).
- The difference between Eohippus and the modern horse is relatively trivial, yet the two forms are separated by 60 million years and at least 10 different genera (genus, classes, kinds). If 10 genera separate Eohippus from modem horse then where are the many, many diverse linking forms we should be finding for all the other supposed evolutionary series (land mammal to whale, etc.) All these many life forms just seemed to have disappeared (or perhaps they never existed).
- The nicely ordered picture is not how we find the fossils in real life. In the fossil record, they are actually found at the same layer of strata indicating they all lived at the same time.
- The ribs of the horses in the diagram present a problem when they are lined up small to large.
   They do not follow the expected sequence according to evolution. The actual sequence goes 18 15 19 18, which is counter to evolution where you would expect a sequential increase in the number of ribs as the horse evolved into a larger and larger creature.
- Even many scientists have abandoned the idea of horse evolution. Dr. David Raup, curator of the Field Museum of Natural History in Chicago, writes: "Classic cases ... such as the horse in North America have had to be modified or discarded as the result of more detailed information."

Unfortunately, horse evolution is sill frequently cited by Darwinists as evidence for macro evolution.

## The Archaeopteryx (Missing Link)

A second example of an intermediate life form often used is that of the Archaeopteryx, a supposed transitional creature between reptile and bird. Six examples have been found in the fossil record to date.

The Archaeopteryx is a fossil that is so astounding that one paleontologist called it "a holy relic of the past that has become a powerful symbol of the evolutionary process itself." It's the most famous fossil in the world: the *archaeopteryx*, or "ancient wing", is a creature dating back 150 million years. With the wings, feathers, and wishbone of a bird, but with a lizard-like tail and claws on its wings, it was hailed as the missing link between reptiles and modern birds. Here is a half-bird, half-reptile that 'proves' that paleontology backed up Darwin's theory. The discovery of the archaeopteryx (pronounced ar-key-OPT-er-icks) was made two years after Darwin's book in a German quarry.

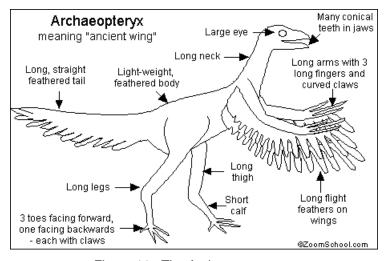


Figure 11: The Archaeopteryx

The evidence used to suggest Archaeopteryx as an intermediate includes it's reptile-like characteristics, which include its (1) teeth, (2) claws on its wings and (3) its long spinal tail as well as its bird-like characteristics, which include its (1) features, (2) a wishbone and (3) a bird's pelvis.

The overall evidence for this creature being a bird is compelling:

- No other creature except birds have feathers and a wishbone
- The feathers are modem feathers, with an asymmetrical design
- As for the claws on the wings, three birds alive today have claws: the Ostrich (which is more reptile-like than Archaeopteryx), the Touraco, and the Hoactizn
- Paleontologist James Jensen of Brigham Young University has found modem bird fossils older than Archaeopteryx, demonstrating that birds lived in early ages
- The bones are hollow, like birds
- The cranium is bird-like and not reptile-like.

In order to demonstrate the transition from reptile to bird, we need to comprehend the full scope of the transitional process:

- Development of feathers from scales
- Reform of the respiratory system
- Reform of the skeletal system with the bones becoming more porous, hollow, and in many cases fused
- Reform of the digestive system
- Reform of the nervous system, especially the brain and eyeball
- · Construction of bills and beaks
- Mastery of nest building
- Acquisition of flight and all the homing capabilities
- Development of a unique sound-producing organ

Success in transitioning any one of these components is hard to visualize. When we add the fact that all of these characteristics have to transition and move forward, while keeping the organism in operation at all times, the difficulty becomes overwhelming.

So what can we infer about the archaeopteryx? It doesn't necessarily demonstrate Darwinian evolution. The question is, do you get from a reptile to a bird – an astonishingly huge step – by some totally natural process or does this require the intervention of a designer. The archaeopteryx doesn't show us one way or the other. There are many strange animals around today that no one considers transitional but which have the characteristics of different classes (i.e. the duck-billed platypus). The Archaeopteryx is a bird, but not part reptile. Further, Paleontologists are all pretty much agreed that the Archaeopteryx is not an ancestor to modern-day birds since we have fossils that look most like the reptilian ancestors of birds occurring tens of millions of years later in the fossil record. As such, the Archaeopteryx appears to just be an extinct species of bird.

#### Java Man

Perhaps the most widely recognized "icon" of evolution is Java Man – a half man, half ape being that graces the cover of many books including the 1998 edition of *The Origin of Species*. This 'man' with his sloping forehead, heavy brown, jutting jaw, receding chin and bemused expression is exactly what most people think a blend of ape and man should look like. "Java Man" was discovered on an Indonesian Island in 1891 where Dutch scientist Eugene Dubois found an ape-like skull cap and then a year later, 50 feet away from where he found the skull, he found a human-like thigh bone and assumed they went

together. The fossils were dated at 500,000 years old. These bones are frequently considered the "missing link" between man and ape.

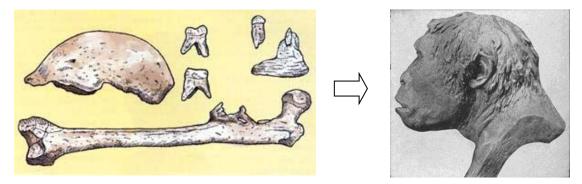


Figure 12: Java Man

- The problem with Java man is that the fossils consisted of nothing more than a skullcap, a thigh bone and three teeth. The rest was imagination evolutionary expectation of what he should have looked like if Darwinism were true. In fact, Dr. Dubois went to the Far East with the deliberate intention of finding the "Missing Link" when he stumbled upon Java Man.
- There was a lot of controversy at the time about whether the bones were human or ape. The leg bone was definitely human, but what about the skull cap? Did they for sure go together? The femur was found 50 feet away from the other fossils.
- The skullcap, according to prominent Cambridge University anatomist Sir Arthur Keith, was distinctly human and reflected a brain capacity well within the range of humans living today.
- The date of the fossils (500,000 years old) was based on the need for a good fit into evolutionary ideas of geology, not on actual geological records (the geology of the area at this time was not well known nor were there any other methods available for dating fossils just guess work based on the assumed evolutionary model).
- Dubois kept hidden for 30 years the fact that he found two human skulls in the same area. To
  reveal that information would have discredited his Java Man. Dubois' explanation of the distance
  between the leg bone and skull cap was that the bodies floated down the river.
- In 1940 Dubois admitted that what he found was the skull of a large gibbon (a small ape). The entire case for Java Man rested on the assumption that the ape-like skull cap and the human leg bone came from the same individual. Java Man turned out to be just a case of searching for evidence to support a pre-conceived idea.
- A 342-page scientific report from a fact-finding expedition of nineteen evolutionists subsequently demolished Dubois' claims and concluded that Java man played no part in human evolution.

## **Neanderthal Man**

Fossil fragments of Neanderthal man were first found in 1856. They consisted of a skull cap and some limb bones. The diagnosis of the time was that this was a human and that the vertebrae were severely deformed because of arthritis and rickets. In 1908, an almost complete skeleton of a Neanderthal Man was found in France. A famous paleontologist (Marcelle Boule) was called in to reconstruct it.

Boule emphasized the ape-like features in his reconstruction. He ignored the scientific evidence of the time, based on his pre-conceived notions of evolution, and decided it must be made to look ape-like. This view dominated the world for 44 years, until two doctors (one from John Hopkins and the other from London) published a paper in 1957 which recognized that there were serious problems with the reconstruction. The study showed that Neanderthal man stood erect & walked normally as modern

humans. Today Neanderthal man is known to be fully human with a bone deformity. However, school textbooks have not been updated to reflect this scientific knowledge and still categorize Neanderthal man according to outdated information.

## Ramapithecus

Ramapithecus was found in India in the 1930s. He was considered to be a hominid (human ancestor). This assertion was based entirely on the findings of some jaw fragments and a few teeth.

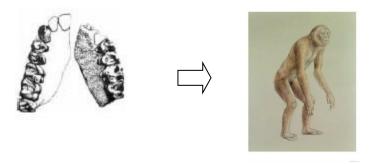


Figure 13: Ramapithecus

Until 1970 these were the only fossils of the creature found. As more fossil evidence was found in the 1970s, it became obvious that it had nothing to do with human evolution. In addition, scientists have found baboons living in Ethiopia today which have the same teeth structure as Ramapithecus. Today Ramapithecus has all but been discarded as a possible "missing link".

Note the picture to the right. This drawing was made from just a few teeth and a jaw fragment and was published world-wide as factual evidence of human evolution. Here is the key question: when these fossil fragments were found, was there any hair found with the bones? No. Was the nose found? No. Were the eyeballs found? No. How do we know it stooped over since no hip or knee joints were found? So how do scientists know what this creature really looked like if all they found was a few teeth and some jaw fragments? The answer is that scientists really don't know. Artists are hired to draw pictures that match the preconceived notion that scientists have.

#### Piltdown Man

In 1908, a portion of a human skull and part of a lower ape-like jaw were found. The fossil fragments were estimated to be 500,000 years old. At first there were many skeptics. However, as a few more fragments (the exact pieces needed to convince the skeptics) were found, the vast majority of paleontologists began to accept Piltdown as legitimate.

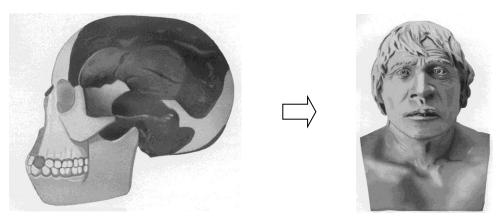


Figure 14: Piltdown man

In 1953 Piltdown was discovered to be a fraud after almost 40 years of being taught in the school system as the real missing link. It was discovered that the lower jaw and tooth were from an orangutan (the tooth had been filed). The skull was dated at 520 - 720 years old and chemically dyed to appear old. Parts of the lower jaw had been broken to hide the fact that it did not fit with the skull.

#### Nebraska Man

Nebraska Man illustrates one of the most far-fetched cases of misrepresentation in the history of the search for the missing link. Nebraska Man was discovered in 1922 and was dated to be 1-million years old. From this fossil, which was just a single tooth, scientists constructed a complete model of Nebraska Man, his family and environment.

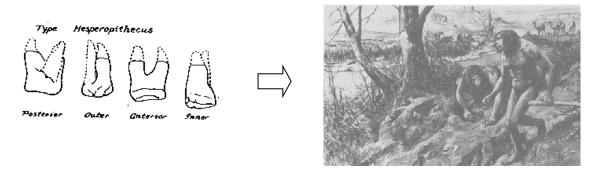


Figure 15: Nebraska Man

In 1928 it was discovered that the fossil evidence was nothing more than a pig's tooth. When the mistake was discovered, it was not considered news worthy. Nebraska Man was still being cited as evidence for evolution into the 1940s.

## Lucy

Lucy was discovered in 1974 by Donald Johanson. He found a 40% complete skeleton and dated it at three and a half million years old. The compelling evidence for Lucy being an intermediate form was:

- An arm / leg ratio of 83.9%
- The hip and pelvis, which was evidence it walked upright
- The knee joint, which was evidence it walked upright

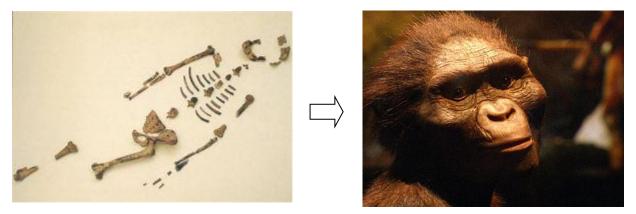


Figure 16: Lucy

Lucy is still being shown in exhibits around the country today. The problems with Lucy are the following:

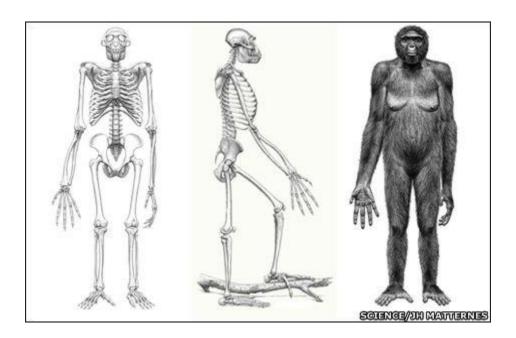
- The leg bone was broken in two places and one end was crushed. Scientists guessed at the length of the leg, which invalidates the arm / leg ratio used as evidence to support the conclusion.
- The hip and pelvis was found as a complete fossil. Scientists considered it to be distorted, so they reshaped it to make it look as if it walked upright. This was the only hip they found.
- The knee joint was found over a mile away and 200 feet deeper in the strata from the rest of the bones.

Based on the above, it's clear what we really have are the fossil remains of two different creatures, which were fitted together to form a make-believe creature and create evidence for a pre-conceived notion.

### Ardi

Ardi (Ardipithecus ramidus), was announced in 2009 and proclaimed as the definitive "missing link" and claimed as the oldest human ancestor ever revealed. Ardi is the fossilized skeletal remains of a creature discovered in Ethiopia in 1992 and estimated from radiometric dating to be 4.4 million years old.

The discovery was claimed to have great significance as Ardi is the oldest known hominid fossil. The discovery was made by a team of scientists led by UC Berkeley anthropologist, Tim D. White. Researchers infer from the form of Ardi's pelvis and limbs and the presence of her opposable big toe that she was a bipedal when moving on the ground (walked on two legs), but quadrupedal when moving about in tree branches (using arms and legs).



Ardi is compelling since it is a complete skeleton, but there are numerous problems with Ardi:

• Ardi was initially found in 1992, but not released to the public until 2009. Why did it take over 15 years for the reports on this fossil to be finally published? The answer as given by Tim White was due to the fact the bones were so brittle, "squished," "chalky" and "erod[ed]" when cleaned such that many of the bone fragments had to be "reconstruct[ed]"—and that took a long time. The process was described as a "Herculean effort". "The bone is so chalky that when I clean an edge it erodes, so I have to mold every one of the broken pieces to reconstruct it" said White. Of course a key feature in demonstrating that an organism was bipedal is the precise shape of its pelvis. But look at what the media stories on Ardi reported on the condition of the pelvis and other bones that were discovered:

One problem is that some portions of Ardi's skeleton were found crushed nearly to smithereens and needed extensive digital reconstruction. "Tim [White] showed me pictures of the pelvis in the ground, and it looked like an Irish stew," says Walker. Indeed, looking at the evidence, different paleoanthropologists may have different interpretations of how Ardi moved or what she reveals about the last common ancestor of humans and chimps.<sup>69</sup>

But the team's excitement was tempered by the skeleton's terrible condition. The bones literally crumbled when touched. White called it road kill. And parts of the skeleton had been trampled and scattered into more than 100 fragments; the skull was crushed to 4 centimeters in height.<sup>70</sup>

After Ardi died, her remains apparently were trampled down into mud by hippos and other passing herbivores. Millions of years later, erosion brought the badly crushed and distorted bones back to the surface. They were so fragile they would turn to dust at a touch.<sup>71</sup>

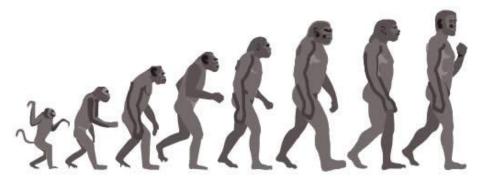
"Chalky"? "Squished"? "Badly crushed and distorted"? "Needed extensive digital reconstruction"? Given the importance of Ardi and the claim that it is the "Rosetta stone" of fossils, how much should we really trust a skeleton that was initially "crushed to smithereens" and "would turn to dust at a touch"? Claims of bipedalism often depend upon precise measurements of the angles of key bones such as the pelvis, femur, and knee-bones. But if these bones were discovered in such a crushed, squished, etc. form, determining the precise contours of these bones might become a highly subjective exercise which might explain why the reconstruction took 15 years and involved more than 47 scientists. At the end of the day, it's difficult to make solid claims about extremely unsolid bones. <sup>72</sup>

- Ardi was not found as a complete skeleton, but rather discovered with "the remains of 35 other individuals, plus birds, animals and plants." How did scientists know which bones went with which individual or animal? They didn't. In fact, the process took more than 15 years and more than 47 scientists to reconstruct Ardi, much of which was done digitally on the computer. This is a bit analogous to taking 35 different Lego sets and mixing the parts together and then asking someone to reconstruct one of the sets. If you are one of my two sons, what you will get from those Legos will always be space ships, regardless of what sets were actually mixed up to begin with because that is what my boys always build with Legos. So too, what might one expect when the fossil remains of 35 different species are mixed together and 47 evolutionary biologists are asked to reassemble them? Answer: the elusive 'missing link' or 'Rosetta Stone' as Ardi has been called.
- Given the state of the bones, it isn't even clear that Ardi was bipedal. In fact, one Science article is reporting some serious scientific skepticism about Ardi (Ar. ramidus) being bipedal:

However, several researchers aren't so sure about these inferences. Some are skeptical that the crushed pelvis really shows the anatomical details needed to demonstrate bipedality. The pelvis is "suggestive" of bipedality but not conclusive, says paleoanthropologist Carol Ward of the University of Missouri, Columbia. Also, Ar. ramidus "does not appear to have had its knee placed over the ankle, which means that when walking bipedally, it would have had to shift its weight to the side," she says. Paleoanthropologist William Jungers of Stony Brook University in New York state is also not sure that the skeleton was bipedal. "Believe me, it's a unique form of bipedalism," he says. "The postcranium alone would not unequivocally signal hominin status, in my opinion." Paleoanthropologist Bernard Wood of George Washington University in Washington, D.C., agrees. Looking at the skeleton as a whole, he says, "I think the head is consistent with it being a hominin, ... but the rest of the body is much more questionable." The postcranium alone would not unequivocally signal homining to the says, "I think the head is consistent with it being a hominin, ... but the rest of the body is much more questionable."

Ardi thus leaves us with 2 options: either she wasn't an ancient upright walking hominid and isn't anything close to a human ancestor, or our previous—and confidently touted—theories about how bipedality evolved in humans were wrong. Either way, it casts serious doubt on this discovery and its conclusions.

 Another interesting result of the Ardi discovery was that Biologists have now concluded that humans didn't actually evolve from chimps. "Rather than humans evolving from an ancient chimplike creature, the new find provides evidence that chimps and humans evolved from some long-ago common ancestor – but each evolved and changed separately along the way." Think about this conclusion for a minute – for 150 years, Biologists have taught that humans descended from apes. Most people are very familiar with the diagram below shown in almost all Biology textbooks:



We are now told that as part of this single discovery, Biologists have concluded that the fundamental assumption – that humans evolved from chimps – is wrong. Oops. Sorry. Now we learn that chimps and humans actually evolved as separate and distinct species and not one from the other. Although none of the popular press discussed this implication, the result of the Ardi discovery actually contradicts traditional evolutionary thinking and supports Intelligent Design. If humans didn't evolve from chimps, then what did they evolve from? Biologists have no answer – they just know now that the common wisdom was wrong. The important point is if one fossil find

can completely change the thinking about how humans evolved, how limited must the evidence be for evolution in the first place? As we've seen from the above examples – very, very limited.

### Others "Icons" of Evolution

Other "icons of evolution" that have been put forth to 'prove' Darwin's theory include the following:

- Coelacanth Fish: These were touted as being extinct for 70-million years. Coelacanth fish were claimed to be an intermediate link between fish and amphibians because the front fins appeared to be turning into legs. However, in the 1930's fisherman caught a living coelacanth. They are still 100% fish and their fins are still fins despite their appearance.
- **Gills.** One evidence that is frequently put forth is that all human embryos go through a stage in which they actually develop gill-like structures on their necks. Encyclopedia's still state this and in 1996, *Life* magazine described how human embryos grow "something very much like gills," which is "some of the most compelling evidence of evolution." Even some contemporary biology textbooks assert that human embryos have "gill pouches" or "gill slits". The problem is this just isn't true these structures are not gills even fish don't have gills at this stage. They're not even gill slits they are just abnormalities in the way that the skin grows around the neck at this stage of the human embryo development..
- **Vestigial Organs**. It was once taught that the human body has over 100 vestigial (left-over or useless) organs from our days of evolving. Even today many biology textbooks still teach some of these. However, over the past several decades, medical doctors have demonstrated that there are *no* vestigial organs in the human body. What was once thought as useless organs have been found to have specific purposes as we have learned more about the human body.
- Peppered Moths. It was once taught that when the population of peppered moths appeared to have shifted from light to dark, it was proof of evolution. This was nothing more than an example of natural selection (survival of the fittest). The moths were still peppered moths. Interestingly, the original theory that the light colored moths were in greater number because the darker months stood out more on the light colored bark of trees and were easier to spot by birds turned out to be a fraud. It has since been discovered that the peppered moth did not even land on the trees that evolutionists put forth as evidence for their color shift rather they were pasted there for pictures used in textbooks by scientists.
- Similar Bone Structure (homology). Another evidence put forth concerns the similarity of bone structures in a bat's wing, a porpoise's flipper, a horse's leg and a human hand. The argument is made that although these limbs have been adapted for different uses, their underlying structure is proof they all share a common ancestor. The problem with this theory is that similarity could equally point to a common designer or design, not toward descent with modification. Similarity alone isn't sufficient proof. The fact that a 1954 Corvette is similar to a 1955 Corvette is because of a consistent designer. Successive models of the Corvette are based on plans drawn up by engineers, so there is intelligence at work to guide and implement the process. If you wanted to demonstrate that similar features resulted from a Darwinian process, you would have to show that once you somehow got an automobile, the natural forces of rust, wind, water and gravity would turn one model into its successor.
- The Primordial 'Soup'. Most scientists talk of a primordial soup ever since 1871, when Charles Darwin wrote a letter in which he speculated that life might have originated when "a protein compound was chemically formed...in some warm little pond, with all sorts of ammonia and phosphoric salts, light, heat, electricity, etc. present." The problem is there isn't any evidence of such an ancient chemical ocean. Any such ocean would have to be rich in amino acids and therefore would need a lot of nitrogen, because amino acids are nitrogenous. So, when we examine the earliest sediments of the Earth, we should find large deposits of nitrogen-rich minerals. Such deposits have never been found and the nitrogen content of early organic matter

is relatively low – just .015 percent. From this we can be reasonably certain there was never any substantial amount of primordial soup on Earth.

# The Death of Darwinism<sup>77</sup>

Like all other scientific theories, Darwinian evolution must be continually compared with the evidence. If it does not fit the evidence, it must be reevaluated or abandoned – otherwise it is not science, but myth.<sup>78</sup>

Looking at the doctrine of Darwinism, one would have to believe that:

- Nothing produced everything
- Non-life produced life
- Randomness produced fine-tuning
- Chaos produced information
- Unconsciousness produced consciousness
- Non-reason produced reason

Based on this, we have to conclude that Darwinism would require a blind leap of faith that does not fit with the current mounting evidence discussed in this chapter to the contrary. For example, naturalistic processes have utterly failed to explain how non-living chemicals could somehow self-assemble into the first living cell (discussed in more detail in the next chapter). Not only are there no viable theories, but there are none are on the horizon. This is one of the greatest myths of our time.

In addition, the fossil record has stubbornly refused to confirm the grand claims of Darwinian transitions. Despite innumerous discoveries since Darwin's day, "the intermediates have remained as elusive as ever" said Michael Denton. Rather than harmonize into a consistent case for Darwinism, the fossil record cannot reasonably account for the monumental leaps Darwinism must make, for example, between fish and amphibians or amphibians and reptiles. The most glaring problem, of course, is the Cambrian explosion. The majority – or according to some experts, all – of the world's forty phyla (the highest category in the animal kingdom) virtually sprang forth with unique body plans more than five hundred million years ago. The sudden appearance of these radically new life forms, devoid of prior transitions, has turned Darwin's Tree of Life on its head.

# What Do The Scriptures Say?

If Darwinism is not the answer, then what is? The Bible puts forth the following as evidence for an intelligent creator, known as God or Lord:

In the beginning, God created the heavens and the earth. - Genesis 1:1

The Lord God formed the man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being. – Genesis 2:2

You alone are the Lord. You made the heavens, even the highest heavens, and all their starry host, the earth and all that is on it, the seas and all that is in them. You give life to everything, and the multitudes of heaven worship you. — Nehemiah 9:6

It is I who made the earth and created mankind upon it. My own hands stretched out the heavens; I marshaled their starry hosts. – Isaiah 45: 12

Have we not all one Father? Did not one God create us? - Malachi 2: 10a

When they heard this, they raised their voices together in prayer to God. "Sovereign Lord," they said, "you made the heaven and the earth and the sea, and everything in them. – Acts 4:24

For by him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things were created by him and for him. He is before all things, and in him all things hold together. — Colossians 1:16-17

And he swore by him who lives forever and ever, who created the heavens and all that is in them, the earth and all that is in it, and the sea and all that is in it, and said, "There will be no more delay!" — Revelations 10:6

A complete list of references in the Bible supporting creation is contained in the Appendix B.

# **Evolution Can't Explain the Creation of Life**

The evidence from Biology and the Fossil Record discussed in this and the previous chapter logically brings us to the conclusion of our third "proof" discussed in the introduction.

Proof from Life	Evolution (time plus chance) can't explain the creation of life.		
	<ul> <li>Life never spontaneously arises from non-life. Life always comes from life.</li> <li>There has never been an observed case of macroevolution. Never.</li> <li>Beneficial mutations don't occur; and mutations never form new species.</li> <li>Survival of the fittest (natural selection) can't explain the arrival of the fittest.</li> <li>The fossil record does not support macroevolution - there are no transitional life forms. Evolution predicts millions upon millions of transitional life forms.</li> </ul>		

Life couldn't have been created through the process of evolution. As we have seen from the arguments presented, time plus chance can't explain the origin of life. Not only have there never been recorded cases of life spontaneously generating or macroevolution, but the core processes for evolution – mutation and natural selection don't lead to the type of evolution we need to explain not only the origin of life, but also the growth in the sophistication in life over time.

Further, the fossil record and the nature of the species in the world we live in don't support evolution. What more can we conclude than evolution isn't the answer to the question of human origins?

# **Discussion Questions**

- 1. Were any of the "Icons of Evolution" described in this chapter instrumental in shaping your opinions? How so?
- 2. What was your personal view of Darwinism before reading this chapter or studying Intelligent Design?

- 3. Why do you believe the "Icons" described in this chapter have survived the passage of time even though they are seriously flawed?
- 4. Darwin admitted that the Cambrian explosion was "inexplicable" and a "valid argument" against his theory, but he predicted future fossil discoveries would vindicate macroevolution. Why do you think recent fossil discoveries have not supported his view? Why do you think so many still hold to Darwinism?

# **CHAPTER 6**

# **EVIDENCE FROM BIOCHEMISTRY**

There are no detailed Darwinian accounts for the evolution of any fundamental biochemical or cellular system. Only a variety of wishful speculations. – James Shapiro, University of Chicago

We have always underestimated the cell...The entire cell can be viewed as a factory that contains an elaborate network of interlocking assembly lines, each of which is composed of a set of large protein machines...Why do we call [them] machines? Precisely because, like machines invented by humans to deal efficiently with the macroscopic world, these protein assemblies contain highly coordinated moving parts. – Bruce Alberts, President, National Academy of Sciences

The world is too complicated in all its parts and interconnections to be due to chance alone. I am convinced that the existence of life with all its order in each of its organisms is simply too well put together. Each part of a living thing depends on all its other parts to function. How does each part know? How is each part specified at conception? The more one learns of biochemistry the more unbelievable it becomes unless there is some type of organizing principle – an architect for believers, a mystery to be solved by science (even as to why) sometime in the indefinite future.

- Allan Sadage, one of the most respected scientists of our age<sup>79</sup>

The question of 'how did life originate?' which interests us all, is inseparably linked to the question 'where did the information come from?'...Anyone who wants to make meaningful statements about the origin of life, would be forced to explain how the information originated. All evolutionary views are fundamentally unable to answer this crucial question. — Dr. Werner Gitt<sup>80</sup>

In the previous chapters, we examined the evidence and saw how evolution can't explain the origin of life. Now, it's one thing to say that evolution can't explain the creation of life, but it's quite another to say that life is the result of an intelligent creator. In this chapter, we'll examine the evidence from biochemistry to answer the question if evolution can't explain the origin of life, what can?

# Darwin's Test81

If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down.

— Charles Darwin

We can say that Darwin's theory has absolutely broken down - Michael Behe

Life as we know it is essentially a molecular phenomenon. If Darwinian evolution is going to work, it has to succeed at the microscopic level of amino acids, proteins, and DNA.

In the days of Darwin, scientists could see the cell under a microscope, but given the limited technology at the time, all scientists could observe is that the cell looked like a little glob of Jello, with dark spots as the nucleus. Scientists observed that the cell could do interesting things – it could divide, it could move around, etc. – but they didn't know *how* it did anything. Some believed all you had to do was zap the gelatinous material with electricity and it would come alive – remember that in the days of Darwin, scientists had a very limited understanding of electricity as well. Most scientists speculated that the deeper they delved into the cell, the more simplicity they would find. However, over the last half-century, the opposite happened.

Now that scientists have probed to the molecular level, we've found that there is complexity all the way down. Cells are horrendously complicated and they're actually run by micro machines of the right shape, the right strength, and the right interactions. The existence of these machines challenges Darwin's test. In Darwin's *Origins of Species*, Darwin stated: "If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down." This chapter will evaluate whether Darwin's test has been met.

# **Building Blocks**

Before looking at the cell, it's worth reviewing the basic building blocks of a cell. All complicated systems are made out of building blocks. Different building blocks combine to form the various components necessary to make a complete system work. This is true in biology or mechanical systems. A living (or biological) system is composed of the following core components:

Table 5: The Building Blocks of Biological Systems

Component	Description	Picture
Atom	The atom is a basic unit of matter consisting of a dense, central nucleus surrounded by a cloud of negatively charged electrons. The electrons of an atom are bound to the nucleus by an electromagnetic force. At the center of an atom are protons and neutrons. An atom is classified according to the number of protons and neutrons in its nucleus which determine the chemical element (such as hydrogen, helium, etc.) A group of atoms can be bound to each other, forming a molecule. The name atom comes from the Greek and means 'uncuttable', something that cannot be divided further.	
Molecule	A molecule is defined as a sufficiently stable group of at least two atoms combined in a definite arrangement and held together by very strong chemical bonds. A molecule may consist of atoms of the same chemical element, as with oxygen (O <sub>2</sub> ) which consists of two of the same atoms, or of different elements, as with water (H <sub>2</sub> O) which consists of two hydrogen atoms and one oxygen atom.	
Amino Acid	An amino acid is a special kind of molecule. It is an organic compound made of carbon, hydrogen, oxygen, nitrogen, and (in some cases) sulfur bonded in characteristic formations. There are more than 2,000 different types of Amino Acids. These molecules are particularly important because chains of amino acids form proteins, which are critical to life. Amino acids come in two shapes, left-handed and right handed which differ in which side the organic group (R group) is attached to.	H R R

Protein	Proteins are large organic compounds made of amino acids arranged in linear chains. The sequence of amino acids in a protein is defined by a gene and encoded in the genetic code. Proteins are essential parts of organisms and participate in every process within cells. There are over ten thousand proteins in a cell	
Cell	The cell is the structural and functional unit of all known living organisms. It is the smallest unit of an organism that is classified as living, and is often called the building block of life. Some organisms, such as most bacteria, consist of a single cell. Other organisms, such as humans, are multicellular (humans have an estimated 100 trillion or 10 <sup>14</sup> cells). The word <i>cell</i> comes from the Latin <i>cellula</i> , meaning, a small room.	
Organ & Systems	An organ is a group of tissues (which itself is a group of cells) that perform a specific function or group of functions. A group of related organs is an organ system. Examples of organs in humans include the skeletal system, respiratory system, digestive system, muscular system, nervous system, circulatory system or reproductive system. The word organ comes from the Latin <i>organum</i> , meaning instrument or tool.	
Species	A species is often defined as a group of organisms capable of interbreeding and producing fertile offspring. While in many cases this definition is adequate, more precise measure would be based on similarity of DNA. The commonly used names for plant and animals sometimes correspond to species: for example, "lion," "walrus," and "Camphor tree" — each refers to a species. In other cases common names do not: for example, "deer" refers to a family of 34 species, including Red Deer and Elk. These two species were once considered a single species, illustrating how species boundaries may change with increased scientific knowledge.	

Although the building blocks of living organisms are sometimes hard to understand (especially at the cellular level), the following is an analogy which may prove useful:

Table 6: A Comparison of Building Blocks of Different Systems

	Biology	Factory
Smallest Component	Atoms	Material (i.e. metal)
	Molecules	Parts
	Amino Acids	Sub-component
	Proteins	Components
7	Cells	Machine
v	Organs/Systems	Line
Complete System	Species	Factory

Instruction Set	DNA	Process Manual /	
		Blueprint	

Biological systems, as described above, start with atoms. Atoms combine to form molecules, which themselves combine to form amino acids (a special type of molecule), and then proteins, cells, organs and finally a complete system.

In a Mechanical system (i.e. a factory), the basic unit of material is typically metal. Metal forms different parts of a machine which combine to create a sub-component (i.e. a distributor cap in a motor), which combine to form components (i.e. a complete ignition system) which combine with other components to form a machine (i.e. a drill press). Numerous machines are arranged in a line which performs different functions to produce something. A factory typically contains numerous lines to produce a finished product (i.e. a car).

Common to these different systems is an instruction set. Even with all the components and complete systems, no work can be performed unless there are instructions, which tell the system how to operate. In biological systems, these instructions are known as DNA. In a mechanical system, the instruction set is typically a process manual or blueprint.

It's useful to keep these different analogies in mind as we delve into the fundamental elements of a cell and explore how they work. The core question to be asked is whether these elements exhibit the characteristics of a system that could have been created by random chance and time, or whether they exhibit the characteristics of a system created by an intelligent creator.

# Irreducible Complexity<sup>83</sup>

The concept of irreducible complexity was developed by scientist Michael Behe. A system is considered irreducibly complex if it has a number of different components that all work together to accomplish the task of the system. As such, if you were to remove one of the components, the system would no longer function. An irreducibly complex system is highly unlikely to be built piece-by-piece through Darwinian processes, because the system has to be fully present in order for it to function.

An example is a mousetrap. It is built to crush a mouse and every part – from the wooden platform, to the metal hammer, to the spring which extends to press the platform and the hammer to trap, to the catch itself which traps the mouse and the metal bar which connects to the catch and holds the hammer back when the trap is charged. If you take any of these parts away – the mousetrap fails to work entirely. It doesn't become less efficient – it's broken and doesn't work at all. And notice that you don't just have the 5 parts, but they are put together in the right place to make them work. A mousetrap defies a Darwinian explanation.

Why? Because according to Darwin, each incremental change caused by a mutation must provide some sort of advantage to the organism. A mutation which lengthens the beak of a bird, for instance, might make it easier for a bird to find food. Natural selection can then work "selecting" this new attribute which provides a natural advantage. However, natural selection only selects for a *natural advantage*. An organism developing an attribute that doesn't provide any sort of advantage will not be selected.

Our knowledge of cells has exploded in the last half century. Unlike the gelatinous blob that scientists observed in Darwin's day, powerful technologies have shown us that cells – the basis units of life – are packed with circuits, assembly instructions and miniature machines. Darwin could never have conceived of this. The problem for Darwinists is that life is full of these molecular machines. Molecular machinery lets cells move, reproduce, and process food. In fact, every part of the cell's function is controlled by complex, highly calibrated machines. If a device like a simple mousetrap requires intelligent design, then what about the finely tuned machines of the cellular world? If evolution can't explain them, then scientists should be free to consider other alternatives.

Similar to the mousetrap, the problem with a biological machine is that you can't produce them suddenly, because they are too complicated – there are too many parts and the odds would be prohibitive. Further, you can't produce them directly by numerous, successive, slight modifications of a precursor system, because any precursor system would be missing a part and consequently couldn't function. As a result, there would be no reason for it to exist since natural selection chooses systems that are already working.

Biological examples of irreducibly complex systems include:

- The Eye. The fossil evidence is not helpful. The first occurrence of an eye in the geological strata is on the trilobite, which already has a very complex eye. There are no intermediates in the fossil record leading up to the trilobite. The fossil record at its lowest layer (Cambrian layer) contains one-celled organisms and then jumps to complex organisms with complex eyes with *no* intermediates in-between. Part of an eye is not useful. Unless the eye is whole, it has no real function. The eye is an irreducibly complex system.
- Cells. There are over ten thousand proteins in a cell. A recent study in *Science* magazine found that the proteins in a simple yeast cell don't function alone, but they function as complexes of half a dozen proteins or more. Up to fifty proteins are stuck together like cogs in a machine. Of the other fifty percent, most are in complexes of three or four. Very few work as single proteins. This represents a huge problem not only for yeast, but for other cells too. Since the mutation rate of cells is very low, how does one assemble a cell by evolution? Evolution must build things from the bottom up. The problem is if you remove a component from the cell, it's broken it ceases to work. The cell is an irreducibly complex system.
- The Intra-Cellular Transport System. Cells have various compartments, like rooms in a house, with more than twenty different sections in a cell. Each compartment is sealed off by a membrane. Cells are constantly getting rid of old stuff and manufacturing new components which are designed to work in one room, but not the others. The system that manages all of this is called the intra-cellular transport system. Think of molecular trucks, highways for them to travel on, a system to identify which components are supposed to go into which truck, a signaling system to let the right protein onto the right truck. The truck has to know where it's going, which means a signal on the truck itself and a complementary signal on the compartment where the truck is supposed to unload its cargo. The truck has to have a way to unload the cargo. So, there are numerous components, all of which have to be in place or nothing works. Without the signal, or the truck, or the highway, the system doesn't work. It's hard to imagine that this system was self-assembled by gradual modification over the years.
- Blood Clotting. The blood clotting process in animals is a highly choreographed cascade of ten steps that use about twenty different molecular components. Without the whole system in place, it doesn't work and a clot in the wrong place (say, the heart, brain or lung) and the whole system dies. The key to the system is to get the clot in the right place when it's needed because too long and the system bleeds to death. To create a perfectly balanced blood-clotting system, clusters of protein components have to be inserted all at once. Like the other systems described, the blood clotting system is irreducibly complex, which rules out gradualistic Darwinian evolution.
- **Ribosomes**. The cell is like a factory which can produce new parts to keep it functioning. Most new components of a cell are made in a central location on things called ribosomes. A ribosome is a collection of fifty or so large molecules containing more than one million atoms. It is essentially an automated factory that can synthesize any protein that it is instructed to make by DNA. Given the correct genetic information, ribosomes can construct any protein-based biological machine, including other ribosomes regardless of the complexity.

It is astonishing to think that this remarkable piece of machinery, which possesses the ultimate capacity to construct every living thing that has ever existed on Earth, from a giant redwood to the human brain, can construct all its own components in a matter of minutes and...is of the order of several thousand million million times smaller than the smallest piece of functional machinery ever constructed by man. – Michael Denton<sup>84</sup>

- Cilia. Cilia are whip-like hair on the surface of cells. They move together in order perform functions like removing particles from your respiratory tract that you accidentally inhale. In fluid, the cilia literally 'row' the cell from place to place. Scientists used to think these were simple hairs, but they beat back and forth. What enables cilia to do this? It turns out a cilium is made up of about two hundred protein parts. The actual mechanisms are quite complex and consist of rods, linkers and motors. Like the mousetrap, this system is irreducibly complex because you can't get motion until you've got all the different components together.
- Bacterial Flagella. While cilia act like oars to move cells, it was discovered in 1973 that flagellum work like a rotary propeller or outboard motor. Only bacteria have them. This biological machine consists of a whip-like propeller which is attached to a drive shaft by a hook protein, which acts as a universal joint, allowing the propeller and drive shaft to freely rotate. Several types of proteins act as bushing material to allow the drive shaft to penetrate the bacterial wall and attach to the rotary motor. The propeller spins at 10,000 RPM (more than almost any car) and can stop spinning within a quarter of a turn and start spinning the other direction. This type of engineering is significantly beyond anything humans are capable of making, especially when you consider its size about (1/20,000 of an inch). What's also impressive about flagellum is its ability to steer to where it needs to go.

Both the cilium and flagellum are irreducibly complex – remove any one part and the system fails.

Darwinists have yet to be able to explain how these biological machines were created.

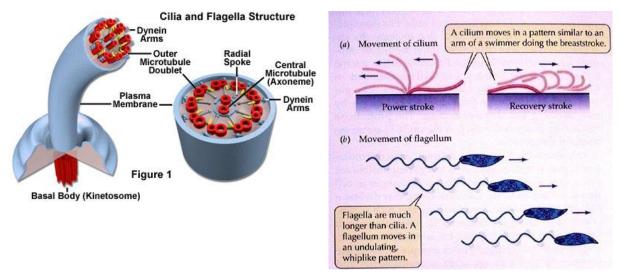


Figure 17: Cilium and Flagellum

There are numerous other examples, but the point is this: Darwin said "If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."

The many examples of irreducible complexity demonstrate how these biological systems could not have been created through numerous, successive, slight modifications that Darwin's theory demands.

At the same time, it should be pointed out that the alternative theory – Intelligent Design – does sufficiently explain how complex biological machines could have been created. To quote Michale Behe:

"My conclusion can be summed up in a single word: design. I say this based on science. I believe irreducibly complex systems are strong evidence of a purposeful, intentional design by an intelligent agent. No other theory succeeds."

# The Second Law of Thermodynamics

As discussed previously in this book, the second law of thermodynamics teaches that energy becomes less available for work over time. The significance of the second law as applied to the cell is that the energy flow in an isolated system always results in a reduction in the amount of energy available for work and a more uniform distribution of energy (equilibrium). This is an irreversible process. Since atoms and molecules obey the laws of thermodynamics, how would they organize themselves into such a highly complex structure as a living cell? How was raw energy captured and utilized to perform the essential processes that would have created the first cell in the evolutionary story without any intelligence? The formation of the first cell violates the second law of thermodynamics.

How would a cell built itself up through a gradual, Darwinian process into a more complex cell with increased amounts of information if the trend is always toward decreased energy and increased disorder? By example, what would happen if you took a living cell apart into its basic components and lay them in the sunlight? What would happen? The answer is decay! Even though the parts would be have a source of energy (the sun), the parts would not assemble into complex structures and re-form into a living cell. Why? Because the functional integrity of the cell would be lost.

Because the development of the cell and the creation of cellular information violate the second law of thermodynamics, the process of evolution cannot reasonably explain their creation.

# **Counter Arguments**

Opponents of Intelligent Design will argue that technically, the second law of thermodynamics requires an 'isolated system' to apply:

- An isolated system is one that cannot exchange matter or energy with its surroundings. The only theoretical isolated system is the universe nothing comes into the universe from the outside and nothing goes out of the universe.
- An open system can exchange both matter and energy with its surroundings (i.e. the earth and our bodies are open systems because they can receive new energy – the former from the sun, the later from food).
- A closed system can exchange energy but not matter with its surroundings (i.e. a thermos of hot liquid that will get colder over time).

A good example of an isolated system would be a perfectly insulated thermos (no heat loss) filled with hot tea and ice cubes. The total energy of this system remains constant (first law), but the distribution of energy within the thermos, between the ice cubes and the tea, will change with time (second law). Since hot always flows to cold, the end result will be the ice will melt and one will end up with a medium-warm tea. The system has increased in entropy – we initially had a temperature difference between the ice cubes and the tea, and work was performed (the melting of ice), but the end result was an even temperature throughout. Now the energy in the system is in equilibrium and cannot do work. The molecules will never reform the ice cubes. The second law was demonstrated.

Many evolutionists would argue that evolution does not violate the second law of thermodynamics because the second law only describes how energy operates in an isolated system and the earth is an open system. Since energy (the sun) can be added to an open system (the earth), things can become more ordered and complex. Examples evolutionists would cite could include an animal embryo growing into a full adult or an acorn growing into a tree.

The problem with this argument is threefold. First, the universe is an isolated system, so evolution would fail to account for the creation of the universe.

Second, as noted above, the second law of thermodynamics applies equally well to open systems:

...There are no known violations of the second law of thermodynamics. Ordinarily the second law is stated for isolated systems, but the second law applies equally well to open systems. – Dr. John Ross, Harvard Scientist & Evolutionist<sup>85</sup>

Another quibble about the application of the second law is contained in the claim that the second law of thermodynamics applies only to closed [isolated] systems. This is nonsense of a high order. – Ker C. Thomson (Ph.D. Geophysics)<sup>86</sup>

Third, as it pertains to the earth, the addition of energy into an open system is necessary, but not sufficient; to perform the work needed to build complex structures such as proteins and cells. In order for life to form, one would need four things:

- 1. An open system (the earth)
- 2. A source of energy (the sun)
- 3. A mechanism to capture and convert energy into a form usable for life
- 4. A mechanism to utilize the converted energy for work (metabolic)

Everyone would agree on the first two points, but the second two are seldom discussed. The main problem is the development of simple molecules into complex structures and living organisms has never been observed. There must be a mechanism to capture, convert and utilize energy, and there is no scientific explanation for the development of such a biological mechanism. Raw energy alone does not automatically cause a system to become more complex and organized. Any such mechanism would require work and information to create. Thus, there is a catch-22 situation because it would require work to be done to create the mechanisms that can capture and utilize energy to build complex structures, but no work can be done until energy can be captured and utilized. In short:

- Work must be done in order to create greater complexity
- We need energy to perform this work
- We have raw energy (sun) all around us, but we need to capture and store it so we can use it
- We need to build some mechanism that can capture, store, and utilize some of this raw energy so we can perform work and create complexity
- We have no useful energy to do this work because we do not have the mechanisms to capture, store, and utilize raw energy, thus, we need to go to the previous step (circular logic)

A good example would be a computer or a Boeing 747. Having an open system with energy isn't enough for the parts to arrange themselves into workable systems. Just take apart a computer or a 747, assemble the parts on the ground and allow the sun to shine on them. No matter how much time is allocated, the parts will not arrange themselves in a useful manner. No amount of time will change that. Since both the computer and the 747 required a designer to manufacture and assemble (a mechanism to capture, convert and utilize energy), isn't it logical to conclude that a cell also had a designer?

To the points about the animal embryo and the acorn, both examples miss the question of how life first originated since both examples already contain the mechanisms for capturing and converting energy and utilizing it in life processes. Both examples already contain immense amounts of information stored in their DNA. This information directs development, growth, maintenance and reproduction of each organism. In addition, the information in the DNA provides all the instructions for synthesizing all the

molecular machines needed to carry out these processes. Thus, these examples don't answer the basic question of how the cell or the information contained in the DNA got there in the first place.

# Probabilities<sup>87</sup>

It's one thing to look at the evidence and assume that a cell couldn't have been created by mere chance, but let's look mathematically to see if this assumption is true.

Amino acids come in two shapes, left-handed and right handed. In the natural world, we find an even mixture of left and right. When we flip a coin we have two possible outcomes, heads or tails. If we flip a coin 100 times, what are the odds we will achieve 100 heads in a row? The answer is if the flipping occurred at a rate of over 31 million times a second, it would take over 1-quadrillion years to come up with 100 heads in a row.

Now, let's equate this to the probability of getting one small protein of 100 left-handed amino acids. An average protein has at least 300 amino acids in it – all left-handed. So, to get just 100 left-handed amino acids (far short of the average protein), together would be the same probability of getting 100 heads in a row or  $2^{100}$ . This is such an astounding probability that there is not enough time in the whole history of the universe for this to have happened.

According to evolutionists, the maximum age of the universe is 20 billion years. But the probability demonstrates that it would take 31 million chemical reactions per second in the "primordial soup" for over 1-quadrillion years to produce even one small protein! This will never happen. There is simply not enough time, and of course, decay would occur in accordance to the second law of thermodynamics.

Of course, if you could possibly get one small protein, then it would have no capability to replicate itself, so it would decay. It cannot survive in an oxygen atmosphere because oxygen will cause it to decay. It cannot survive in a non-oxygen atmosphere because the ultraviolet rays of the sun will destroy it. It cannot survive in water because water will decompose it. The only scientific conclusion left is that there is no possible way for proteins to have evolved by natural process.

# Creating Protein

Walter Bradley (Ph.D. in Materials Science) and Charles Thaxton (Ph.D. Chemistry) calculated that the probability of amino acids forming into a protein is: 4.9 X 10<sup>-191</sup>. This calculation takes into account the following:

- · Getting only left-handed amino acids
- Getting a mix from the 20 allowable amino acids in the over 2,000 types available
- Getting the amino acids in the correct order

This is well beyond the law of probability that Emile Borel formulated that if the chances of any event occurring are smaller than 1 in 10<sup>-50</sup>, then the event can be considered to be impossible on a cosmic scale.

# Creating a Cell

Sir Fred Hoyle (Ph.D. Astronomy) and Chandra Wickramasinghe (Professor of Applied Math and Astronomy) concluded the following concerning the chance of a living cell having formed by chance:

No matter how large the environment one considers, life cannot have had a random beginning...there are about two thousand enzymes, and the chance of obtaining them all in a

random trail is only one part in 10<sup>40,000</sup>, an outrageously small probability that could not be faced even if the whole universe consisted of organic soup.<sup>88</sup>

# Creating Life

John Baumgardner (Ph.D. Geophysics), in a paper titled "Highlights of the Los Alamos Origins Debate", concluded the following, after he presented numerous calculations around the probabilistic creation of life by chance:

The number of unique molecules that could have ever existed in the history of the universe is 10<sup>110</sup>...Is it possible, given the above generous circumstances for evolution, that a single protein could form by purely random process?

For a relatively short protein consisting of a chain of 100 amino acids, the number of random trials needed would be about 10<sup>130</sup>. This is a hundred billion billion times the upper bound, or limit computed for the total number of molecules that could have ever existed in the history of the cosmos. No random process could ever hope to find even one such protein structure, much less the full set of roughly 1,000 needed in the simplest forms of life.

With the fact of such stunning odds, how could any scientist appeal to chance and time as a method for life to occur?

Clearly, the laws of mathematical probability demonstrate that the creation of a simple living cell could not have occurred by mere chance. It would take far more faith to believe that a long time ago the necessary amino acids, proteins, cellular machines and cellular information all came together at precisely the right time, the right place and in the right sequence in a primordial chemical soup to form the first cell that they gradually evolved over time to produce the immense sophistication and diversity of live that we witness on life today, than it would to believe in the alternative theory of Intelligent Design.

# **Discussion Questions**

- 1. The cell can be described as a high-tech factory. After reading this chapter and understanding how cells work at a microscopic level, do you believe that "design" or some other explanation is most appropriate? What factors lead you to this conclusion?
- 2. Charles Darwin conceded that his theory would "absolutely break down" if it could be shown that any complex organ "could not possibly have been formed by numerous, slight modifications."

  Does irreducible complexity pass this test? Do you agree or disagree?
- 3. When Michael Behe said that when he concludes life is intelligently designed, some people "don't just disagree; many of them jump up and down and get red in the face." Why do you believe this issue generates so much controversy? Do you feel an emotional investment in the matter?
- 4. While scientists are virtually unanimous in ruling out random chance for the origin of life, this theory is still prevalent in popular opinion. What's your assessment on the odds that life could have assembled by chance?

# **CHAPTER 7**

# **EVIDENCE FROM DNA**

Human DNA contains more organized information than the Encyclopedia Britannica. If the full text of these encyclopedias were to arrive in computer code from outer space, most would regard this as proof of the existence of extraterrestrial intelligence. But when seen from nature, it is explained as the workings of random forces. – George Sim Johnson<sup>89</sup>

This new realm of molecular genetics [is] where we see the most compelling evidence of design on Earth.

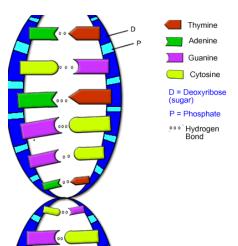
– Dean Kenyon repudiating the conclusions of his own book on the chemical origin of life

There is not a shred of objective evidence to support the hypothesis that life began in an organic soup here on the earth. Indeed, Francis Crick, who shared a Nobel Prize for the discovery of the structure of DNA, is one biophysicist who finds this theory unconvincing. So why do biologists indulge in unsubstantiated fantasies in order to deny what is patently obvious, that the 200,000 amino acid chains, and hence life, did not appear by chance. – Fred Hoyle (Ph.D. Astronomy)90

Einstein said, "God does not place dice." He was right. God plays Scrabble. – Philip Gold<sup>91</sup>

# DNA & Cellular Information 92,93

In 1953, approximately 100 years after Darwin, Francis Crick and James D. Watson discovered DNA — the now famous double helix where the "language of life" is stored. For the past fifty years, scientists have studied the six feet of DNA that's tightly coiled inside every one of our body's one hundred trillion cells, and they have marveled at how it provides the genetic information necessary to create the more than 20,500 different proteins out of which our bodies are built. The astounding capacity of microscopic DNA to harbor this mountain of information, carefully spelled out in a four-letter chemical alphabet, "vastly exceeds that of any other known system," said geneticist Michael Denton.



Most textbooks focus on the chemistry of life: which molecules do what inside the cell. Obviously, life is a chemical phenomenon, but its distinctiveness lies not in the chemistry as such. The secret of life comes instead from its informational properties; a living organism is a complex information-processing system. – Paul Davies<sup>94</sup>

DNA (Deoxyribonucleic Acid) consists of two strands neatly aligned with one another, coiled into a double helix (like a twisted ladder). The sides of the ladder are composed of alternating sugars (deoxyribose) and phosphates. The rungs of the ladder are composed of nucleotides (referred to as 'T', 'A', 'G' and 'C' after

Figure 18: DNA

their chemical names). These chemical components form the information, or different 'lines of code' within the DNA.

DNA is the chemical component of chromosomes, which are located in the nucleus of every cell. A gene is a segment of DNA that creates a protein, which in turn creates a trait (skin tone, eye color, etc.) For instance, a stretch of DNA could be AATGACCAT - which would code for a different gene than a stretch that read: GGGCCATAG. All in all, there are billions of nucleotides in cells, which code for all the things an organism needs to function.

DNA is sometimes called "the blueprint of life" because it contains the master code, or instructions for building and organism and ensuring that organism functions correctly. Just like a builder uses a blueprint to build a house, DNA is used as the blueprint, or plans, for the entire organism.

RNA (Ribonucleic Acid) is responsible for putting the genetic information from DNA to use in building proteins. RNA resembles DNA in structure and also carries information.

DNA serves as the information storehouse for a finely choreographed manufacturing process in which the right amino acids are linked together with the right bonds in the right sequence to produce the right kind of proteins that fold into the right way to build biological systems. To make an analogy, the proteins would be like the working components (machines) in a factory and the nucleic acids would play the role of the library or memory bank containing all the information (blueprint and instructions) necessary for the construction of all the various machines (proteins). If you want an organism to acquire a new function or structure, you have to provide information somewhere in the cell. You need instructions for how to build the cell's important components, which are mostly proteins. And we know that DNA is the repository for a digital code containing the instructions for telling the cell's machinery how to build proteins.

The question is where did all this genetic code come from? The question of the origin of this information is *the* foundational question – if you can't explain where the information comes from, you can't explain life, because it's the information that makes the molecules into something that actually functions.

Bill Gates said 'DNA is like a software program, only much more complex than anything we've ever devised.' That says something, since Microsoft employs tens of thousands of highly intelligent programmers to produce the software that it does.

One single cell *is* more complex than any information system we've ever created:

- A single cell has a genome which consists of 3 billion pairs of DNA molecules (or lines of code) twined into the long double helix that forms our 46 chromosomes, and yet we have trillions of cells in our body.
- A single string of human DNA contains enough information to fill almost 1,000 books, each containing 1,000 pages of text and yet is packaged into a space smaller than the head of a pin. <sup>95</sup> If all the DNA in all the cells of a human were straightened and lined up end to end, they would be about 30 billion miles long (to the moon and back over 60,000 times)!
- In the 90's, scientists finished mapping the three billion codes of the human genome a project that filled the equivalent of 75,490 pages of *The New York Times*. Think of this mapping as the table of contents or index of the DNA.
- DNA has more than a trillion times the storage efficiency of a computer chip technology designed by highly intelligent engineers. In terms of information storage, DNA can be considered to be a "super storage" device. A DNA molecule is over a trillion times more efficient than a silicon megachip used in the most advanced computers.<sup>96</sup> To put this in perspective:
  - The average storage chip for a digital camera (usually known as a 'SD' card) will hold approximately 2 gigabytes of information.
  - The hard drive on the average state-of-the-art computer will hold approximately 200 gigabytes of information.

- The Library of Congress, if digitized and stored as plain text, holds approximately 20 terabytes of information, or 20,000 gigabytes.
- The DNA contained in one human body holds approximately 35 *trillion* gigabytes or 1.75 *billion* times more information than the entire Library of Congress!
- DNA replicates itself to guarantee that an exact duplicate of itself is made. Which means, cats stay cats, dogs stay dogs, and people stay people. A cell division lasts from 20-80 minutes and during this time the entire molecular library (equivalent to 1,000 books of 1,000 pages each) is copied correctly.

The question is where does all this information come from and how can it duplicate itself so fast? It truly is amazing to consider the origin of information at this scale. By contrast:

- Windows 7 50M lines of code. If this program is broken down into its basic parts (1s and 0s), it contains more than a billion bits (less than one third that of a single cell). How much information is stored in the component parts (1s and 0s)? None. What makes Windows 7 perform is the arrangement of the parts. Without intelligence, the component parts will never assemble themselves to produce complex informational codes. Microsoft employed more than 10,000 programmers over a period of many years to create Windows 7 and its component parts.
- **Boeing 747** 6M parts. If we were to take all the parts (metal, plastic, glass, wire...) and lay them out in the sunlight (a source of energy), what will happen to them over time? Nothing but decay. Why won't the parts assemble themselves? Because the addition of raw energy is not sufficient to build complex machines it takes outside intelligence to assemble the pieces into something useful. Boeing employs more than 150,000 people to produce the planes that it does.
- Cell Billions of non-living parts. If we were to take all the components of DNA and put them into a "primordial soup" and strike it with lightning, what would happen? Nothing. The addition of raw energy is not sufficient to assemble molecules, much less assemble an unfathomably complex computer code. Since there is no mechanism to capture the energy, it cannot be used. Since there is no molecular machine to convert the energy, if captured, into usable energy, it cannot be used. The only way the components will assemble themselves into the code necessary for life is with the addition of outside intelligence.

Think of how DNA would be created, which has billions of letters that must all be in the right order:

Do coded algorithms which are a million words in length arise spontaneously by any known naturalistic process? Is there anything in the laws of physics that suggest how such structures might arise in a spontaneous fashion? The honest answer is simple. What we presently understand from thermodynamics and information theory argues persuasively that they do not and cannot! -- John Baumgardner (Ph.D. Geophysics)<sup>97</sup>

So, where did the information contained in DNA come from? How was it formed? Books do not write themselves by random chance, computer programs do not assemble on their own by accident, and machines do not build themselves despite any amount of time and energy being applied to them. No, the question of origin of the information contained within DNA is best explained by an intelligent cause. Why? Because information is *always* the product of intelligence.

# The Challenge to Evolution 98,99

To the skeptic, the proposition that genetic programmers of higher organisms, consisting of something close to a thousand million bits of information, equivalent to the sequence of letters in a small library of one thousand volumes, containing in encoded form countless thousands of intricate algorithms controlling, specifying and ordering the growth and development of billions of cells into a form of a complex organism, where composed by a purely random process is simply an affront to reason. But to

the Darwinist, the idea is accepted without a ripple of doubt – the paradigm takes precedence!

– Michael Denton (Ph.D. in molecular biology)<sup>100</sup>

I have carefully studied molecular, biological, and chemical ideas of the origin of life and read all the books and papers I could find. Never have I found an explanation that was satisfactory to me. The basic problem is with the original template (be it DNA or RNA) that would have been necessary to initiate the first living system that could undergo biological evolution. Even reduced to the barest essentials, this template must have been very complex indeed. For this template and this template alone, it appears it is reasonable at present to suggest the possibility of a creator.

- Henry Margenau, professior of Physics and Natural Philosophy at Yale<sup>101</sup>

All of us who study the origin of life find that the more we look into it, the more we feel it is too complex to have evolved anywhere. We all believe as an article of faith that life evolved from dead matter on this planet. It is just that its complexity is so great, it is hard for us to imagine that it did.

— Harold Urey, Nobel Prize Laureate who took part in the Miller experiment<sup>102</sup>

Darwinian evolution only has chance mutations at its disposal. Because no 'advance thinking' can possibly be allowed, there is no way that the nucleotides can arrange themselves in a 'pre-defined code', since this assumes prior knowledge. Thus, the very existence of the DNA-coded language stalls evolution at the first hurdle. – Andrew McIntosh (Ph.D. Mathematics)<sup>103</sup>

It was fashionable in the middle part of the twentieth century to attribute biological information and complexity to chance plus time. However, as our understanding of the enormous biochemical complexity associated with the origin of life and the development of more complex forms has matured, appeals to change have gradually lost credibility. – Walter Bradley<sup>104</sup>

The likelihood of life having occurred through a chemical accident is, for all intents and purposes, zero. This does not mean that faith in a miraculous accident will not continue. But it does mean that those who believe it do so because they are philosophically committed to the notion that all that exists is matter and motion. In other words, they do so for reasons of philosophy and not science. – Robert Gange<sup>105</sup>

Any hypothesis or model meant to explain how all life evolved from simple inorganic molecules to a complex cell consisting of vast amounts of information also has to explain the source of information and how this information was encoded into the genome (all the DNA in all the chromosomes of a cell). According to the model of evolution, all the information in life today was created through natural processes. If evolutionists believe their model can explain how evolution took place, they have to show how the mechanism could have put vast amounts of information into the genome of all organisms. For example, how could natural selection and random mutation be the cause of the tremendous gain in complexity and information needed for macroevolution?

According to the model of evolution, the information contained in DNA has not only evolved or changed, it has increased. It has gone from zero information to billions of bits of information in the human DNA code. How did all this information assemble itself? It is a tenant of information theory that information only comes from an intelligent source. Information not only implies meaning, but purpose. This is the opposite of change.

Imagine trying to create a simple book by throwing Scrabble letters onto the floor. Are you ever going to produce *Hamlet* in anything like the time of the known universe? It couldn't happen by chance. Consider the following:

- There is a certain level of folding that a protein has to have (called tertiary structure) that is necessary for it to perform a function. You don't get this tertiary structure in a protein unless you have at least seventy-five amino acids or so.
- To form a protein molecule by chance, you first need the right bonds between the amino acids. Since amino acids come in right-handed and left-handed versions, and you've then got to get all

left-handed ones. Finally, since you need seventy-five or so amino acids to create a functioning protein, the amino acids must all link up in a specific sequence.

- Run the odds of all these things falling into place on their own and you find that the odds of this
  happening at random would be one in a hundred thousand trillion trillion trillion trillion trillion trillion trillion. That's a ten with 125 zeroes after it!
- If that were to happen, you would have one protein molecule a minimally complex cell would need between three hundred and five hundred protein molecules to function which would need to all come together by random chance in the right arrangement and at the same time.

To suggest all of this happened by chance is to invoke a naturalistic miracle. Likewise, creating the DNA structure couldn't have happened by natural selection either:

- By definition, natural selection requires a self-replicating organism to work. Organisms must reproduce and their offspring have variations. The offspring that are better adapted to their environment survive better, and so these adaptations are preserved and passed on to the next generation.
- However, to have reproduction, there has to be cell division, and that presupposes the existence
  of information-rich DNA and proteins. But that's the problem those are the very things they're
  trying to explain!
- In other words, you would need to have a self-replicating organism for Darwinian evolution to take place, but you can't have a self-replicating organism until you have the information necessary in DNA, which is what you're trying to explain in the first place.

Another problem is that DNA cannot replicate the coded information it contains without the help of DNA polymerase – a protein that is used in the replication of DNA made exclusively from left-handed amino acids. This creates another catch-22 scenario for Darwinists:

- DNA cannot replicate itself without the help of proteins. DNA requires a protein to already exist in order to replicate itself, but
- Proteins cannot duplicate DNA without the instructions from DNA.

The discovery of DNA and how it works over the past several decades creates a gigantic hole in the evolution model, since the formation of proteins used in life (containing 100% left-handed amino acids) is not scientifically possible by natural processes.

Another aspect to consider is that one function of DNA polymerase is to ensure that the information is copied correctly. As DNA polymerase moves along the chain to attach the next molecule, part of the enzyme 'proofreads' the work it has done by checking the nucleotide pair to ensure that the proper base pairing has taken place. If an incorrect nucleotide has been inserted, this portion of the enzyme swiftly removes the nucleotide from the chain, and the molecule starts work all over again. This means that DNA not only contains information – it contains an information code control which ensures it produces an identical copy of the original DNA. Why would the evolution process develop a mechanism that prevents change?

No hypothesis has ever come close to explaining how DNA information necessary to life's origin arose by natural means.

An honest man, armed with all the knowledge available to us now, could only state that in some sense, the origin of life appears at the moment to be almost a miracle, so many are the conditions which would have had to have been satisfied to get it going. – Francis Crick, a philosophical materialist 107

In life, DNA, RNA and proteins all require each other. Therefore, either of these had to evolve at the same time, which defies all scientific process and logic, or there must have been some ancient life-form

that no one has ever seen or discovered. These are the only two scientific options and no one has ever observed either one take place. This means to accept that the creation of life happened by evolutionary means (natural processes) is to accept it by faith and not by scientific fact or evidence.

The core fundamental issue for Darwinists is that information – whether in books, computer code or language (any sequential arrangement that's complex and corresponds to an independent patter or functional requirement) – is *always* the product of intelligence and DNA contains the *exact* same relevant pattern as these other information types created by intelligence.

### To quote Stephen C. Meyer:

I think the information revolution taking place in biology is sounding the death knell for Darwinism and chemical evolutionary theories. The attempt to explain the origin of life solely from chemical constituents is effectively dead now. Naturalism cannot answer the fundamental problem of how to get from matter and energy to biological function without the infusion of information from intelligence. Information is not something derived from material properties; in a sense, it transcends matter and energy. Naturalistic theories that rely solely on matter and energy are not going to be able to account for information. Only intelligence can. I think that realization is going to progressively dawn on more and more people, especially younger scientists who have grown up in an age of information technology...So what do we make of the fact that there's information in life? What do we make of the fact that DNA stores far more information in a smaller space than the most advanced supercomputer on the planet?

Information is the hallmark of mind. And purely from the evidence of genetics and biology, we can infer the existence of a mind that's far greater than our own – a conscious, purposeful, rational, intelligent designer who's amazingly creative. There's no getting around it.

The data at the core of life is not disorganized, it's not simply orderly, but it's complex and specific information that can accomplish a bewildering task – the building of biological machines that far outstrip human technological capabilities. What else can generate information but intelligence? What else can account for the rapid appearance of a staggering variety of fully formed, complex creatures that have absolutely no transitional intermediates in the fossil record?

The answer is only that an intelligent entity has quite literally spelled out the evidence of his existence through the four chemical letters in the genetic code. It's as if the Creator autographed every cell.

It is the discovery of the nature of DNA that convinced renowned atheist philosopher Anthony Flew to become a diest. Mr. Flew has been called the most influential atheist philosopher in the world, and his arguments against the existence of God are staples of many college anthologies and textbooks. Now he says that he believes there is a God. Key to his conviction that there must be an intelligent mind behind the universe is DNA. His conversion has had a big impact on the atheist movement. Gary Habermas, a philosophy professor at Liberty University whom Mr. Flew credits with helping him change his mind says the impact on the atheist movement is similar to what would happen in the evangelical world if Billy Graham or J.I. Packer renounced Christianity. For the 81-year-old Mr. Flew, renouncing his life's work and the reason for his fame is a matter of intellectual honesty. "My whole life has been guided by the principle of Plato's Socrates," he said. "Follow the evidence, wherever it leads." 108

# Information is Always the Product of Intelligence

The evidence from Biochemistry discussed in this chapter logically brings us to the conclusion of our fourth "proof" discussed in the introduction.

Proof from	DNA is information, and information is always the product of intelligence.	
Information	<ul> <li>Numerous examples of "irreducible complexity" disprove Darwinism.</li> <li>Cells are horrendously complicated – more complex than any computer we've ever created; and many biological machines could not have evolved.</li> </ul>	
	<ul> <li>Random chance never produces information, and DNA contains more than 3 billion "lines of code" (equal to 4,000 books or 60X that of Windows 7).</li> </ul>	

As scientists have learned more about the cell, they have marveled at the complexity of the many molecular machines it contains and the complexity of the information stored within each strand of DNA. As we have seen from the arguments presented, evolution can't explain the origin of these molecular machines or the basic building blocks of life – DNA, which is instruction set for life to exist.

DNA is information, and never in the universe have we found information outside of something created by an intelligent agent. Information is always the product of intelligence. Thus, the origin of life itself must also be the product of intelligence.

# **Discussion Questions**

1. Do you believe any naturalistic explanation could account for the creation of DNA and the information stored in genetic material?

# **CHAPTER 8**

# **EVIDENCE FROM CONSCIOUSNESS**

I think, therefore I am. - Rene Descartes

Why should a bunch of atoms have thinking ability?...No one, certainly not the Darwinian as such, seems to have any answer to this...The point is that there is no scientific answer.

— Darwinist philosopher Michael Ruse

To expect the highest brain mechanism or any set of reflexes, however complicated, to carry out what the mind does, and thus perform all the functions of the mind, is quite absurd. What a thrill it is then, to discover that the scientist, too, can legitimately believe in the existence of the spirit.

— Wilder Penfield, the renowned father of modern neurosurgery

### Consciousness<sup>109</sup>

What is consciousness? Consciousness consists of sensations, thoughts, emotions, desires, beliefs, and free choices that make us alive and aware.

As far back as 1871, Darwin advocate Thomas Huxley said: "Mind is a function of matter, when that matter has attained a certain degree of organization." Darwinists today agree that "conscious experience is a physical and not a supernatural phenomenon" as sociobiologist Edward O. Wilson said.

Today, many scientists and philosophers are now concluding that the laws of physics and chemistry cannot explain the experience of consciousness in human beings. Computers, for example, have a very high level of organization and ability, but they can't attain consciousness. You can expand a computer to have all the power you want, hooking up as many computers as you think you need, and they still won't be conscious, because all they'll ever do is follow instructions. Why? Because there is a nonmaterial reality called the "soul," "mind," or "self" that accounts for our sentience or consciousness. In fact, it is this very existence which provides strong evidence against the purely naturalistic theory of Darwinian evolution and in favor of a Creator who imbued humankind with his image.

In 2001, a year-long British study provided evidence that consciousness continues after a person's brain has stopped functioning and he or she has been declared clinically dead. It was dramatic evidence that the mind and the brain are not the same, but they're distinct entities. In their journal article, physician Sam Parnia and Peter Fenwick, a neuropsychiatrist, describe their study of sixty-three heart attack victims who were declared clinically dead but were later revived and interviewed. Their conclusions included the following:<sup>110</sup>

• About 10% reported having well-structured, lucid thought processes, with memory formation and reasoning, during the time that their brains were not functioning.

- The effects of oxygen starvation or drugs objections commonly offered by skeptics were ruled out as factors.
- While more studies are needed, the scientific findings so far "would support the view that the mind, 'consciousness,' or the 'soul' is a separate entity from the brain."
- The authors speculated that the brain might serve as a mechanism to manifest the mind, much in the same way a television set manifests pictures and sounds from waves from the air.

Both the Old and New Testaments consistently teach that humans are creatures composed of both spirit and body. To this extent then, there is no quarrel between theology and the findings of recent research. Said anthropologist Arthur C. Custance:

[The Bible] makes it very clear that when the soul or spirit leaves the body, the body is dead and that if the spirit is somehow returned to the body, the whole person comes back to life. This duality is repeated in hundreds of places in the Bible...Indeed the formation of Adam as the first human being is expressly stated as the result of the animation of the body by a spirit, constituting a living soul.

# Physicalism<sup>111</sup>

The alternative to the belief that the soul and the body are separate is called *physicalism*, which is the belief that consciousness is purely a product of biology. There is no free will per se, rather matter is completely governed by the laws of nature. The problems for physicalism are the following:

- There would be no disembodied intermediate state, which means near-death experiences can't be explained. Although people are clinically dead, sometimes they have a vantage point from above, where they look down at the operating table their body is on. Sometimes, they gain information they couldn't have known if this were just an illusion happening in the brain. One woman died and she saw a tennis shoe that was on the roof of the hospital. How could she have known this?
- Although we can electrically stimulate a person's brain to cause them to move parts of the body, neuroscience has never found a place where electrical stimulation will cause a patient to believe or to decide. That's because those functions originate in the conscious self, not the brain. Laurence C. Wood said, "many brain scientists have been compelled to postulate the existence of an immaterial mind, even though they may not embrace a belief in the after-life."112
- People *are* their souls, although they *have* bodies. We learn about people by finding out how they feel, what they think, what they're passionate about, what their worldview is, and so forth. Staring at their body might tell us whether they like exercise, but that's not very helpful. We need to go 'inside' of people to learn about them. The problem is this part of a person cannot be seen or touched in the brain. It's something entirely different.

Darwinism has no explanation. The emergence of consciousness is a mystery. How can mere matter originate consciousness? How does evolution convert the water of biological tissue into the wine of consciousness? Consciousness seems like a radical novelty in the universe, not prefigured by the aftereffects of the Big Bang. If there were no God, then up until the appearance of living creatures, the history of the universe would be that of dead matter with no consciousness. You would not have thoughts, beliefs, feelings, sensations, free actions, choices or purposes. There would simply be one physical event after another physical event, behaving according to the laws of physics and chemistry. How do you get something totally different – conscious, living, thinking, feeling, believing creatures – from materials that don't have that? That's getting something from nothing!

# As Phillip Johnson put it:

At the end of the day, you either have 'in the beginning were the particles,' or 'in the beginning was the Logos, which means divine mind.' If you start with particles, and the history of the universe is just a story about the rearrangement of particles, you may end up with a more complicated arrangement of particles, but you're still going to have particles. You're not going to have minds or consciousness. However – and this is really important – if you begin with an *infinite* mind, then you can explain how finite minds could come into existence. That makes sense. What doesn't make sense – and which many atheistic evolutionists are conceding – is the idea of getting a mind to squirt into existence by starting with brute, dead, mindless matter.

# **Discussion Questions**

- 1. Imagine you were asked to debate the question of whether people consist of both body and spirit, or conversely, that we are essentially "a computer made of meat". What evidence would you present for your side?
- 2. Experts often say that although there's no adequate theory for how the brain causes consciousness, they have faith that science will eventually discover a completely naturalistic explanation. Do you believe this will ever be the case?
- 3. J.P. Moreland has said that "you can't get something from nothing" and therefore human consciousness is inexplicable if the universe only consist of physical matter. However, he said that if everything were brought into being by a divine mind, then the existence of finite mind makes sense. Do you find this argument compelling?
- 4. Techno-prophet Ray Kurzweil has raised the question of whether computers might someday develop consciousness. What's your opinion on this issue and why?

# Part 2

# The Case for a Personal God

# **CHAPTER 9**

# **EVIDENCE FROM PHILOSOPHY**

The whole history of humanity as such can be written as a search for a meaningful answer to the question of the existence of God. – Terry L. Miethe & Gary R. Habermas

Scientific evidence actually supports theistic belief. In fact, across a wide range of sciences, evidence has come to light in the last fifty years which, taken together, provides a robust case for theism. Only theism can provide an intellectually satisfying causal explanation for all this evidence. – Stephen Meyer

The fool says in his heart, "There is no God." They are corrupt, their deeds are vile; there is no one who does good. The LORD looks down from heaven on the sons of men to see if there are any who understand, any who seek God. – Psalm 14:1-2

In the first section of this book, we examined the first question that the introductory chapter raised on the road to belief in Christianity – namely, how did the universe and life get here? Was it the result of "time plus chance" or the result of a creator of some sort? This is the key question that separates atheism from the various religions of the world. Hopefully, it was apparent that that the "preponderance of evidence", whether from the Big Bang, Astronomy, Physics, Biology, the Fossil Record, Biochemistry or Consciousness itself, all point to a creator of some sort. Our universe, the Earth and life itself, could not have occurred through mere chance or Darwinian evolution.

In this section, we'll look at the second question raised in the introductory chapter of this book, and that is if there was a creator, what is the nature of that creator? Is the creator an impersonal force or a personal God? If the later, what characteristics can we infer about the creator from the creation?

# The Fundamental Question of God<sup>1</sup>

The fundamental question of philosophy is simply: why is there something rather than nothing? For millennia, philosophers have pondered this very question. Why does the universe exist? How did we get here? What is the purpose? It's easy to imagine what the world would be like without us – it's likely everyone who has ever watched the popular movie, *It's a Wonderful Life* has thought about that question. It's also straight-forward to imagine a solar system without Earth or the earth without mankind, but what if nothing existed? What if the expanse of the universe contained absolutely nothing? What is the reason for the matter in the universe?

There are three basic answers to this last question (which we'll call the 'fundamental question'):

- 1. This big something that includes us has always existed for no reason; it just is.
- 2. This big something that includes us is one big spiritual 'it'; we're all God and part of God.

3. This big something that includes us was brought into existence by someone whose existence explains itself – namely, God.

The question for each of us to ponder is which of these answers is right? These three potential answers lead one to the three different belief systems regarding God – namely, Atheism, Pantheism and Theism.

### Atheism

The name for the first potential answer to the fundamental question is atheism – the belief that there is no God at all. The Greek word for *atheist* is "atheos" which literally means God (theos) negated. The universe just exists.

This worldview is fine, if one could explain how the universe got here in the first place. If one holds to atheism, one is left to conclude that the universe has always existed, but as we have seen in the first chapter, the universe we live in had a definite beginning. If the universe had a beginning, then what was the reason or purpose for the beginning? How did the universe originate?

In the Bible, the sole occurrence of the term 'atheos' is in Ephesians 2:12 where the Gentiles were described as "having no hope and without god (atheos) in the world." Indeed, to be without God is a hopeless situation. Although the word atheist appears only once in the Bible, the concept of atheism is clealry described in phrases like "rejecting God" or "there is no God" or "Who is God over us?" There is one root cause of atheism and that cause is not ignorance. The root cause of atheism is pride. Pride is evidenced by self-exaltation, self-rule, boasting, moral abandonment, and being puffed up in prosperity or intellect. Saying "there is no God" implies absolute knowledge of the universe, which no one possesses.

The problem with atheism, especially given the discoveries of the past several decades, is the many features of the world that have been found to not be self-explanatory. Specifically:

- The world has not always existed. The scientific evidence regarding the Big Bang has made it clear that the Earth and the Universe had a definite beginning – they have existed for a finite length of time. The problem is that this implies a beginning – and perhaps a beginner to explain the beginning.
- The world has been created so as to make life possible. As we have seen, our universe, our position in the galaxy, our solar system and our earth were designed for life against formidable odds. Intelligent design proponents have put forth numerous cases to show that the structure and nature of the universe and the Earth is such that any variation and life wouldn't be possible. In short, the probability that the Earth "just happened" by chance to be structured perfectly for life is highly improbable. The simplier argument is to show that it was designed for life.
- Biological life demonstrates intelligent design. As we have seen in the chapters on biology and biochemistry, the formation of proteins, amino acids, DNA and the cell could not have happened by mere chance. The odds are simply too great an occurrence.

The logical conclusion is that there had to be an intelligent force behind the creation of the universe and life on earth. Intelligent design implies an intelligent creator, which atheism rejects.

# Pantheism

The name for the second potential answer to the fundamental question is pantheism – the belief that the world is in some sense God. There are three different cases of pantheism:

• God alone exists and everything we experience is an illusion (e.g., the modern movie, *The Matrix*). The problem with this view is one is still left with the question: to what end? What purpose was the illusion created? This view doesn't answer what reality truly is.

- God alone exists and we are all God. The problem with this is we have no self-knowledge that we're God. Wouldn't we know it if we had a hand in creating the universe?
- God is in all. This view holds that God and creation are separate, yet one (like the body and soul are two different forms of the same existence). This view is more satisfying that the previous two explanations because it acknowledges that the world has features that are difficult to explain. The problem with this view is the inter-dependence. The body and soul must go together so in this view is God really dependant on us the way we are on him?

The problem with pantheism is that can't explain the origin of the universe, because pantheists believe in an impersonal god that's coextensive with the physical universe. Such a god can't bring the universe into being from nothing, since such a god doesn't exist independently of the physical universe.

### **Theism**

The name for the third potential answer to the fundamental question is theism – the belief that God made all. This view assumes God has always existed and creation was created by him. The philisophical implication is that God's existence is self explanatory as is the world's. Some might argue the problem with this view is that God is essentially a construct of man, but it's important to note (at least in the Christian belief in God), that that this is not the case – God introduced himself from day one in the Garden of Eden and then subsequently revealed himself over and over through Moses, the prophets, Jesus, the apostles, the Bible, etc.

Theism, with its concept of a transcendent Creator, provides a more adequate explanation of the cause of the Big Bang than a naturalistic explanation can offer, since the cause of the universe must transcend matter, space, and time, which were brought into existence with the Big Bang. The Christian God has precisely this attribute of transcendence. The fine-tuning of the physical laws and constants of the universe and the precise configuration of its initial conditions, dating back to the very origin of the universe itself, suggests a need for cause that's intelligent as well – namely, God. Thus, theism can explain both the Big Bang and the fine-tuning we observe in the universe.

# The Universal Moral Code

In the universal sense, morality refers to a basic code of conduct, one which would be espoused by all rational people of the world, under specified conditions. In this sense of morality, value judgments such as "murder is immoral" or "rape is wrong" are made. The question is whether humans have an innate sense of right and wrong, or whether it is driven by social norms?

Anyone with a child at home can readily answer this question. Watching any two children play from the earliest age, it's obvious they have an innate sense of what is "fair" and what is not — especially if someone takes a toy they were playing with or cheats in a simple game they are playing. Further evidence supporting the innate nature of morality is found in all the peoples of the world. Despite diverse societies in continents around the globe, historical evidence suggests that there is a standard set of moral laws. Moses did not need to come down from the mountain with tablets written from God for all people groups to know that cheating, lying, stealing, killing, talking back to your parents, etc. are wrong. People seem born with these basic moral laws built into them.

If this is true, then moral laws imply a lawgiver, otherwise where else did they come from? Why does everyone seem to have an inbred sense of basic right and wrong if we are just formed by chance chemical reactions over time? Morality itself is not based in DNA, but rather in something more – something that transcends our physical beings. Without an intelligent creator, atheists are left with no explanation for the universal moral code.

# The Christian Moral Code<sup>2</sup>

Although mankind may have a basic sense of right and wrong, different religions lead to different worldviews and, as a result, different societal outcomes.

This is where the truth of the Christian Gospel works on so many levels. Though some will argue that God does not exist and that man is the highest form in the universe, they will still strive for a moral code. Challenge them to find a better moral code than that which is outlined in the New Testament. Ask them to compare it to the other systems of morals in the world: those of atheists, other religions, other political systems. Ask them to come up with a better moral law then the Golden Rule of "Treat others in the same way you would want them to treat you." Ask them to show you a country where innovative breakthroughs emerge where Christians are not in the majority. Discuss the list of great scientists and achievers of all time and see how many of them were Christians or Jews or at least believed in God's existence: Newton, Gutenberg, Michelangelo, Luther, Washington, Martin Luther King Jr., Mother Teresa, and others you will find on any list of important people of the last one thousand years. They all had tremendous faith in God. Look at nations that have tried to exist without God: the Soviet Union, China, Albania, Vietnam – which of these has been as successful as those that built their foundation on the laws of the Bible?

But then you will have to add that even though this is a great philosophy, it cannot work without its power source. Man has no motive to be "good" without gratitude to a Savior who granted they should not have to suffer for their own sins. Without the love of God in their hearts to motivate them to put the needs of others before themselves, they will ultimately act selfishly despite what philosophies they hold on to. The views of Marx and Lenin sound like they are a solid foundation for heaven on earth, but their applications have brought more hell than any other. What brought this about? When those in power saw that they could do whatever they liked and tried to force others into a mold of service to the state, selfishness took over and whenever convenient they began to reword their philosophies to justify their own selfish desires. To free ourselves from cultural restraints to rise to a higher and better system seems a great idea, but such cultural revolutions have done little but bathe their countries in blood and poverty.

Christianity has an explanation for not only our basic moral code, but as evidenced throughout history, has led to significantly better societal outcomes than any alternative worldviews. Perhaps that is because Christianity better reflects the fundamental question of God, our existence and the purpose for mankind's existence that philosophers have pondered for millennia. Perhaps this is why Christianity is the largest belief system in the world – because it works, and because it resonates with the innate moral code that we are all born with.

# The Problem of Pain<sup>3</sup>

Atheists argue that people suffer and there is evil in the world, therefore, there can't be a God. Why would an all-powerful and all-loving God make humans imperfect? Why would he allow suffering and evil in the world? Doesn't that prove that there is no God?

The Christian answer to this question is that freewill is the reason for sin in our world, and Jesus is the answer to suffering & death. Christ's resurrection is what separates Christianity from other religions. Why then, does God allow pain? God allows pain for several reasons:

Table 7: The Purpose of Pain in Life

Purpose	Examples	
To call people to repentance	Tower victims – Luke 13:1-5	
	Harsh letter – 2 Corinthians 7:5-11	
	Hardships – Amos 4:6-11	

To glorify God	Blind man – John 9:1-3	
	Lazarus – John 11:4	
	Blind, Deaf & Dumb – Exodus 4:11	
To test your faith	What's going on? – Job 1	
	In the fire – 1 Peter 1:6-7	
	Humble you – Deuteronomy 8:2	
Consequence of decisions	Cain's murder of Abel – Genesis 4	
•	Wrong friends – Proverbs 13:20	
	Affliction – Psalm 32, 38	
	Accidents – Acts 20:9	
Indirect link with sin and	Sin brings curse – Genesis 3:16-19	
unredeemed creation	Creation corrupted – Romans 8:20-23	
	Eventual restoration – 1 Corinthians 15:51, Revelation 21:4,	
	22:3, Acts 3:21	
Identify with God who also	Christ on the cross	
suffers	God as a victim of adulterous mate (Israel) – Jeremiah 3,	
	Ezekiel 16	
	Paul's goal – Philippians 3:10	
Perfection of Believers	Humility – 2 Corinthians 12:9-12	
	Reveals Christ – 2 Corinthians 4:7-11	
	Obedience – Hebrews 5:8	
	• Experience God's comfort – 2 Corinthians 1:3-4	
	<ul> <li>Increases dependence on God – 2 Corinthians 1:9-10</li> </ul>	
	Salvation of others – 2 Timothy 2:8-10	
	<ul> <li>Unites Christians – Revelations 1:9, 2 Corinthians 8,9</li> </ul>	
	Holiness – Hebrews 12:10	
	Life purpose – Philippians 1:29	
Satan's Work	• Illness – Luke 13:11, 16	
	Oppression – Acts 10:38	
	Possession – Mark 5,9	
	Thorn – 2 Corinthians 12:7	
Direct chastisement for Sin	• Leviticus 26:14-16, 21	
(warnings, prophecies)	Deuteronomy 28:20-28, 35, 58-62	
	Ezekiel 38:22	
	Micah 6:12-13	
	• Isaiah 3:16-17	
	Proverbs 5:3-11	
	• 1 John 5:16-17	
	Revelations 2:22-23	
	Revelations 11:6; 15:1-8; 16:2; 22:18-19	

# The Problem of Disease<sup>4</sup>

Similar to the problem of suffering, some argue that disease in our world demonstrates that there is no God, since why would an all-powerful and all-loving God make mankind susceptible to disease? Why would he allow this kind of suffering in the world?

There are perhaps many different ways to answer this. Obviously, some disease is spread through immoral behavior, but this doesn't explain all disease and as we look through the Bible, we see numerous passages where God allows a certain disease to fall upon a certain group of people for a specific purpose or as the result of a specific sin the people committed.

This explanation may not be very satisfying to humans, but it is scriptural. The following table provides numerous examples where God allowed disease in response to a specific sin:

Table 8: Examples of Disease Resulting from Sin

Scripture	People	Sin	Disease
Numbers 11:3-34	Israelites	Greed	Severe Plague
Numbers 12:1-15	Miriam	Slander	Leprosy
Numbers 14:36,37	10 spies	Neg. Report	Plague
Numbers 16:41-50	Israelites	Grumbling	Plague
Numbers 21:5-7	Israelites	Slander	Poisonous Snakes
1 Samuel 5 & 6	Philistines	Stole Ark	Tumors
1 Samuel 25:36-38	Nabal	Selfishness	Heart Attack
2 Samuel 12;15-19	David & Son	Adultery, Murder	Sickness & Death
2 Samuel 24:10-25	Israelites	David's Census	3 Day Plague
2 Kings 5:25-27	Gehazi	Greed, Lying	Leprosy
2 Chronicles 21:12-19	Jehoram	Idols, Murder	Bowels Afflicted
2 Chronicles 26:17-20	Uzziah	Proud Heart	Leprosy
Psalm 38	David	Folly vs.3,5,8	Depression
Daniel 4	Nebuchadnezzar	Pride, Glory	Insanity
Acts 5:1-10	Ananias & Saphira	Greed, Lying	Death
Acts 12:21-23	King Herod	Self-Glory	Death, Worms
Acts 13:8-12	Elymas	Opposed Gospel	Blindness
1 Corinthians 11:27-32	Corinthians	At communion	Weak, Sick, Death
James 5;15,16	Believers	Various	Various

# The Problem of Evil<sup>5</sup>

Like the problem of pain and disease, much has been written on the problem of evil in the world – if evil exists, then how can there be a God?

Instead of using this logic to argue against the existence of a God, when it comes to good and evil, the situation the world is in is exactly what Christianity claims – namely, that God created a good world that has been corrupted by our bad choices. This view explains the presence of both good and evil, and our awareness of it in other humans as well as in ourselves.

By contrast, compare this view to:

- Atheism stuff just happens. We make judgments about what we find tolerable and intolerable as a species, but these judgments are not based on any absolute values. Good and evil are human inventions and we use them to encourage or discourage certain behavior. The problem with this view is it doesn't explain the glories of human goodness or the shamefulness of human evil. The second problem is that it doesn't explain things that are innately "good" or "bad" such as child molestation or risking your life to save people from a burning building. If everything is truly relative, how does everyone just know these actions are "bad" and "good" respectively?
- **Theism** humans are spoiled. If God is all and in all, it's hard to imagine anything bad would ever happen. The only explanation offered by Theists is that the world is somehow spoiled that God created it perfectly and created us to make choices and we made the wrong choices.

Surely, comparing the three different belief systems in their response to the problem of evil in the world, it's evident that the Christian explanation is at the least more consistent with what we observe throughout the world.

### Disteleology<sup>6</sup>

A case is often made by atheists regarding "disteleology" which refers to the apparent poor design in the biological and physical world. This argument is used to show that a God cannot exist. To adopt the explanation of design, we are forced to attribute a host of flaws and imperfections to the Designer. The implication is that an imperfect design disproves the existence of a perfect God.

The examples offered include the human eye, which places the neural wiring of the retina on the side facing the incoming light, which scatters the light, making our vision less detailed than it might be and produces a blind spot. The problem with this example is that proponents only look at one parameter. When looking at the design as a whole, the eye is a great example of a functional – though non-intuitive – design. The design shows a conscious tradeoff in a complex system. This tradeoff allows the eye to process the vast amount of oxygen it needs. Yes, it creates a tradeoff, but that's not a problem because we have two eyes and they don't overlap.

Engineers known that all designs require optimizing a whole set of parameters, and so tradeoffs are inevitable to create the best overall result. A laptop computer is a good example which tradeoffs size, capacity, power and weight. You could look at one parameter – say memory, and say it should have more, but that causes the weight, cost, and power consumption to go up. The engineer's job isn't to create the best overall memory. It's to create the best overall system. Each individual part might be criticized as being suboptimal, but that's not the issue. The real issue is how the overall system functions and atheists have yet to put forth a compelling case for a biological system where poor design is evident. Rather, what we find in nature is remarkable innovation, engineering and design which a randomly created, evolutionary approach would not tend to lead to.

### **Discussion Questions**

- 1. What do you believe is the fundamental question that philosophy and religion attempt to address? Is it the question of origin? Is it the question of purpose? Is it the question of the nature of our existence and our relationship with the Creator?
- 2. Atheism would naturally argue that the universe has always existed, and yet recent discoveries have made it apparent that the universe was created through "The Big Bang". If you were an atheist, how would you rationalize a "creation event" without acknowledging the existence of a "creator"?
- 3. Do you believe that mankind is born with a basic moral code? Why or why not? Can you cite an example you observed where you believe this was or was not the cause?
- 4. Do you believe Christianity provides a compelling case for the existence of pain, disease and evil in our world?

# **CHAPTER 10**

# THE CHARACTERISTICS OF GOD

For 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 [that is, his creation], so that men are without excuse. – Paul, Romans 1:20

### What Can We Conclude about God? 7

What is the nature of the "Creator"? Although not specifically addressed in each chapter, the following conclusions can be drawn:

- The evidence from the universe demonstrates that the cause of the cosmos must be an uncaused, beginningless, timeless, immaterial, personal being endowed with freedom of will and enormous power. These are the only logical conclusions if you accept the Big Bang theory.
- The evidence from physics established that the Creator is intelligent and has continued to be involved with his creation after the Big Bang. These are the only logical conclusions from the nature of creation we studied and the Second Law of Thermodynamics.
- The evidence from astronomy shows that the Creator was incredibly precise in creating a livable habitat for the creatures he designed, logically implying that he has care and concern for them.
- The evidence from biology shows that he's creative and a master engineer of a broad array of different biological structures that all appeared roughly at the same time in the fossil record.
- The evidence from biochemistry shows that the Creator must have an intelligence far surpassing our own to design and develop the informational structures of DNA and RNA that we have observed.
- The evidence from the mind shows that he's intelligent, that he's creative, that he's sentient and that he's invisible, because that's the way conscious beings are.
- The evidence from philosophy leads us to conclude that he's rational, gives us a basis for understanding his omnipresence, and suggests that life after death is credible. We can also observe that he does punish people, which implies a sense of fatherly discipline and emotion.

In short, what can we conclude about God? That he is uncaused, beginningless, timeless, immaterial, personal, powerful, highly intelligent, active, precise, caring, creative, sentient, invisible, rational, emotional and views creation in a fatherly manner. This is clearly not a picture of the god of abstract deism, who supposedly formed the universe and then abandoned it. Likewise, the idea in pantheism that the Creator and universe are co-existent, also falls short based on the evidence because the Creator would not be capable of bringing the universe into being.

What does the Bible say about the characteristics of God? The following are some of his characteristics:

- **Creator**: "In the beginning you laid the foundations of the earth, and the heavens are the work of your hands." Psalm 102:25
- **Unique**: "You were shown these things so that you might know that the Lord is God; beside him there is no other." Deuteronomy 4:35
- **Uncaused and timeless**: "Before the mountains were born or you brought forth the earth and the world, from everlasting to everlasting you are God." Psalm 90:2
- Immaterial: "God is spirit." John 4:24
- Personal: "I am God Almighty." Genesis 17:1
- Freedom of will: "And God said, 'Let there be light,' and there was light." Genesis 1:3
- **Intelligent and Rational**: "How many are your works, O Lord! In wisdom you made them all; the earth is full of your creatures." Psalm 104:24
- Enormously powerful: "The Lord is...great in power." Nahum 1:3
- **Creative**: "For you created my inmost being; you knit me together in my mother's womb. I praise you because I am fearfully and wonderfully made; your works are wonderful, I know that full well." Psalm 139:13-14
- Caring: "The earth is full of his unfailing love." Psalm 33:5
- Omnipresent: "The heavens, even the highest heaven, cannot contain you." 1 Kings 8:27
- **Has given humankind purpose**: "For everything, absolutely everything, above and below, visible and invisible,...everything got started in him and finds its purpose in him." Colossians 1:16 (The Message)
- Provides for live after death: "He will swallow up death forever." Isaiah 25:8

It is hopefully obvious from the evidence that the creator is not an impersonal force, but rather a personal God with characteristics similar to that described in the Bible.

### **Discussion Questions**

- 1. What is your image of God? If you were to name 3-4 attributes, what would they be? Why?
- 2. Do you believe the evidence presented provides cause for belief a personal God as opposed to an impersonal force? If a personal God, then why might 1.3 billion people of the Earth (e.g., Hindus and Buddhists) believe God to be an impersonal force? If you were to debate a Hindu or Buddhist on this topic, what evidence do you feel would be the most compelling to argue for the existence of a personal God?

# Part 2 The Case for the Bible

# **CHAPTER 11**

# **SCIENCE & THE BIBLE**

All I have seen teaches me to trust the creator for all I have not seen. – Ralph Waldo Emerson
The problem is to get [people] to reject irrational and supernatural explanations of the world, the demons
that exist only in their imaginations, and to accept a social and intellectual apparatus, Science, as the only
begetter of truth. – Harvard geneticist Richard Lewontin

To say that science is the only begetter of truth is self-contradicting, because that statement in itself cannot be tested by the scientific method. It's a self-defeating philosophical assumption.

- Stephen Meyer

My grandfather was fairly typical of his generation: A devout and active [mainline] Presbyterian elder, he nonetheless believed firmly in evolution and regarded the Virgin Birth as a pious legend. Those kinds of mainline Christians are vanishing, replaced by evangelicals...The result is a gulf not only between America and the rest of the industrialized world, but a growing split at home as well. One of the most poisonous divides is the one between intellectual and religious America.

- Nicholas Kristof, The New York Times, August 15, 2003

I say it's time to redefine science. We should not be looking for only the best naturalistic explanation, but the best explanation period. And Intelligent Design is the explanation that's most in conformity with how the world works. – Stephen C. Meyer

The purpose of science, it seems to me, is to find out how things got here and how they work. Science should be the search for truth, not merely the search for materialistic explanations. The great scientists of history – Newton and Einstein, for instance – never thought science's job was to come up with some sort of self-sufficient explanation for nature. This is a recent innovation, and not a good one – especially in light of discoveries during the last fifty years that have pointed in the exact opposite direction.

– Michael Behe<sup>1</sup>

The trend is definitely toward more discoveries that point toward God...More and more people are going to find themselves open to God as a result of new findings that make theistic belief the best explanation for the evidence of nature. – Stephen Meyer

We are entering the greatest era of science-religion fusion since the Enlightenment last attempted to reconcile the two. – Gregg Easterbrook, Journalist

I look at the stars in the night sky or reflect on the structure and information-bearing properties of the DNA molecule, and these are occasions for me to worship the Creator who brought them into existence. I think of the wry smile that might be on the lips of God as in the last few years all sorts of evidence for the reliability of the Bible and for his creation of the universe and life have come to light. I believe he has caused them to be unveiled in his providence and that he delights when we discover his fingerprints in the vastness of the universe, in the dusty relics of paleontology, and in the complexity of the cell.

- Stephen Meyer

Science, done right, points toward God. - Stephen Meyer

It may seem bizarre, but in my opinion science offers a surer path to God than religion.

– Physicist Paul Davies

The truth claims of atheism simply cannot be proved. How do we know that there is no God? The simple fact of the matter is that atheism is a faith, which draws conclusions that go beyond the available evidence. – Alister McGrath

Only a rookie who knows nothing about science would say science takes away from faith. If you really study science, it will bring you closer to God. – Nanoscientist James Tour of Rice University

Nothing we learn about the universe threatens our faith. It only enriches it.

– Astrophysicist and priest George Coyne

In the first two sections of this book, we examined the first two questions that the introductory chapter raised on the road to belief in Christianity – namely, how did the universe and life get here? And, is the Creator an impersonal force or a personal God? These two questions are the key questions that separate Christians from Atheists, Hindus & Buddhists.

The third question on the road to belief in Christianity is simply this – is the Bible the word of God? Approximately 3.6 billion people adhere in some way (often loosely) to the Bible, but 1.4 billion of these adhere to Islam, which believes the Bible to be a sacred book, but the version that exists today has been corrupted over the ages. Atheists, on the other hand, scoff at the Bible and believe it is full of fables, scientific inaccuracies and mistruths. They believe the Bible should be rejected as nothing more than a book for the weak-minded.

Is the Bible the word of God? Is it accurate by historical accounts? Is there any proof that it is the word of God as Christians claim? In the next few chapters, we will examine these questions to discover if there is any evidence of the Bible's divine inspiration.

### Science and the Bible<sup>2</sup>

Is science the only source of truth? Does science contradict the Bible and Christianity? Should 'intelligent' people reject the Bible as outdated and 'embrace science'? These are important questions. Many people assume that the Bible represents a collection of fables regarding creation and that the material it contains is diametrically opposed to science itself. As such, Christians have been characterized over the past several decades as being out of touch with science. This is extremely unfortunate, since science and Christianity are not at odds with one another. We should view science as a means to support Christianity, not as a threat to it. That is what the great scientists throughout history have always done. A brief look at Appendix C demonstrates just how many notable scientists throughout the ages have embraced Christianity. Here are a few examples:

There are two books laid before us to study, to prevent our falling into error: first, the volume of the Scriptures, which reveal the will of God; then the volume of the Creatures, which express his power. - Sir Francis Bacon, credited for formulating the scientific method

Since we astronomers are priests of the highest God in regard to the book of nature, it befits us to be thoughtful, not of the glory of our minds, but rather, above all else, of the glory of God. - Johannes Kepler, developed the three laws of planetary motion

I have a fundamental belief in the Bible as the Word of God, written by men who were inspired. I study the Bible daily. - Sir Isaac Newton, co-inventor of calculus, developer of the

law of universal gravity, developer of the three laws of motion, and inventor of the reflecting telescope

The nearer I approach to the end of my pilgrimage, the clearer is the evidence of the divine origin of the Bible. - Samuel F, B. Morse, inventor of the telegraph and designer of Morse Code

The more I study nature, the more I stand amazed at the work of the Creator. - Louis Pasteur, contributed more to the saving of human lives than any other man, developed the germ theory of disease, the law of biogenesis, invented pasteurization of food and developed many vaccines

Since answering the question of origins requires an attempt to reconstruct a series of past events based upon all known evidence, we should examine *all the evidence*. Although Darwin's model has persuaded many scientists that the universe was created through naturalistic means, it contains serious limitations as we have seen throughout this book. Many of these limitations have been discovered through recent understanding of information within DNA, the fossil record, and molecular biology. It is becoming increasingly difficult to square Darwin's model with these new evidences.<sup>3</sup>

Given the apparent contradictions, should scientists be free to seek and propose alternative theories or should science tie itself to one and only one explanation, and ignore all other potential data? Doing the later obviously is not what science is about. Furthermore, scientific knowledge alone doesn't necessarily take precedence over other forms of knowledge. For instance, historical knowledge is important and tells us much, but it can't be tested by repeated experimentation. The fact that a historical event occurred (say, George Washington crossing the Delaware) can't be tested using the scientific method and yet we know that it happened through records and historical records. Likewise, we can know we have free will through introspection, but again, the scientific process can't prove this.

Many view science and faith as two separate and distinct realms that don't interact with one another and that contradict one another. That is not true. Consider the following examples:

- Cosmology. Modern cosmologists now agree that there was a beginning to the universe. If this is true, it implies a cause that transcends the universe. The fact that most scientists now believe energy, matter, space, and time had a beginning is profoundly antimaterialistic (antinaturalistic), since you can invoke neither time nor space nor matter nor energy nor the laws of nature to explain the origin of the universe. The theory of general relativity points to the need for a cause that transcends those domains. Theism affirms the existence of such an entity namely, God. Taken together, the Big Bang and general relativity provide a scientific description of what Christians call *creation* ex *nihilo* creation out of nothing.
- **Physics.** Modern physicists now agree that if the laws of physics are fine-tuned to permit life, then perhaps a designer fine-tuned them. This is called 'anthropic fine-tuning'. This means the fundamental laws and parameters of physics have precise numerical values that could have been otherwise. That is, there are no fundamental reasons why these values have to be the way they are. Yet all of these laws and constants conspire in a mathematically incredible way to make life in the universe possible. The impression of design is overwhelming. This is powerful evidence for Intelligent Design.
- **Molecular biology** shows that there is information in the cell. This suggests intelligent design. To get life going in the first place would have required biological information; the implications point beyond the material realm to a prior intelligent cause. Richard Dawkins of Oxford said that 'the machine code of the genes is uncannily computer-like.' If you reflect on that, you realize that computers run on software programs that are produced by intelligent engineers. In fact, every experience we have about information whether its computer code, hieroglyphics, a book, or a cave painting points toward intelligence. The same is true of the information inside every cell of every living creature.

• Molecular biology also shows that there is evidence for design in molecular machines that defy explanation by Darwinian natural selection. These integrative, complex systems in biological organisms – which microbiologist Michael Behe calls 'irreducibly complex' – include signal transduction circuits, sophisticated motors, and all kinds of biological circuitry. These machines need their various parts to function. But how could you ever build such a system by a Darwinian process of natural selection acting on random variations? Natural selection only preserves things that perform a function. That's survival of the fittest. The problem with irreducibly complex systems is that they perform no function until all the parts are present and working together in close coordination with one another. So natural selection cannot help you build such systems; it can only preserve them once they've been built. And it's impossible for evolution to take such a huge leap by mere chance to create a whole system at once. These biological machines look designed because they really were designed.

### The Scientific Worldview of Today

The following is an article by Gene Edward Veith that appeared in World Magazine which unfortunately reflects the worldview prevalent throughout most of the scientific community today<sup>4</sup>.

# A Smithsonian-backed editor is defrocked by the priesthood of science for publishing an article on Intelligent Design

Science is typically praised as open-ended and free, pursuing the evidence wherever it leads. Scientific conclusions are falsifiable, open to further inquiry, and revised as new data emerge. Science is free of dogma, intolerance, censorship, and persecution.

By these standards, Darwinists have become the dogmatists. Scientists at the Smithsonian Institute, supported by American taxpayers, are punishing one of their own simply for publishing an article about Intelligent Design.

Stephen Meyer, who holds a Ph.D. from Cambridge and is a research fellow at the Discovery Institute, wrote an article titled "The Origin of Biological Information and the Higher Taxonomic Categories." As Mr. Meyer explained it to WORLD, his article deals with the so-called Cambrian explosion, that point in the fossil record in which dozens of distinct animal body forms suddenly spring into existence. Darwinists themselves, he showed through a survey of the literature, admit that they cannot explain this sudden diversity of form in so little time.

Mr. Meyer argued that the need for new proteins, new genetic codes, new cell structures, new organs, and new species requires specific "biological information." And "information invariably arises from conscious rational activity." That flies in the face of the Darwinist assumption that biological origins are random.

Mr. Meyer submitted his paper to the Proceedings of the Biological Society of Washington, a scientific journal affiliated with the Smithsonian Institute's National Museum of Natural History. The editor, Rick Sternberg, a researcher at the museum with two Ph.D.s in biology, forwarded the article to a panel of three peer reviewers. In scientific and other academic scholarship, submitting research to the judgment of other experts in the field ensures that published articles have genuine merit. Each of the reviewers recommended that, with revisions, the article should be published. Mr. Meyer made the revisions and the article was published last August.

Whereupon major academic publications—Science, Nature, Chronicles of Higher Education—expressed outrage. The anger was focused not on the substance of the article, but on the mere fact that a peer-reviewed scientific journal would print such an article.

So the wrath of the Darwinists fell on Mr. Sternberg, the editor. Although he had stepped down from the editorship, his supervisors at the Smithsonian took away his office, made him turn in his keys, and

cut him off from access to the collections he needs for his research. He is also being subjected to the sectarian religious discipline of "shunning." His colleagues are refusing to talk to him or even greet him in the hallways.

His supervisors also staged an inquisition about Mr. Sternberg's religious and even political beliefs. Mr. Sternberg, who describes himself as a Catholic with lots of questions, has filed a case alleging discrimination not just on the grounds of religion but "perceived" religion.

Critics of Mr. Sternberg say that the article should not have been published because the American Association for the Advancement of Science has proclaimed that Intelligent Design is "unscientific by definition." As Mr. Meyer points out: "Rather than critique the paper on its scientific merits, they appeal to a doctrinal statement."

Historically, said Mr. Meyer, science has sought "the best explanation, period, wherever the evidence leads." But now the scientific establishment is requiring something else: "the best materialistic explanation for phenomenon." That rules out non-materialistic explanations from the onset, demanding adherence to the worldview that presumes the material realm is all that exists.

David Klinghoffer broke the story of Mr. Sternberg's mistreatment in The Wall Street Journal. The attempts to discredit him, Mr. Meyer said, have resulted in hundreds of scientists from around the world requesting and downloading the paper (available from www.discovery.org/csc/).

Mr. Meyer said that many scientists secretly agree with elements of Intelligent Design but are afraid to go public. Critics tried to force Mr. Sternberg to reveal the names of the peer reviewers—which are supposed to remain anonymous—but he refused. Darwinists shifted the discussions to evolution as a worldview, while avoiding its admitted failures to account for what Darwin purported to explain, namely, the origin of species.

The virulence of the attempts to suppress Intelligent Design demonstrates the Darwinists' insecurity. "You don't resort to authoritarianism," observed Mr. Meyer, "if you can answer it."

How did science fall so far short of its original intent? To quote the definition of 'science' from Wikipedia:

Science (from the Latin *scientia*, meaning "knowledge" or "knowing") is the effort to discover, and increase human understanding of how the physical world works. Using controlled methods, scientists collect data in the form of observations, records of observable physical evidence of natural phenomena, and analyze this information to construct theoretical explanations of how things work. Knowledge in science is gained through research. The methods of scientific research include the generation of hypotheses about how natural phenomena work, and experimentation that tests these hypotheses under controlled conditions. The outcome or product of this empirical scientific process is the formulation of theory that describes human understanding of physical processes and facilitates prediction.

Science is supposed to represent the search for understanding and discovery of how the physical world works. The purpose of science is to collect data, construct theoretical explanations and test those explanations through research, experimentation and active debate and dialog. Sadly, as it comes to the concept of Intelligent Design, today's scientific community have fallen far short of the world of Newton, Bacon, Kepler, Morse and Pasteur.

### The Bible and Science<sup>5</sup>

Skeptics will often say that the Bible contradicts science. As the evidence below shows, nothing can be farther from the truth! As you read the following, consider what this means for the Bible. Does it contradict science or does the following demonstrate that the Bible is the inspired word of God?

### **Biology**

• **Circulatory System.** The circulatory system (an organ system within the body that moves nutrients, gases, and wastes to and from cells) was discovered in 1628 by William Harvey. Prior to 1628, bloodletting (the removal of often considerable quantities of blood) was the medical treatment of choice based on the false belief that removing the blood from a patient 'purged' the patient from disease. This of course, only made the patient worse. The Bible, however, written more than *three thousand* years earlier had a different view:

For the life of a creature is in the blood, and I have given it to you to make atonement for yourselves on the altar; it is the blood that makes atonement for one's life. Leviticus 17:11a

• **Disease Control**. The spread of leprosy and Black Death was a mystery in the Middle Ages. The Bible had the answer thousands of years earlier: quarantine those with contagious diseases.

The person with such an infectious disease must wear torn clothes, let his hair be unkempt, cover the lower part of his face and cry out, 'Unclean! Unclean!' As long as he has the infection he remains unclean. He must live alone; he must live outside the camp. Leviticus 13:45 & 46

Any bed the man with a discharge lies on will be unclean, and anything he sits on will be unclean. Anyone who touches his bed must wash his clothes and bathe with water, and he will be unclean till evening. Whoever sits on anything that the man with a discharge sat on must wash his clothes and bathe with water, and he will be unclean till evening. Whoever touches the man who has a discharge must wash his clothes and bathe with water, and he will be unclean till evening. If the man with the discharge spits on someone who is clean, that person must wash his clothes and bathe with water, and he will be unclean till evening. Everything the man sits on when riding will be unclean, and whoever touches any of the things that were under him will be unclean till evening; whoever picks up those things must wash his clothes and bathe with water, and he will be unclean till evening. Anyone the man with a discharge touches without rinsing his hands with water must wash his clothes and bathe with water, and he will be unclean till evening. Leviticus 15:4-11

• Stress & Health: Stress and emotional trauma can cause serious illness. We now know that blood flow and amount of blood are changed during emotional stress. Glands secrete excess thyroxin, adrenaline, bile or acids when a person experiences stress, fear, guilt or bitterness. The bones produce healthy blood under good circumstances. Today's physicians are becoming more aware of these facts. The Bible has been aware of the impact of stress on health for thousands of years:

My life is consumed by anguish and my years by groaning; my strength fails because of my affliction, and my bones grow weak. Psalm 31:10

When I kept silent, my bones wasted away through my groaning all day long. For day and night your hand was heavy upon me; my strength was sapped as in the heat of summer. Psalm 32:3,4

Because of your wrath there is no health in my body; my bones have no soundness because of my sin. My guilt has overwhelmed me like a burden too heavy to bear. I am bowed down and brought very low; all day long I go about mourning. My back is filled with searing pain; there is no health in my body. I am feeble and utterly crushed; I groan in anguish of heart. Psalm 38:4,5, 6-8

Do not be wise in your own eyes; fear the LORD and shun evil. This will bring health to your body and nourishment to your bones. Proverbs 3:7,8

A wife of noble character is her husband's crown, but a disgraceful wife is like decay in his bones. Proverbs 12:4

A heart at peace gives life to the body, but envy rots the bones. Proverbs 14:30

A cheerful look brings joy to the heart, and good news gives health to the bones. Proverbs 15:30

Pleasant words are a honeycomb, sweet to the soul and healing to the bones. Proverbs 16:24

A cheerful heart is good medicine, but a crushed spirit dries up the bones. Proverbs 17:22

### **Physics**

• **Isostasy**: Isostasy is the study of the earth's perfect balance. The earth's mountains and oceans are so equally distributed so as to yield an incredible balance between varying weights. Isostasy came into full understanding in 1959, but the Bible paints a picture of a designer who took great care in balancing the mountains and the earth three thousand years earlier.

Who has measured the waters in the hollow of his hand, or with the breadth of his hand marked off the heavens? Who has held the dust of the earth in a basket, or weighed the mountains on the scales and the hills in a balance? Isaiah 40: 12

He set the earth on its foundations; it can never be moved. You covered it with the deep as with a garment; the waters stood above the mountains. They flowed over the mountains, they went down into the valleys, to the place you assigned for them. You set a boundary they cannot cross; never again will they cover the earth. Psalm 104:5,8,9

The LORD reigns, he is robed in majesty; the LORD is robed in majesty and is armed with strength. The world is firmly established; it cannot be moved. Psalm 93:1

Where were you when I laid the earth's foundation? Tell me, if you understand. Who marked off its dimensions? Surely you know! Who stretched a measuring line across it? On what were its footings set, or who laid its cornerstone. Job 38:4-6

• **Geodesy**: Geodesy is the study of the geologic size and shape of the earth. The ancients thought the earth was flat, yet the Bible declared the earth was round. The Hebrew word "chug" = sphere, and is often translated "circle".

He sits enthroned above the circle of the earth, and its people are like grasshoppers. He stretches out the heavens like a canopy, and spreads them out like a tent to live in. Isaiah 40:22

I was there when he set the heavens in place, when he inscribed a circle on the face of the deep. Proverbs 8:27 NASB

• **Earth's Rotation**: The earth's rotation on an axis is referred to by Job. The ancients rolled small cylinders into clay for impressions. The cylinder was held by a stick through the center (much like a modern-day lint bruth). This rotation corresponds to the earth's rotation.

"It [the earth] is turned like clay to the seal." Job 38:14

• **Unsupported Earth**: The ancients thought the earth was supported by a large pillar, upon an animal's back or on the back of the Greek God Atlas. Again, Job declared what astronauts photographed millennia later.

He spreads out the northern skies over empty space; he suspends the earth over nothing. Job 26:7

### Conservation of Mass & Energy

The first law of thermodynamics states that mass and energy cannot be created or destroyed (by human beings). Nothing new is being created in the universe. Energy takes on different forms but continues on. This law is etched in Scriptures in various passages.

Thus the heavens and the earth were completed in all their vast array. Genesis 2:1

Now we who have believed enter that rest, just as God has said, "So I declared on oath in my anger, 'They shall never enter my rest.' And yet his work has been finished since the creation of the world. Hebrews 4:3

You alone are the LORD. You made the heavens, even the highest heavens, and all their starry host, the earth and all that is on it, the seas and all that is in them. You give life to everything, and the multitudes of heaven worship you. Nehemiah 9:6

What has been will be again, what has been done will be done again; there is nothing new under the sun. Is there anything of which one can say, "Look! This is something new"? It was here already, long ago; it was here before our time. Ecclesiastes 1:9,10

I know that everything God does will endure forever; nothing can be added to it and nothing taken from it. God does it so that men will revere him. Whatever is has already been, and what will be has been before; and God will call the past to account. Ecclesiastes 3:14,15

He is before all things, and in him all things hold together. Colossians 1:17

### Meteorology

• **Unchanging Seasons:** After the flood, God made a covenant that the seasons would always remain the same. The planet earth will never experience an ice age or greenhouse effect that modem man fears and speculates about.

As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease. Genesis 8:22

 Wind Circuits: Galileo discovered that the winds circulate in consistent patterns. Solomon knew that 1000 years before Christ. The wind blows to the south and turns to the north; round and round it goes, ever returning on its course. Ecclesiastes 1:6

 Atmospheric Weight. No scientist before Galileo knew that air had weight. Job, perhaps the oldest book in the Bible, says:

He imparted weight to the wind .... (NASB) Job 28:25a

### Hydrology

 Cycle of Evaporation – Condensation, Precipitation, Evaporation: This process was not discovered until the 17th century. Scripture describes this cycle in detail.

As the rain and the snow come down from heaven, and do not return to it without watering the earth and making it bud and flourish, so that it yields seed for the sower and bread for the eater, so is my word that goes out from my mouth: It will not return to me empty, but will accomplish what I desire and achieve the purpose for which I sent it. Isaiah 55:10,11

He makes clouds rise from the ends of the earth; he sends lightning with the rain and brings out the wind from his storehouses. Psalm 135:7

He wraps up the waters in his clouds, yet the clouds do not burst under their weight. Job 26:8

He draws up the drops of water, which distill as rain to the streams; the clouds pour down their moisture and abundant showers fall on mankind. Job 36:27,28

All streams flow into the sea, yet the sea is never full. To the place the streams come from, there they return again. Ecclesiastes 1:7

• **Ocean Currents**: Ocean waters run in currents like rivers within the ocean. Oceanographer's have charted what the Bible described thousands of years earlier:

The birds of the air, and the fish of the sea, all that swim the paths of the seas. Psalm 8:8

• **Underwater Mountains**: In recent decades, deep channels, canyons, and mountain ranges have been discovered in the ocean floor. Scripture refers to this:

The engulfing waters threatened me, the deep surrounded me; seaweed was wrapped around my head. To the roots of the mountains I sank down; the earth beneath barred me in forever. But you brought my life up from the pit, LORD my God. Jonah 2:5,6

### **Astronomy**

• **Countless Stars**: Before the telescope, Ptolemy believed there were 1056 stars. Kepler counted 1055. Now scientists tell us there are over 100 billion stars on our galaxy alone. The Bible said thousands of years before that the stars were infinite in number.

I will make the descendants of David my servant and the Levites who minister before me as countless as the stars of the sky and as measureless as the sand on the seashore. Jeremiah 33:22

• **Variation of Stars**: Although most believed the stars were the same size, the Scriptures factually report that stars differ in their power to shine forth.

The sun has one kind of splendor, the moon another and the stars another; and star differs from star in splendor. 1 Corinthians 15:41

 Immeasurable Heavens: A popular idea among the ancients was that the sky was a vaulted dome with stars attached to it. However, the Bible talks about the vastness and distance of the universe.

Is not God in the heights of heaven? And see how lofty are the highest stars! Job 22:12

Can you fathom the mysteries of God? Can you probe the limits of the Almighty? They are higher than the heavens -- what can you do? They are deeper than the depths of the grave -- what can you know? Job 11:7,8

As the heavens are higher than the earth, so are my ways higher than your ways and my thoughts than your thoughts. Isaiah 55:9

This is what the LORD says: "Only if the heavens above can be measured and the foundations of the earth below be searched out will I reject all the descendants of Israel because of all they have done, "declares the LORD. Jeremiah 31:37

Interestingly enough, man has not been able to penetrate downward below the earth's crust for accurate measurements and exploration.

• **Fixed Orbits**: Scientists can foretell eclipses and Halley's comet because of the fixed and precise orbits. God gave these absolute patterns of heavenly bodies.

Thus says the Lord, who gives the sun for light by day, and the fixed order of the moon and the stars for light by night, who stirs up the sea so that its waves roar; the Lord of hosts is his name: "If this fixed order departs from before Me, " declares the Lord, "Then the offspring of Israel also shall cease from being a nation before Me forever." Jeremiah 31:35,36 (NASB)

• **Constellations Bound**: Star clusters known as constellations were observed thousands of years ago and remain unchanged because God bound them together.

He is the Maker of the Bear and Orion, the Pleiades and the constellations of the south. Job 9:9

Can you bind the beautiful Pleiades? Can you loose the cords of Orion? Can you bring forth the constellations in their seasons or lead out the Bear with its cubs? Job 38:31,32

He who made the Pleiades and Orion, who turns blackness into dawn and darkens day into night, who calls for the waters of the sea and pours them out over the face of the land -- the LORD is his name. Amos 5:8

• **Sun's Circuit**: Astronomers have recently discovered the sun moves in a gigantic orbit around the Milky Way galaxy at 600,000 mph. This gives fresh meaning to an often scoffed at verse:

It [the sun] rises at one end of the heavens and makes its circuit to the other; nothing is hidden from its heat. Psalm 19:6

### The Model of Scientific Revolution

The above clearly demonstrates that the Bible isn't *behind* the curve as it relates to scientific discovery, it was *ahead* of the curve on numerous scientific discoveries, in most cases thousands of years before scientists 'discovered' what was already spelled out in the Bible.

To many, it's frustrating that the discussion around Intelligent Design is shunned in the scientific community, especially since so many great scientists throughout history have embraced the Bible and God. It's really only been the past 150 years since the advent of Darwinism that the perspective of so many scientists has changed to atheism. What will it take for a scientific revolution to occur and for the scientific community? To look to all plausible explanations to explain the phenomenon we observe in the universe, physics, astronomy, biology, the fossil record, biochemistry and the other scientific disciplines instead of just naturalistic ones?

The following is a very appropriate article by Gene Edward Veith from World Magazine on this topic6:

Intelligent Design took a hit [in 2006] when a federal court in Dover, Pa., banned it from being taught in the state's public schools. Now Darwinian activists are targeting the Ohio school system for including a biology lesson that simply poses questions about evolution.

Pundits are ridiculing those who doubt evolution as being "anti-science." They are using the controversy over Intelligent Design to warn about "fundamentalists" who want to reverse modern science and take us back to the Dark Ages. Even some conservative pundits, such as George Will, are piling on, eager to distance themselves from those embarrassing conservative Christians who somehow got into the Republican Party's big tent.

Meanwhile, evolutionists rallied to Darwin's defense. Popular magazines such as Newsweek, National Geographic, Discover, and Wired put Darwin on the cover, along with dismissive treatments of Intelligent Design. More serious scientists admitted that there are some gaps in evolutionary theory, but insisted that those gaps will someday be filled!

The overheated reaction—including purges of scientists who doubt Darwinism, censorship of dissident ideas, and legal action against promulgating Intelligent Design—is a textbook illustration of what the pioneering historian of science Thomas Kuhn describes in The Structure of Scientific Revolutions (1962).

He shows how scientists develop "paradigms," or explanatory models, the terms of which they use to organize their findings and interpret their research. For example, for centuries, the Ptolomaic model of the universe, the assumption that the moon, the sun, and the planets revolve around the earth, was adequate to account for nearly all astronomical observations.

But then someone discovered "anomalies," facts that the model cannot easily explain. Galileo with his telescope observed that some other planets have moons revolving around them as earth has.

Typically, the old-paradigm scientists first defend the model by attacking the anomaly detectors, often virulently, sometimes using the law and institutional power to silence the critics of the established model. Galileo was tried as a heretic, forced to recant, and put in prison.

Meanwhile, the scientists tinker with the model to try to make it fit the observations. The Ptolomaic system was modified with epicycles and complex new mathematical models. Eventually, though, as more and more anomalies are discovered, the old paradigm is abandoned and a new one that explains the anomalies takes its place—such as the Copernican model that the earth and planets revolve around the sun. This process is what Kuhn describes as a "scientific revolution."

Intelligent Design has found anomalies that just cannot be explained in terms of Darwin's random natural selection. As Michael Behe has shown, the most basic mechanisms of life—the structures within a cell, the chemistry of blood-clotting, the processing of oxygen—display "irreducible complexity" that could not have evolved randomly. If these already complex and finely tuned structures were not in place, life on any level could not exist.

Apologists for evolution often simply ignore these anomalies. They launch off on "evidence" for Darwinism, such as how bacteria develop strains that are resistant to antibiotics through natural selection. But no one denies that natural selection occurs. Obviously, the fittest will survive. But Darwinism insists that natural selection is what creates new species. And the evidence for that happening—for bacteria turning into another life form—is lacking.

Oddly, some of the outrage against Intelligent Design comes from "theistic evolutionists." These are Christians who have made their peace with the major scientific paradigm, upholding both evolution and a belief in God. They believe that evolution is the way God chose to create his natural order. The book of Genesis, they say, is symbolic. God directed evolution to create man.

But the crux of Darwinism is precisely that evolution is undirected, stemming from random mutations. Those who say there is a purpose to evolution are no longer in the Darwinist paradigm. Whether they want to or not, they are advocating Intelligent Design.

Since purpose, direction, and non-random order can be observed everywhere in nature, perhaps eventually they will inspire a scientific revolution.

### Conclusion

Obviously, the Bible was never intended to be a science textbook. Rather, the Bible was written to provide a historical and spiritual context to God's people. As such, we shouldn't look to the Bible for detailed scientific explanations, but within that context, how can it be that a book written over thousands of years ago can know so much about the science of the world, even before the associated 'scientific' discoveries were made? How can the Bible reference the circulatory system, disease control, the impact of stress on health, the perfect balance of the Earth, the shape of the Earth, the nature of the Earth's rotation, the fact that the earth floats in space, the laws around conservation of mass & energy, the unchanging seasons, the wind circuits, the existence of atmospheric weight, the cycle of evaporation, ocean currents, underwater mountains, the countless stars in the sky, the different variation of stars, the infinite expanse of the universe, the nature of fixed orbits, the fact that the constellations remain consistent and the sun's circuit before these phenomenon were known to mankind?

One explanation is that the Bible is not a normal book, as we will see over the next couple of chapters. Only God could know of these phenomenon's before they were discovered. If it is true that the Bible is the inspired Word of God, then the answer as to how the Bible can know these things is obvious. If the answer is anything else, one is left to explain the unique and almost miraculous nature of the passages referenced above.

Regardless, it quickly becomes evident to anyone but the hardened skeptic, that the Bible does not stand opposed to science. The Bible is not for the 'unintelligent' or those ignorant of science. Rather, throughout the ages, the Bible has revealed phenomenon thousands of year before these phenomenon were known to mankind. Perhaps this is why the Bible has been embraced by some of the greatest scientists of all-time, dozens of which are listed in Appendix C of this book. Perhaps instead of shunning the Bible, we should be exploring its pages for hints of other scientific phenomenon that we have yet to understand.

### **Discussion Questions**

- 1. How would you respond to the statement that "science is the only source of truth"? Is that a scientific or a philosophical statement? How much confidence do you put in science? What are the limits of science?
- 2. Have you ever met someone who was hostile toward Christianity for 'scientific' reasons? What are some of the factors that might have driven that person's skepticism?
- 3. On a scale of one to ten, how credible do you think Christianity is, scientifically speaking? Specifically, what are your opinions based on? How have your attitudes changed over the years?
- 4. Do you believe Christianity is being eclipsed or enhanced by modern science? Why? On what do you base your assessment?

# **CHAPTER 12**

# EVIDENCE FOR THE OLD TESTAMENT

The grass withers, the flower fades; but the world of our God will stand forever. - Isaiah, Isaiah 40:8

My doubts scattered to the winds and my reason became convinced by the arguments in support of the inspired and infallible authority of the Old and New Testaments – Abraham Lincoln

The Bible is God's Word to us. It is the traveler's map, the pilgrim's staff, the pilot's compass, the soldier's sword and the Christian's charter. It should fill the memory, rule the heart and guide the feet. It should be read slowly, frequently and prayerfully. — Source Unknown

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. – Timothy, 2 Timothy 3:16

The starting place for the study of the Christian faith is the Bible, the written witness to God's words and acts of history. Although the Bible has many books, it is really one book – one continuous story – with two distinct parts or "testaments", from the Latin *testamentum*, meaning "covenant" or "agreement". The Old Testament contains the covenant between God and the people of Israel at Mount Sinai: "Now therefore, if you obey my voice and keep my covenant, you shall be my treasured possession out of all the peoples" (Exodus 19:5). The New Testament contains the covenant between God and all of humankind, which was foretold by the prophet Jeremiah: "The days are surely coming...when I will make a new covenant..." (Jeremiah 31:31). This covenant was the coming Messiah, Jesus Christ.

### Authority of the Old Testament<sup>7</sup>

Christians call the Bible the "Word of God", which is a metaphor or figure of speech, because God did not dictate the Bible (as Muslims believe he did the Koran). God communicated with those entrusted with the task of putting pen to paper through visions and dreams (Numbers 12:6).

The Bible is the vehicle or medium through which God's "Word" comes to us. The divine selection of those who wrote the Scriptures, and the guidance to assure the faithful writing and transmission of their testimony, is called inspiration (2 Timothy 3:16). The authors, though, were human and wrote for different audiences and had different sources, both oral and written (Luke 1:1-4), which accounts for occasional differences in their stories.

Most Christians believe that the Bible is infallible, meaning that the Bible is completely trustworthy, especially as to the revelation of God in Jesus Christ.

### Uniqueness of the Bible<sup>8</sup>

The Bible is unique among all other books of the world. The Bible has been read by more people, and published in more languages, than any other book in history. More copies of its entirety have been produced than any other book in history and there is no book in the history of mankind that has known anything approaching the constant circulation of the Bible. Consider the following. The Bible:

- Was written over a 1,500 year span
- Was written over 40 generations
- Is made up of 66 different books
- Was written by more than 40 authors from every walk of life including kings, peasants, philosophers, fisherman, poets, statesman, scholars, etc.
- Was written in different places such as the wilderness, a dungeon, a hillside, a palace, a prison, while traveling, on an island, in the military
- Was written on three continents
- Was written in three languages (Hebrew, Aramaic, Greek)
- Has withstood vicious attacks from its enemies as no other book has. Many throughout history have tried to burn it, ban it, and outlaw it – all to no avail
- Its subject matter includes hundreds of controversial topics yet the Biblical authors spoke with harmony and continuity from Genesis to Revelation

### Historical Quality of our Bible<sup>9</sup>

Many people believe that the Bible has somehow been corrupted over the ages (including those who believe the Muslim faith). These people believe that in the process of copying and recopying the books of the Bible, century after century that some parts got lost, some got misinterpreted, some got added and no one really knows what the Bible originally said at this point. This is a myth. The original text of the Bible has been remarkably preserved. Three facts give us confidence of this:

- First, we have plenty of ancient manuscripts of the Bible, both the Hebrew Old Testament and the Greek New Testament. For example, we have thousands of Hebrew Old Testament manuscripts that have been found all over Europe and the Middle East, including the fabulous collection discovered by scholars in Cairo in 1896. We also have the Dead Sea Scrolls, the first of which were discovered in 1947 and include some two hundred Old Testament manuscripts. Likewise, we have hundreds of copies of each book of the New Testament in a mass of over five thousand Greek manuscripts in museums and libraries worldwide.
- Second, the quality of these manuscripts is very good. The discovery of the Dead Sea Scrolls
  provided concrete proof that the Jewish scribes had preserved the text with astonishing accuracy.
  The quality and accuracy of the Bible is considerably better than the manuscript quality of any
  other ancient documents. Where there are variations, they are variations in spelling and style.
- Third, the time span between the originals and our earliest copies is extremely short for ancient writings. The Dead Sea Scrolls, for example, date from about 200 B.C. to A.D. 68. The time span between the writing of the original New Testament books (between about A.D. 50 and 100) is exceptionally short.

As such, there is no reason to question the substantial accuracy and integrity of the Old and New Testament books because they enjoy far greater attestation in terms of quantity, quality and time span than any other ancient documents.

### Historical Accuracy of the Bible<sup>10</sup>

Unlike most of the sacred writings of other religions, The Bible is largely a book of historical accounts of what God has done in the past. The truth of the Bible is therefore tied to the truth of its claims about certain crucial events that happened in the history of Israel. The general outline of events described in the Bible has never been in serious doubt:

The Israelites were a nation that was tied to the familial identity as the children of Abraham. Isaac, and Jacob. The people of Israel were taken captive by the Egyptians and then were released. They then occupied Palestine and achieved a level of military and economic strength. The kingdom was short-lived – after the reign of David and Solomon, the kingdom divided and the resulting two kingdoms were conquered, first the northern kingdom by the Assyrians in the eighth century B.C. and then the southern kingdom of Judah in the wave of conquests by the Babylonians between 605 and 586 B.C. The Jewish Temple in Jerusalem. destroyed by the Babylonians was then rebuilt after the Jewish people were allowed to return by the Persians, whose empire was supplanted by the Babylonians in 539 B.C. The Jewish people were then ruled by the Persians, then by the Greeks, and then finally by the Romans. Jesus was an itinerant rabbi and reputed healer whose teaching offended some of the Jewish religious leadership of the day. He was eventually executed by the order of Pontius Pilate, the Roman governor, just outside Jerusalem on or about the Jewish festival of Passover in either A.D. 30 or 33. A few weeks after his execution, Jesus' followers began proclaiming that he had risen from the dead, had appeared to them, and that he was the promised Deliverer-King, known in Hebrew as the Messiah and in Greek as the Christ. About fifteen years later. Gentiles (non-Jews) began to join the Church. By A.D. 70, when the second Jewish Temple was destroyed in a war between the Jews and the Romans, the movement of Jesus' followers had become in effect a new religion, and its members became known as Christians.

Very little of the above has ever been in serious doubt by scholars or archeologists. Of course, skeptics question the supernatural acts of God, but the historical outline of the Bible is not in question, and no serious historian or scholar has ever argued that Jesus did not exist or that his followers did not report having seen him alive after his execution.

### **Evidence of Miraculous Claims**<sup>11</sup>

Although the general historical context and overall reliability of the Bible is not in serious question, this is not sufficient basis to accept the remarkable claims of the Bible to be a revelation from God. We need to know if some of the more miraculous claims of the Bible have any credibility to them. Is there evidence to support the Bible's historical accuracy in its most important claims?

Other than the Bible, there are third-party documents which confirm some of the miracles mentioned in the Bible. Consider the following passage regarding the plagues that God brought upon Egypt in the days of Moses from the *Admonitions of Ipuwer*, an Egyptian writing dating back to at least 100 B.C.<sup>12</sup>

Indeed, [hearts] are violent, pestilence is throughout the land, blood is everywhere, death is not lacking, and the mummy-cloth speaks even before one comes near it.

Indeed, many dead are buried in the river; the stream is a sepulcher and the place of embalmment has become a stream.

Indeed, nobleman are in distress, while the poor man is full of joy. Every town says: "Let us suppress the powerful among us."...

Indeed, the river is blood, yet men drink of it. Men shrink from human beings and thirst after water.

Indeed, gates, columns and walls are burnt up, while the hall of the palace stands firm and endures.

Indeed, the ship of [the southerners] has broken up; towns are destroyed and Upper Egypt has become an empty waste...

Behold, men tread [the water] like fishes, and the frightened man cannot distinguish it because of terror...

Indeed, gold and lapis lazuli, silver and turquoise, carnelian and amethyst, lbhet-stone and [...] are strung on the necks of maidservants...

Indeed, laughter is perished and is [no longer] made; it is groaning that is throughout the land, mingled with complaints...

Indeed, all animals, their hearts weep; cattle moan because of the state of the land.

Indeed, the children of princes are dashed against walls, and the children of the neck are laid out on the high ground...

Indeed, [men eat] herbage and wash [it] down with water; neither fruit nor herbage can be found [for] the birds, and [...] is taken away from the mouth of the pig. No face is bright which you have [...] for me through hunger.

Indeed, everywhere barley has perished and men are stripped of cloths, spice, and oil; everyone says: "There is none." The storehouse is empty and its keeper is stretched on the ground; a happy state of affairs!

Note that several of the plagues of the Exodus story are mentioned here:

- The turning of the Nile river into blood (Exodus 7:17-25)
- The plague on the cattle (Exodus 9:1-7)
- The plague of hail and fire (Exodus 9:13-35) would explain the destruction of the buildings and the trees
- The lack of fruit, herbs, and grain may be explained by the plague of locusts (Exodus 10:1-20)
- The reference to groaning throughout the land and the death of children of princes fits the tenth plague (Exodus 11:1-12:32)
- In addition, the references to female slaves wearing jewelry recalls the plundering of the Egyptians by the Israelite slaves before leaving the land (Exodus 12:34-36)

Although this is just one example, it does provide compelling third-party evidence that the miracles related to the Exodus story did actually occur. A more complete discussion of miracles as evidence of the Bible's super-natural inspiration is contained in Chapter 19 of this book.

### The Dead Sea Scrolls<sup>13</sup>

Prior to 1947, if someone was asked to prove that the original Hebrew Scriptures of the Old Testament were copied without error throughout the thousands of years, they would have had had a hard time. At that time, the oldest Old Testament manuscript used by the King James translators was dated to approximately A.D. 1100. Obviously, that manuscript was a copy of a copy of a copy. How could we be sure that the text in the copy of the Scriptures from A.D. 1100 was identical to the original text, as given to the writers by God and inspired by him?

An extraordinary discovery changed this dilemma the turbulent year before Israel became a nation. In 1947, a Bedouin Arab shepherd boy found a hidden cave in Qumran near the Dead Sea that ultimately yielded over one thousand manuscript fragments dating back before A.D. 68, when the Roman legions destroyed the Qumran village during the Jewish war against Rome. This find represented the greatest archeological find in history. When the site was examined, hundreds of precious texts, both biblical and secular, that dated back before the destruction of the Second Temple and the death of Jesus Christ were found.

Among the finds was an immense library of biblical manuscripts that contained almost all the books of the Old Testament (with the exception of the book of Esther). In fact, multiple copies of several biblical texts were found. In total, some 40,000 inscribed fragments consisting of 500 books were found. The Dead Sea Scrolls were preserved by the Essenes, one of the three significant Jewish religious groups alongside the Pharisees and the Sadducees. The Essenes established their center of religious community near the Dead Sea. They faithfully copied each Old Testament scroll in their village of Qumran. The significance of this find is twofold:

- First, the accuracy of the Old Testament scriptures was confirmed by the manuscripts that were found – the copies that were preserved throughout the ages were done so with amazing accuracy.
- Second, the messianic prophecy in Isaiah 53 was not altered by Christians (see section 4 of this book). The Isaiah 53 passage foretells of a Jewish messiah that will come. This prophetic passage provides details of Christ's coming in such accuracy that many have tried to argue that the passage was somehow altered by Christians after-the-fact to support the claim of Christ's divinity. The Dead Sea Scrolls confirmed that this was not the case.

The Isaiah scroll that was discovered was dated to 125 B.C. The oldest text of Isaiah had been written in 916 AD. So what had 1000 years of transmission done to the accuracy of the text? Of 166 words in Isaiah 53, only 17 letters were in question. Ten of the 17 were a matter of spelling which did not affect the meaning. Four others were minor stylistic changes, such as conjunctions. The three other letters comprise the word "light" which is added in verse 11, but does not change the meaning greatly.

After careful comparison, this find revealed that aside from a tiny number of spelling variations, there were no significant differences between the original scrolls in the caves and the Hebrew texts used to produce the Authorized King James Version of 1611. This remarkable archeological find provided powerful evidence that the text we have today was the same as it was originally written.

### **Discussion Questions**

- 1. Given the amazing accuracy of the Bible handed down through the ages and confirmed by the Dead Sea scrolls, what basis do you think people like Muslims can find to explain their belief that the Bible has been corrupted over time?
- 2. Reread the passage from *The Admonitions of Ipuwer*, which seems to confirm the Biblical account of the plagues of Egypt. If you were an atheist, what naturalistic explanation can you offer for the various events that Ipuwer describes?
- 3. Which of the proof points in this chapter regarding the Bible are most compelling to you?

# **CHAPTER 13**

# EVIDENCE FOR THE NEW TESTAMENT

I tell you the truth, until heaven and earth disappear, not the smallest letter, not the least stroke of a pen, will by any means disappear from the Law until everything is accomplished. – Jesus, Matthew 5:18

We were not making up clever stories when we told you about the power of our Lord Jesus Christ and his coming again. We have seen his majestic splendor with our own eyes. – Peter, 2 Peter 1:16 NLT

...so firm the ground upon which these Gospels rest, that the very heretics themselves bear witness to them – Iraneus, a second-century Bishop

I find more sure marks of authority in the Bible than in any profane history whatsoever – Isaac Newton

### **Authorship of the New Testament**

In any court of law, an eyewitness account can be compelling and convincing. When a witness has actually observed a crime and when there is no bias or ulterior motives, the eyewitness testimony is probably the most compelling piece of evidence that can be offered.

Several questions are asked of an eyewitness to substantiate the truthfulness or accuracy of a given statement or document:

- How near is the author geographically to the events recorded?
- How near is the author chronologically to the events recorded?
- Are the authors eyewitnesses, recorded from eyewitnesses, or relying on 3<sup>rd</sup> hand information or four or more sources removed from eyewitness testimony?

What eyewitness accounts do we possess of the life of Jesus? Do we have any records from first-century "journalist" who interviewed eyewitnesses, asked tough questions and accurately recorded what they determined to be true? Perhaps as important, have these eyewitness accounts stand up the scrutiny of skeptics?

The New Testament is made up of five different types of 'books' or letters:

• The Gospels: Each of the Gospels narrates the ministry of Jesus of Nazareth. The first three are commonly classified as the Synoptic Gospels. They contain very similar accounts of events in Jesus' life. The Gospel of John stands apart for its unique records of several miracles and sayings of Jesus, not found elsewhere. Strictly speaking, the gospels are anonymous (they are unsigned). However, there is almost unanimous consensus among the early Church that

Matthew, also known as Levi, the tax collector and one of the twelve disciples, was the author of the first gospel; that Mark, a companion of Peter was the author of the second; and that Luke was the author of the third as well as the book of Acts. The fourth gospel is traditionally ascribed to the disciple John, the son of Zebedee.

- Acts: The book of Acts, also termed Acts of the Apostles or Acts of the Holy Spirit, is a narrative of the Apostles' ministry after Christ's death and subsequent resurrection, which is also a sequel to the third Gospel. Acts was written by Luke.
- **The Pauline epistles**: The Pauline epistles constitute those letters attributed to Paul. These include Romans, Corinthians, Galatians, Ephesians, Philippians, Colossians, Thessalonians, Timothy, Titus and Philemon.
- **The General epistles**: The General epistles include those letters written to the church at large. These include the books of Hebrews, James, Peter, John and Jude.
- **Revelation**: The final book of the New Testament is the Book of Revelation. Revelation is sometimes called The Apocalypse of John (the apostle) and generally describes events surrounding the end times.

In total, the New Testament was written by 8 men (note that the book of Hebrews was written by an unknown author, so is excluded from this discussion):

**Author Authority** Matthew Was an eyewitness of Christ (Matthew 9:9) Was one of the 12 apostles (Matthew 10:3) His identity as one of the twelve is verified by Mark (Mark 2:14; 3:18) and Luke (Luke 5:27, 28) Mark Was an eyewitness of the early Church (Acts 12:12) Received eyewitness testimony about Jesus from Peter (1 Peter 5:13) His identity was verified by Paul (Philemon 24) Luke Collected evewitness testimonies from those who saw Christ (Luke 1:1-4) Was an eyewitness to Paul's journeys (Acts 16:10) • His identity was verified by Paul (Colossians 4:14, 2 Timothy 4:11) John Was an evewitness of Christ (John 19:35, 1 John 1:1-3) • Was one of the 12 apostles (Matthew 10:2) His identity was verified by Matthew (Matthew 4:21) and Mark (Mark 9:2) Paul • Was an eyewitness of Christ (Acts 9) His identity was verified by Peter (2 Peter 3:14-15) and Luke (Acts 27) James Half-brother of Jesus (Matthew 13:55) Initially disbelieved in Jesus' messiahship (John 7:5) His identity was verified by Paul (Galatians 1:19, 1 Corinthians 15:7) and Luke (Acts 15:13) Peter Was an eyewitness of Christ (2 Peter 1:16-18) Was one of the 12 apostles (John 1:41, Matthew 1:16-20, Mark 3:16, 1 Corinthians 15:5, Jude 18, 2 Peter 3:3) Jude Half-brother of Jesus (Matthew 13:55) • Initially disbelieved in Jesus' messiahship (John 7:5) His identity was verified by Luke (Acts 1:14)

Table 9: The Authors of the New Testament<sup>14</sup>

As it pertains to their eyewitness testimony and the potential accuracy of their accounts:

Of the eight New Testament authors, six were eyewitnesses of Jesus Christ.

- The two who were not eyewitnesses (Luke and Mark) received their information from living eyewitnesses
- Two were related family members of Jesus (James and Jude).
- All eight authors were verified by at least two others from the group of eight.
- Of the eight authors, all were unlikely characters Mark and Luke weren't even among the twelve disciples. Matthew was, but as former hated tax collector, he would have been the most unlikely and distrusted disciple next to Judas. Surely, if the accounts were fabricated, then the fabricators would have chosen a more credible set of authors such as Peter, Philip, Mary or James.
- All eight authors remained true to their testimony until death. Compare this with the eleven witnesses to *The Book of Mormon* whose names appear in the preface of *The Book of Mormon*. Eight of these eleven witnesses left the Mormon Church and/or renounced Joseph Smith as a false prophet.<sup>15</sup> Not one author of the New Testament recanted any testimony even though all were severely punished and/or died for their witness to Christ.

### Corroborating Evidence

How do we know that the above authors did indeed write the books attributed to them?

- Papias, an early Church leader, specifically affirmed in A.D. 125 that Mark had carefully and accurately recorded Peter's eyewitness observations. He said Mark 'made no mistake' and did not include 'any false statement.' Papias said Matthew had preserved the teachings of Jesus as well.
- Irenaeus, an early Bishop of the Church, wrote the following about A.D. 180:

Matthew published his own Gospel among the Hebrews in their own tongue, when Peter and Paul were preaching the Gospel in Rome and founding their church there. After their departure, Mark, the disciple and interpreter of Peter, himself handed down to us in writing the substance of Peter's preaching. Luke, the follower of Paul, set down in a book the Gospel preached by his teacher. Then John, the disciple of the Lord, who also leaned on his breast, himself produced his Gospel while he was living at Ephesus in Asia.

So, we can be assured that the gospel records are based on direct or indirect eyewitness testimony.

# Dating of the New Testament<sup>16</sup>

When was the New Testament written and how close was it to the actual events?

- Although the exact dates of authorship are unknown, even in very liberal circles, Mark was acknowledged to be written in the 70s, Matthew and Luke in the 80s and John in the 90s. Others have dated the New Testament gospels to between A.D. 32 and A.D. 64. These are all well within the lifetimes of various eyewitnesses of the life of Jesus, including hostile eyewitnesses who would have served to correct any false teaching about Christ that were going around. The point is that it would be almost impossible to successfully distribute a blatantly false story about Christ's miracles, his death, and his resurrection throughout the Roman Empire while thousands of his faithful followers and thousands of non-Christian observers of these events were still alive to dispute it.
- The book of Acts ends abruptly with Paul, the central figure in the book, under house arrest in Rome. Why? Because the book was most likely written before Paul was put to death. That would imply that Acts cannot be dated any later than A.D. 62. With that established, and knowing

that Acts is part two of a book written by Luke, the Gospel of Luke must have been written before that. Since Luke incorporates parts of the gospel of Mark, which means Mark must be dated even earlier. Allowing for maybe a year each, this means Mark was likely written no later than A.D. 60 or maybe in the late 50s. Since Jesus was put to death in A.D. 30 or 33, then the maximum gap would be about thirty years or so. Historically speaking, that's an amazingly short period of time.

- It's important to note that all four Gospels fail to mention the Roman destruction of Jerusalem, the Temple and the Jewish state in A.D. 70. These were monumental events for the Jewish people. This argues strongly for an authorship date prior to A.D. 66 when the Roman legions invaded Galilee, or after A.D. 70 when the Romans burned the city and the Temple. The Gospel writers would have referred to this fact since these events fulfilled Jesus' earlier prophecies made in A.D. 32 regarding the impending destruction of the Jewish Temple. However, all three Synoptic Gospels are totally silent about the catastrophic events of Jerusalem's destruction an event that affected every Jewish citizen throughout the land. The silence of the Gospels about this event provides convincing evidence to any unbiased observer that the Gospel writers must have written their manuscripts at some point prior to the Jewish-Roman War of A.D. 66-70.
- Furthermore, the evidence is overwhelming that the Greek originals of the Gospels and the New Testament Epistles were widely copied, distributed, and translated immediately into Hebrew, Syriac, Latin, Coptic and other languages. These New Testament documents were treasured by the churches and read in their Sunday services within the first century. If anyone had wanted to introduce a false miracle, an imaginary event, or a theologically deviant doctrine, they would have faced an almost impossible task since the forger would have to simultaneously forge and insert this counterfeit passage into every single manuscript copy of the Gospels in every country and language without being detected or challenged by a Christian.

So we can establish that the Gospels, the eyewitness accounts of the life of Christ, were written extremely close to the actual events. To put this in perspective, consider the following:

- The two earliest biographies of Alexander the Great were written by Arrian and Plutarch more than 400 years after Alexander's death in 323 B.C., yet historians consider them to be generally trustworthy.
- The scriptures of Buddha, who lived in the sixth century B.C., were not put into writing until after the Christian era and the first biography of Buddha was written in the first century A.D. That leaves about a 700 year gap of time between when Buddha lived and when his biography was written.
- Although we have the sayings of Muhammad, who lived from A.D. 570 to 632, in the Koran, his biography was not written until 767 A.D. – more than a full century after his death.

## Testing the Evidence<sup>17</sup>

As we consider the Gospels, we should subject the testimony of the authors to a variety of tests to prove the veracity of the witness that they present. These tests are the same tests used by defense attorneys to examine evidence in a court of law:

- The Intention Test: Was the stated or implied intention of the writers to accurately preserve history?
  - Yes, consider Luke 1:1-4:

Many have undertaken to draw up an account of the things that have been fulfilled among us, just as they were handed down to us by those who from the first were eyewitnesses and servants of the word. Therefore, since I myself have carefully investigated everything from the beginning, it seemed good also to me to write an orderly

- account for you, most excellent Theophilus, so that you may know the certainty of the things you have been taught.
- Luke clearly says he intended to write accurately about the things he investigated and found to be supported by witnesses.
- Other gospels don't have specific statements, but it's clear they were written from an intentional, sober fashion with accurate detail without blatant mythologizing that you see in other ancient writings. It is clear the gospel writers were attempting to record what actually occurred.
- **The Ability Test**: If the writers intended to reliably record history, were they able to do so? Can we be sure the material about Jesus' life was well preserved for 30 years before it was finally written into the Gospels?
  - Before the time of computers and the printing press, most history was taught orally. As such, Israel was an oral culture with great emphasis placed on memorization. Rabbis became famous for having the entire Old Testament committed to memory, so it was certainly well within the capability of Jesus' disciples to have committed much material to memory and pass it along accurately.
  - Much like a study of other ancient Middle East that showed that 10-40% of any given retelling of sacred tradition could vary from one retelling to the next, the gospels vary the same percentage on any given passage, but as with other retellings, are consistent on the important aspects of the story. Consider, that with each retelling, people were present who had eyewitness knowledge or had heard the stories before, so the accuracies of the stories could be validated and corrected.
- The Character Test: Is it in the writer's character to be truthful? Was there any evidence of dishonesty or immorality that might taint their ability to transmit history accurately?
  - There is no evidence to this. Rather, we see 10 of the 11 disciples being put to grisly deaths to defend what they were saying, which shows great character.
- The Consistency Test: Do the various accounts contradict one another?
  - Although there are points at which the gospels appear to disagree, these range from minor variations in wording to more well known discrepancies. However, these can be accounted for by the oral tradition, of paraphrase, of explanatory additions or selective omission. By ancient standards, the gospels are remarkably consistent, which is the only standard by which they can be measured.
  - o Ironically, if the gospels were identical to one another, it would raise charges that the authors had conspired among themselves to coordinate their stories in advance, which would cast doubt on their reliability. Much like in a court of law, one would argue that a witness would have been "coached" if one was hearing a story that was parroted by other witnesses. As a result, there needs to be enough discrepancy to show that there could not have been previous collaboration among the authors, but at the same time, such substantial agreement to show that they were all independent narrators.
  - With regards to the more well known discrepancies:
    - In Matthew it says a centurion himself came to ask Jesus to heal his servant, but in Luke it says the centurion sent the elders to do this. This can be explained similar to today where we say "the president announced..." or "Bill Gates launched a new software product..." when in fact his staff announced something or are actually the ones launching the new product. We give credit to the person in charge regardless of personal involvement.
    - In Mark and Luke, it says Jesus sent the demons into the pigs at Garasa, while Matthew says it was in Gadara. They appear to be in two different places, but the most logical explanation is that one is a town and one is a province.

- Contradictions in the genealogies of Jesus in Matthew and Luke. They are in conflict, but this can be explained because Matthew reflects Joseph's lineage, because most of his opening chapter is told from his perspective. The themes of Jesus' royal lineage are important for Matthew. Luke, by contrast, traced the genealogy through Mary's lineage. Both are ancestors of David, so when you get that far back, the lines converge. Remember, the fact that some names are omitted was a common practice at the time and that names are often translated from one language to another, which meant they took on different spellings.
- **The Bias Test**: Were there any biases that would have colored their work? Did they have any vested interest in skewing the material that was being reported?
  - Although it's certain that Jesus' disciples loved him, they had no financial or positional power to be gained by skewing what they reported. Rather, they were likely pressured to keep quiet, deny Jesus and downplay him to protect themselves. Yet, they defended their stories to the point of suffering and death.
- The Cover-up Test: Did the authors include information that was embarrassing to themselves or could the stories have been skewed to make the authors look good?
  - Mark 6:5 says Jesus could do few miracles in Nazareth because the people there had little faith. This seems to limit his power.
  - Mark 13:32 says Jesus doesn't know the day or hour of his return, which seems to limit his Omniscience.
  - On the Cross, Christ cried out "My God, my God, why has thou forsaken me?"

These can be explained by Philippians 2:5-8 which talks about Christ voluntarily limiting the exercise of his power, but it certainly would have been more convenient for the gospel writers to leave these facts out. Likewise, there is plenty of embarrassing material about the disciples:

- Peter's denial of Christ
- The disciple's consistently mis-understanding Jesus
- James and John asking for positions of power in Christ's Kingdom
- **The Corroboration Test**: To the places, people and events mentioned in the gospels check out to be correct in cases where they can be independently verified?
  - Within the last hundred years archaeology has repeatedly unearthed discoveries that have confirmed specific references in the gospels.
  - The number of questions that archeology has risen is far outnumbered by the examples of corroboration that archeology has provided.
- The Adverse Witness Test: Were others present who would have contradicted or corrected the gospels if they had been distorted or false? Were there others at the time who claimed that the gospels were wrong?
  - Although many people had motives to discredit the gospels, in later Jewish writings, Jesus was called a sorcerer who led Israel astray. The Jewish leaders at the time never argued that Jesus didn't work the miracles the Bible describes. Rather, they acknowledge the miracles that Jesus did, although the writers clearly disagree with the source of the power.
  - Could Jesus have performed his ministry, been crucified, buried and resurrected if the people who knew him in the area were aware the disciples were exaggerating or distorting the things that he did? Could the movement have spread the way it did?

### **Documentary Evidence**<sup>18,19</sup>

The Bible today represents copies of ancient historical records. How can we be sure the modern-day versions – the end product of countless copying throughout the ages – bear any resemblance to what the authors originally wrote since there are no surviving originals of the New Testament? How can we be sure they are telling the whole story and that they weren't censored in some way since what we have are copies of copies? The issues are (1) if the biographies we have were reliably preserved for us, and (2) whether there is evidence that equally accurate biographies have been suppressed by the church.

These problems are common to all ancient writings, but what the Bible has in its favor is the unprecedented multiplicity of copies that have survived. The more copies you have that agree with one another, especially if they come from different geographical areas, the more you can cross-check them to figure out what the original document was really like.

No original copy of the New Testament exists. Why? Part of the reason is that in A.D. 303, the Roman Emperor Diocletian issued an official command to kill Christians and burn their sacred books. This was done in an attempt to destroy the new faith of Christianity. Although no original copy of the New Testament exists, we do have copies dating to within a couple generations from the writing of the originals whereas with other ancient texts, typically 5-10 centuries elapse between the time of the original and the earliest surviving copy. Consider the following:

Table 10: Documentary Evidence of Various Ancient Works

Work	When Written	<b>Earliest Copy</b>	Time Lapse	# of Copies
Homer, The Illiad	~800 B.C.	400 B.C.	1,200 years	643
Sophocles	496-406 B.C.	1000 A.D.	1,400 years	193
Herodotus, The	488-428 B.C.	900 A.D.	1,300 years	8
Histories				
Euripides	480-406 B.C.	1100 A.D.	1,500 years	9
Thucydides, History of	~460-400 B.C.	~900 A.D.	1,300 years	8
the Peloponnesian				
War				
Aristophanes	450-385 B.C.	900 A.D.	1,200 years	10
Plato, Tetralogies	427-347 B.C.	900 A.D.	1,200 years	7
Aristotle	384-322 B.C.	1100 A.D.	1,400 years	49
Demosthenes	383-322 B.C.	1100 A.D.	1,300 years	200
Aristotle	343 B.C.	1100 A.D.	1,400	5
Livy's, Roman History	59 B.CA.D. 17	900 A.D.	900 years	20
Julius Caesar, Gallic	58-50 B.C.	900 A.D.	950 years	9-10
Wars				
Catullus	54 B.C.	1550 A.D.	1,600 years	3
Pliny the Younger,	61-133 A.D.	850 A.D.	750 years	7
History				_
Josephus, <i>The Jewish</i> Wars	~75 A.D.	~900-1100 A.D.	825-1025 years	9
Suetonius, De Vita	75-160 A.D.	950 A.D.	800 years	8
Caesarum				
Tacitus, Anals of	~100 A.D.	850 A.D.	800 years	1 (books 1-6)
Imperial Rome				20 (books 11-16)
Tacitus, Minor Works	~100 A.D.	1,100 A.D.	1,000 Years	1

The New Testament	40-100 A.D.	125 A.D. (full	30-310 years	5,000+ Greek
		manuscripts 350		10,000 Latin
		A.D.)		9,300 Others

- The earliest portion we have of the New Testament dates to between A.D. 100 to 150. This fragment is of the book of John and was written on Papyrus from Egypt. Thus we have at a very early date, a fragment of a copy of John all the way over in a community along the Nile River in Egypt, far from Ephesus in Asia Minor, where the gospel was probably composed. This pushes the composition of John's gospel much closer to the days when Jesus walked the earth.
- We have 306 Greek manuscripts (or portions) written in uncial (on parchment using all capital Greek letters) dating back to the third century including the *Codex Sinaiticus* which is the only complete New Testament in Greek letters and the *Codex Vaticanus*, which is not quite complete. Both date to around A.D. 350.
- We have 2,856 manuscripts written in minuscule (more cursive) dating to roughly A.D. 800.
- We have 2,403 copies of lectionaries, which contain New Testament Scripture in the sequence it was to be read in the early churches at appropriate times during the year. This puts the grand total of Greek manuscripts at 5,664.
- In addition, there are thousands of other ancient New Testament manuscripts written in other languages. 8,000-10,000 Latin manuscripts plus a total of 8,000 in Ethiopian, Slavic and Armenian. In all, there are about 24,000 manuscripts in existence.
- In addition to the above, we have well over one hundred thousand letters from Christians that contain more than 99 percent of the eight thousand verses of the New Testament. This provides overwhelming proof that the text of the New Testament is historically reliable. Even if the New Testament manuscripts didn't exist, we would still be able to re-construct 99% of it from the surviving quotations.

As can be seen, the New Testament has no comparison – the manuscripts are overwhelming when compared to other revered writings of antiquity. Thus, scholars should have no reluctance treating the New Testament as authentic. There is simply no body of ancient literature in the world that enjoys such a wealth of documentary evidence as the New Testament.

It's worth pointing out that different sects of Christianity sprang up quickly and their members constantly appealed to Scripture to argue and defend their differing doctrinal interpretations of the text's meaning. This provides ample proof that the genuine test of the Scriptures has been reliably preserved down through the centuries until today. The existence of these sects guaranteed that no one could change the biblical text without it being instantly detected by their opponents.

### **Errors**

The New Testament, then, has not only survived in more manuscripts than any other book from antiquity, but it has survived in a purer form than any other great book – a form that is 99.5 percent pure.

— Scholars Norman Geisler and William Nix

Although there are naturally differences between the 24,000 manuscripts in existence due to the fact there were no printing presses or copy machines (scribes had to laboriously copy each letter), the errors found between different versions of manuscripts are confined to spelling differences and the sequence in wording. However, unlike English, in the Greek, the word order isn't important, so these errors are inconsequential. Of the more significant errors, none changes any doctrine of the Church.

By analogy, any judge or lawyer will tell you that any four eyewitness accounts of an event that agree in *every* detail would be thrown out of court for collaboration. Any eyewitness account of an event, such as

a car accident, naturally will describe the same event with different details and occasional discrepancies, although they each honestly describe what they saw of the actual event.<sup>20</sup>

Agnostic historians point out the verbal differences between verses such as Matthew 24:32 which says, "Now learn a parable of the fig tree" whereas Luke 21:29 says, "Behold the fig tree, and all the trees." However, as any speaker will tell you, when the same speech is given multiple times to multiple audiences, whether it is a politician's stump speech, or a teacher's course, such differences are easily explainable. Remember that Jesus was a traveling preacher who gave the same message to different audiences on different days. Slight variations in his expression of the message would have been normal.

### The Cannon

How do we know the scripture we have today which contains Matthew, Mark, Luke and John, but not the Gospel of Philip, the Gospel of the Egyptians, the Gospel of Truth and the Gospel of Nativity of Mary is the correct one? How did the Church determine which books would be considered authoritative and which would be discarded?

- The early Church had three tests it used when it considered which eyewitness accounts to include into the cannon of scripture we have today:
  - Was the book written by apostolic authority? In the case of Mark and Luke, while they
    weren't among the 12 disciples, early tradition has it that Mark was a helper of Peter and
    Luke was an associate of Paul.
  - Was the document congruent with the basic Christian tradition that the Church recognized as normative?
  - o Did the document have acceptance and usage by the Church at large?
- Although there were some differences of opinion, there was a high degree of unanimity concerning the New Testament for the first two centuries.
- The other documents mentioned above are written later than the four Gospels in the second-sixth centuries and are written by people that are not apostolic.
- The Gospel of Thomas contains 114 sayings of Jesus, but no narrative of what he did. It was written in Greek in about A.D. 140. The problem is that some of the sayings are modified from what the other gospels report "A city built on a *high* hill cannot be hidden" or "Render to Caesar the things that are Caesar's, render to God the things that are God's, *render to me the things that are mine.*" While other sayings have no parallel in the New Testament and are contrary to the doctrine in the other Gospels (i.e. pantheism). For instance, "Let Mary go away from us, because women are not worthy of life. Lo, I shall lead her in order to make her a male, so that she too may become a living spirit, resembling you males. For every woman who makes herself male will enter into the kingdom of heaven." This just isn't from the Jesus we know from the other Gospels.
- Throughout history, there has generally never been doubt about the authoritative nature of twenty
  of the New Testament's twenty-seven books from Matthew through Philemon, plus 1 Peter and
  1 John. The remaining seven books, although questioned for a time by some early church
  leaders, were finally and fully recognized by the church generally.
- As for other books: the Gospels of Nicodemus, Barnabas, Bartholomew, Andrew, the Epistle of Paul to the Laodiceans, the Apocalypse of Stephen and others were neither genuine or considered authoritative or deserving for inclusion in the New Testament by the early Church. Eusebius, an early Church historian, concluded these extra-Biblical books were "totally absurd" since they were too far removed from Jesus' ministry to contribute anything meaningful.

### **Corroborating Evidence**

There is no other period in the ancient past that is so well documented as the first century of the Christian era during the rule of the Roman emperors. Some of the greatest historians of the ancient world were contemporaries of Jesus, including the Roman writers Livy and Seneca, as well as the Jewish historian Flavius Josephus.

The evidence reveals that the Gospel writer Luke was an accurate historian who mentions well-attested historical figures, including Pontius Pilate, King Herod, Tiberius Caesar, the High Priests Annas and Caiaphas, as well as James, the brother of Christ, John the Baptist, and Jesus of Nazareth, all of whom were also mentioned by Josephus.

Eusebius, a historian wrote in A.D. 130:

The Elder [Apostle John] used to say this also: 'Mark, having been the interpreter of Peter, wrote down accurately all that he [Peter] mentioned, whether sayings or doings of Christ, not however, in order. For he was neither a hearer nor a companion of the Lord; but afterwards, as I said, he accompanied Peter, who adapted his teachings as necessity required, not as though he were making a compilation of the sayings of the Lord. So then Mark made no mistake, writing down in this way some things he mentioned them; for he paid attention to this one thing, not to omit anything that he had heard, not to include any false statement among then."<sup>21</sup>

Irenaeus, Bishop of Lyons (A.D. 180) wrote:

Matthew published his Gospel among the Hebrews in their own tongue, when Peter and Paul were preaching the gospel in Rome and founding the church there. After their departure [i.e., death, which strong tradition places at the time of the Neronian persecution in 64], Mark, the disciple and interpreter of Peter, himself handed down to us in writing the substance of Peter's preaching. Luke, the follower of Paul, set down in a book the gospel preached by his teacher. Then John, the disciple of the Lord, who also leaned on his breast [reference to John 13:25 & 21:20], himself produced his Gospel, while he was living at Ephesus in Asia.'"<sup>22</sup>

- Josephus, a Jewish historian confirms several events reported in Acts:<sup>23</sup>
  - A famine in Judea during the reign of the Roman emperor Claudis (Acts 11:28)
  - o The death of Herod Agrippa I (Acts 12:20-23)
  - Josephus also mentions John the Baptist, Jesus and James, the brother of Jesus
  - He confirms Jesus was widely viewed as a wise man and a miracle worker and was put to death by order of Pontius Pilate based on accusations brought by some Jewish leaders

### **Discussion Questions**

- Which of the evidence tests do you find the most persuasive and why?
- If people give you slightly different details of an event, do you seek to doubt their credibility or do you seek a reasonable way to reconcile their accounts?
- How do you rate the process by which the New Testament was transmitted to us?

- Scan a copy of the New Testament and examine the notes in the margins that talk about the variant readings. What are some examples you find? How do these variations affect your understanding of the passage?
- Do the criteria used by the Church to select the cannon sound reasonable to you? What criteria
  do you think should be added? What disadvantages to modern-day scholars have in secondguessing the early Church's work?

# **CHAPTER 14**

# **EVIDENCE FROM PROPHECY**

Hypocrites! You know how to interpret the appearance of the earth and the sky. How is it that you don't know how to interpret the signs of the times? – Jesus, Luke 12:56, NAS

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 will of man, but men spoke from God as they were carried along by the Holy Spirit. – Peter, 2 Peter 1:20-21

### The Uniqueness of the Bible

If the Bible were merely an ancient collection of writings that were historically credible, it would be interesting but probably not of much significance. But the Bible claims to be much more – it claims to be the Word of God. It claims that it was divinely inspired by the creator of the universe himself – a written expression of God revealing himself and speaking to humanity. Of course, any book can *claim* to be divinely inspired, but such claims prove nothing about the true origins of the book. The Bible, however, contains significant evidence to back up its claim.

Imagine if there were a book that existed throughout history that had successfully predicted the future in over five hundred specific cases with 100 percent accuracy. Wouldn't that book be unique? Wouldn't we have to believe that it was more than just a random collection of writings? The book, of course is the Bible, which contains literally thousands of specific prophecies that have endured the test of time. What's significant about the Bible is that the prophecies it contains, many of them given thousands of years before their fulfillment, have been fulfilled with 100 percent accuracy over time. In more than five hundred specific cases, the Bible has clearly and specifically predicted the future, with the fulfillment verified by historians and archeologists throughout the ages. In many cases, the fulfillment of these prophecies can be verified using a common encyclopedia. No other book would dare to predict future events in such great detail, and certainly no other book can come close to matching this level of accuracy. The Bible is truly unique for its track record of predicting the future that simply defies mathematical probability.

About 30 percent of the Bible is prophecy, which is part of what makes the Bible unique among other religious works such as the writings of Muhammad, Buddha, Confucius, or the Book of Mormon. Indeed, thousands of years ago, the God of the Bible made a bold challenge to all other religions and prophets claiming to be true:

"Present your case," says the Lord. "Set forth your arguments," says Jacob's King. "Bring in your idols, to tell us what is going to happen. Tell us what the former things were, so that we may consider them and know their final outcome. Or declare to us the things to come, tell us what the future holds, so we may know that you are gods." (Isaiah 41:22-23)

The accuracy of prophecy is the test by which to measure all other religions. So far, there has been no credible response to God's challenge for a religion to put its reputation on the line by accurately predicting the future. Certainly no other book can come close to matching this level of accuracy. The Bible is truly unique, for its track record of predicting the future simply defies mathematical probability.

In the opportunities I have had to teach over the years, I have frequently found people shocked to learn that the Bible accurately predicted the exact dates certain events would occur – often thousands of years ahead of time. These events when Israel would be restored to being a nation again following World War II, when Israel would gain control of Jerusalem again, as well as when the people of ancient Israel would be released from their captivity in Babylon. These prophecies had specific dates and timelines associated with them in the Bible, and were fulfilled *exactly* as they were predicted – many to the exact day -- even though their fulfillment was often thousands of years later.

These prophecies are amazing because unlike more generic prophecies (such as the fall of certain world empires or moral decay in the end times), there can be no question that these prophecies were divinely inspired and positively prove that the Bible is unique among all other works. For a book to predict the future *to the day* not once, not twice but at least half-a-dozen different times hundreds or thousands of years into the future is unquestionably and mathematically impossible – unless God's hand were at work.

This chapter will provide an overview of a few of these prophecies, and show how they were fulfilled exactly as predicted to demonstrate that the Bible is no an ordinary book.

### **Background**

Before delving deeply into each specific prophecy, it's important to point out a couple of things that will help individuals replicate the calculations and timelines that follow.

First, the prophecies cited in this chapter come from the Old Testament and were delivered by prophets 500-600 years before the coming of Christ. At this time, of course, the Christian (also known as the Julian and then subsequently Gregorian) calendar had not yet been invented. The calendar used by the prophets was the Jewish calendar, which is very different than our own. It is lunar-solar and has only twelve months of thirty days each, for a total of 360 days a year, as opposed to the solar year used by us today which consists of 365.242 days (the .242 fraction represents the leap year which occurs every four years, and the occasional leap century). Although this may sound confusing, all it means is that when a prophecy in the Bible says something will take "70 years" for example, it means "70 years of 360-days each" or a total of 25,200 days as opposed to the "70 years of 365.242 days" or a total of 25,567 days which we would be used to.

This difference in the length of a Jewish year from our own solar year is important to keep in mind when evaluating prophecies in the Bible that have specific, measurable time frames that can be computed. Failure to take this into account has frequently confused people through time and led to miscalculations and misinterpretations of prophecy. Evidence that the 360 day Jewish calendar was used throughout prophecy includes Noah's account of the flood in the book of Genesis where 150 days are recorded as five months (from the seventeenth day of the second month to the seventeenth day of the seventh month, Genesis 7:11, 24, 8:3-4), Esther's account of the six-month long feast of King Xerxes (which lasted exactly 180 days, Esther 1:4) and John's account of the end times in Revelation where he describes the last three and one-half years as precisely 1,260 days or forty two months (Revelation 12:6,14, 13:5).

The second important point to keep in mind when calculating timelines in the Bible is that there was no year zero on the Christian calendar – the calendar goes from 1 B.C. to 1 A.D., with no year zero. Adjusting for this requires that we add a year when converting from the Jewish calendar to the Christian calendar when the period in question crosses the 1 B.C./1 A.D. date.

With these two points in mind, we can then proceed to evaluate some of the Bible's most amazing prophecies.

### The Babylonian Captivity

In the Old Testament days, after the time of David and Solomon, the ancient nation of Israel fell into decline and turned away from God. Because of this, the Lord sent various prophets (Jeremiah, Obadiah, Joel, Jonah, Amos, Hosea, Isaiah, Micah, Nahum, Zephaniah and Habakkuk) to warn the people of Israel of the consequence of their sin and to pronounce his judgment upon them. This judgment was certain destruction of the nation by the hands of foreign invaders if Israel did not turn from its wicked ways. The people of Israel did not listen to the prophets and continued to disobey, so God sent Babylon to invade and destroy the nation (Jeremiah 5:19, 7:22-34). The story of Israel's disobedience, the warnings given by the prophets, Israel's captivity into Babylon, and their return from this captivity fills the majority of the Old Testament.

One of the most interesting prophecies regarding this captivity was given by the prophet Jeremiah the year Israel was taken captive by Babylon. In this prophecy, Jeremiah predicted that the captivity would last seventy years, after which, the Israelites would return to the city of Jerusalem (Jeremiah 25:11, 29:10). Was Jeremiah correct in his prediction? Was the Bible accurate in this case?

To understand these events, we need look no further than a history book or a common encyclopedia. From these, we learn that the nation of Israel encountered three separate sieges by the Babylonians:

- The first started in 605 B.C. when King Nebuchadnezzar II of Babylon invaded the region and subsequently laid siege to Jerusalem and defeated Jehoiakim, the King of Judah (the southern kingdom of Israel). Nebuchadnezzar then carried off many Israelites (including the prophet Daniel), along with some of the articles from the Temple to Babylon (Daniel 1:1-2). Judah then became a subject state of Babylon and had to pay tribute (taxes) to Nebuchadnezzar (2 Kings 24:1).
- The second siege started after the Egyptians encouraged Judah to rebel in 601 B.C. In 598 B.C., Nebuchadnezzar returned to Jerusalem and again laid siege to the city of Jerusalem. The city fell on March 16, 597 B.C. and the rebellion was crushed. Jehoiachin, the king of Judah at the time, and many of the country's leaders, laborers and craftsmen (including the prophet Ezekiel) were taken to Babylon in exile (2 Kings 24:10-16).
- The final siege occurred in 588 B.C. when despite the two prior attempts, Zedekiah, a puppet king placed on the throne of Judah by Nebuchadnezzar, appealed to the Egyptians for help and once again rebelled. On January 15<sup>th</sup>, 588 B.C., Nebuchadnezzar again invaded Judah and laid siege to Jerusalem. After about 30 months, the city was taken on July 18<sup>th</sup>, 586 B.C. and the rebellion crushed. Zedekiah and the remaining survivors (including the prophet Jeremiah) were carried off as slaves to Babylon. During this final siege, Nebuchadnezzar plundered the Temple and carried off various articles (including the bronze pillars of the Temple). He then set fire to, and destroyed the city of Jerusalem along with Solomon's Temple, the great centerpiece of the Jewish faith, on August 13, 586 B.C. (Jeremiah 39:1-10, 52:1-23, 2 Kings 20b-25:21). The Jewish people still commemorate this tragic day which is known as "Tisha b' Av".

A complete timeline of these, and other events mentioned in this article, is contained in Appendix G. With this knowledge, we can then proceed to look at the timeline and the fulfillment of Jeremiah's 70-year prophecy:

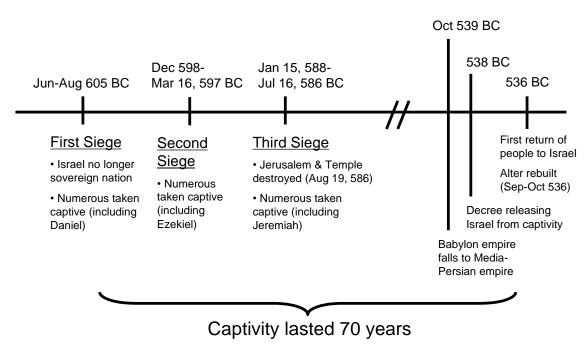


Figure 19: Timeline of the Babylonian Captivity

In October, 539 B.C., the Babylonian Empire fell to the empire of the Medes and Persians. The city of Babylon itself fell without a battle when the Medes and Persians diverted the water of the Euphrates River flowing through the city and, marching at night under the gates of the city, captured it while the Babylonian king was throwing a large feast. Both the secular historians Herodotus and Xenophon describe this event as did the prophet Daniel (Daniel 5). Cyrus II, the king of the Media-Persian Empire, established a new, enlightened policy of peaceful relationships throughout the empire and in 538 B.C. issued a decree that Jews would be allowed to return to Israel along with the treasures that were originally taken from the Temple by Nebuchadnezzar. It was this policy that allowed Cyrus to expand the Empire and still administer and control far-off nations. About 50,000 Jews left Babylon in 537 B.C. and did return to their original homeland, arriving in 536 B.C.

Unfortunately, we don't know from history the exact day that the first siege of Jerusalem occurred which would start Jeremiah's clock, but we do know that it had to occur between June and August of 605 B.C. because of two events that history records bookmarked this event – the first being the battle of Carchemish between the Egyptians and Nebuchadnezzar which occurred between May and June of 605 B.C. and the second being when Nebuchadnezzar returned to Babylon on August 16, 605 B.C. upon hearing of the death of his father.

The prophecy from Jeremiah states that the captivity would last 70 years after which the Israelites would return to the city of Jerusalem. If we convert from the Jewish calendar to the Christian calendar (by multiplying 70 by 360 and then dividing by 365.242), we end up with almost exactly 69 years of time on the Jewish calendar. Starting from June-August 605 B.C. (the year Israel lost its sovereignty and the first group of Jewish people were taken into captivity following the first siege), we can subtract 69 and expect to see from this prophecy that the captivity should have ended in the summer of 536 B.C. with the return of the first group of Jews back to Jerusalem. From history, we can clearly see that this was the case — the people of Israel were indeed taken captive in 605 B.C. from their nation and did return exactly 70 years later on the Jewish calendar - arriving in the summer of 536 B.C. Unfortunately, again, history doesn't record the exact day of their return, but we do know that the Alter of the Temple was rebuild in September-October 536 B.C. and rebuilding this would have been a priority for the Jewish people, so it is logical to conclude that they did, indeed, arrive one to three months prior in the summer as we would expect.

We can see from this that Jeremiah's prophecy of the 70-years of captivity was fulfilled exactly as predicted. Clearly, Jeremiah was a prophet of the true God.

#### The Restoration of Israel as a Nation<sup>2</sup>

The second prophecy we'll look at concerns the restoration of Israel as a nation. The rebirth of Israel as a country in 1948 after 2,000 years of dispersion is a hallmark event in Bible prophecy. Many Old Testament prophets foresaw this event and many people are familiar with these prophecies. When Israel became a nation again on May 14, 1948, it marked the first time since AD 70 that the people of Israel had a nation to call their own. It marked the first time since 605 BC that Israel had its own sovereign nation, which was not under the control of another world power. The importance of this event cannot be overestimated – no other nation in history has ever ceased to exist for centuries and then returned as a nation to its former land to regain its place in world history – and the Bible predicted this is exactly what would occur, thousands of years before it happened.

However, as remarkable as it was for the nation of Israel to be reborn at all, it was even more remarkable that the nation was reborn *on the exact day* in history when the Bible said it would be! To understand this prophecy, we must look to the prophet Ezekiel. In 593 B.C., Ezekiel received a vision from God. In this vision, the prophet was told to "act out" the coming siege of Jerusalem. Ezekiel's vision and subsequent timeline starts with the siege of Jerusalem (Ezekiel 4:2). Ezekiel is told to "lay siege to it. Erect siege works against it, build a ramp up to it, set up camps against it and put battering rams around it." Clearly, the timeline of this prophecy starts with Nebuchadnezzar's sieges against Jerusalem as described above. Ezekiel is then told by God in his vision to lie on his left side for 390 days to represent the bearing of the sins of the house of Israel (the Northern kingdom following their split) and then on his right side for 40 days to represent the bearing of the sins of the house of Judah (the Southern kingdom of Israel). Ezekiel is told that God has "assigned you the same number of days as the years of their sin" (Ezekiel 4:4-6). What this prophecy means is that God's pronounced judgment for the people of Israel would last 430 years. God then proceeds to describe the nature of the coming judgments upon Israel.

Was this prophecy correct in its prediction? We know from the previous section that the Babylonian captivity lasted 70 years. If we subtract this from the 430, we end up with 360 years of punishment that should remain for the people of Israel following the Babylonian captivity. If we convert between the calendars and do the math, we would expect to see God's punishment for Israel end between 182 and 164 B.C. (depending upon whether we use the first siege when Israel lost being a sovereign nation or the third siege when Jerusalem and the Temple were destroyed – both very significant events to the Jewish people). However, looking through history, these dates don't correspond to any known dates or significant events in Israel's history. What should we say then? Was the Bible wrong in its prediction?

To better understand this prophecy and God's punishment for Israel in more detail, we need to go back to the original covenant the people of Israel made with God at Mt. Sinai. After Moses led the people of Israel out of captivity in Egypt, they wandered around the wilderness for 40 years. During this time, God made a covenant (or contract) with the people of Israel through Moses. In this covenant, God promised that if Israel obeyed his commandments, he would treat them as his treasured possession. He would make them a kingdom of priests, with direct access to God, and a Holy nation. The people of Israel affirmed this covenant and agreed to "do everything the Lord had said" (Exodus 19:3-8). The Israelites however, promptly broke God's commandments by making and worshiping idols (Exodus 32:1-10). They then repented of this sin, and God renewed the covenant he had made with them. God promised to bless them above every nation of the earth, and do wonders for them never before done for any nation in the world if they remained obedient to him (Exodus 34:10, Deuteronomy 28:1). However, as part of this renewed covenant, God promised that if they disobeyed him again, they would be disciplined. Moses prophesized that this discipline would take the form of two future dispersions, where the nation of Israel would be taken from their country and scattered throughout the nations.

<sup>&</sup>lt;sup>2</sup> These calculations based on "The Fig Tree Blossoms" from To His Glory Ministries

Moses prophesized that the first time the Israelites disobeyed God, they would be conquered by an as-of-yet unknown nation which would lay siege to Jerusalem (Deuteronomy 28:36, 49, 52). The first conquering of Jerusalem was, of course, by Babylon, which did not exist in 1410 BC when Moses made this prophecy and wouldn't conquer Israel until 800 years later. The second time the Israelites disobeyed God Moses prophesized, the survivors would be scattered throughout the world in every nation. They would worship idols, be relentlessly persecuted and be without a country (Deuteronomy 4:27-31, 28:64-68).

What's interesting to note about these prophecies from Moses regarding Israel's punishment are several passages in Leviticus. In these verses, God clearly stated four different times that if Israel didn't obey God the first time (Babylon), he would multiply Israel's punishment by seven:

If after all this you will not listen to me, I will punish you for your sins seven times over. (Leviticus 26:18)

If you remain hostile toward me and refuse to listen to me, I will multiply your afflictions seven times over. (Leviticus 26:21)

If in spite of these things you do not accept my correction but continue to be hostile toward me, I myself will be hostile toward you and will afflict you for your sins seven times over. (Leviticus 26:23-24)

If in spite of this you still do not listen to me but continue to be hostile toward me, then in my anger I will be hostile toward you, and I myself will punish you for your sins seven times over. (Leviticus 26:27)

God then proceeds to describe his punishment: "I will scatter you among the nations...." (Leviticus 26:33).

Basically, when God made the original covenant with the people of Israel, he knew they would break it, even though he would send numerous prophets warning the Israelites of his pending judgment. God is merciful and the first dispersion (the Babylonian captivity) was intended as a wakeup call or warning shot. Even though the people ignored the prophets, surely they would recognize God's hand in their captivity and turn back to him so that upon their release, they would again be obedient to his laws and have a right and restored relationship with him. However, as stated in Leviticus, if they didn't turn back to him and continued to break God's laws even after this warning shot, God's anger would burn and he would multiply their punishment by seven.

Knowing this, let's then look at the timeline and see if multiplying the remaining punishment after the Babylonian captivity by seven yields anything meaningful.

First, looking at Ezekiel's prophecy, we have to realize the clock starts with the *beginning* of the siege of Jerusalem ("lay siege to it") as opposed to the end of the sieges when the city itself actually fell. This leads us to use slightly different dates than what we did for Jeremiah's prophecy. The question, of course, is which 'siege' should we use? Ezekiel didn't specify in his prophecy and both the first siege (when Israel lost its national sovereignty) and the third siege (when Jerusalem and the Temple were destroyed) were very significant to the Jewish people. Let's see what happens if we look at both.

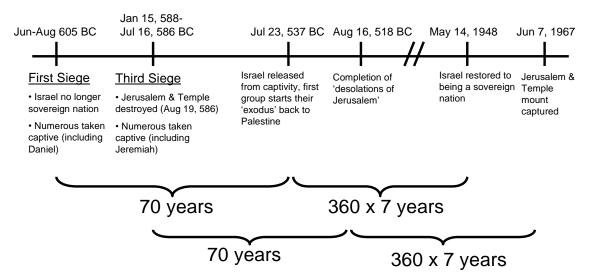


Figure 20: Ezekiel's Prophetic Timeline

If we consider the first siege when Israel lost its national sovereignty and was taken captive by Babylon, we should subtract the time of the captivity (the 70 years) and start from the date that Israel was released from this captivity to evaluate if multiplying the remaining punishment by seven yields a fulfillment. Although Cyrus issued an edict in 538 B.C. regarding Israel's release, it wasn't until July 23, 537 B.C. when the first group of Jewish captives organized, gathered their provisions and former Temple treasures as allowed by Cyrus's decree, and left Babylon on their "exodus" to return to their original land in Palestine. If we start from this date, we would expect the fulfillment to occur 360 years times seven later on the Jewish calendar – or a total of 2,520 years or 907,200 days. Converting between the calendars and adding one to account for the fact that there was no year zero on the Christian calendar, we end up with 2,483 years, 9 months and 12 days on the Christian calendar. Adding this to July 23, 537 B.C., we would then expect the fulfillment to occur on the 14th day of the 5th month of 1948 or May 14, 1948. What happened on this date? This is the *exact* date that the nation of Israel declared its independence and was reborn after almost 2,000 years of dispersion. In fact on May 14, 1948 the first Prime Minister of Israel, David Ben Gurion, citied this prophecy in the book of Ezekiel as his authority for proclaimed Israel as the new Jewish homeland.

The nation of Israel was re-established on the exact day predicted by the Bible! The story of how Israel was reborn is a remarkable one, since no other nation in history ever has fallen off the map only to be reborn thousands of years later. The rebirth truly was a miracle of God, but even more so since he fulfilled the rebirth exactly *to the day* which the prophet Ezekiel predicted more than 2,500 years earlier.

Now consider what happens if we start with the third siege by Babylon when the city of Jerusalem and the Temple was destroyed. If we subtract the time of the captivity (the 70 years), we see we should start from the date when the "desolations of Jerusalem" (the time when Jerusalem was uninhabited) was recognized as having been completed, which was on August 16, 518 B.C. Counting from this date and converting between the calendars as we did before, we would then expect the fulfillment to occur on the 7<sup>th</sup> day of the 6<sup>th</sup> month of 1967 or June 7, 1967. What happened on this date? This is the *exact* date that the nation of Israel captured the old city of Jerusalem (the site of the Temple Mount) in the Six Day War. Even though Israel was permitted to declare statehood under a plan by the United Nations in 1948, it didn't hold Jerusalem. It was only on this date that Jerusalem was fully again under the control of Israel – the first time this was the case since the original fall of the city to Nebudcanezzar.

What we see from Ezekiel's prophecy is that God fulfilled *to the exact day* the time during which Israel would be punished. And even though there were multiple sieges of the city, God's timeline still held – Israel lost its national sovereignty for "430 years" and Jerusalem and the Temple mount were out of

Jewish control of "430 years". Obviously, these prophecies defy mathematical probability of occurring by random chance and certainly couldn't have been fulfilled by calculating Jews who may have been aware of these prophecies, since the Jewish people certainly didn't control the timing of the initial sieges by Babylon or when the nation of Israel would be reborn. The later only occurred after the horrible events of World War II when Jewish refugees had nowhere to go and world sentiment was such that it was actually feasible for a new Jewish homeland to be created in the land of Palestine by the United Nations. Certainly, Israel also couldn't predict the timing of the Six Day War or exactly the date upon which Jerusalem would be recaptured.

So, what can we conclude? Only that once again the hand of God must have been at work in the fulfillment of these prophecies and that Ezekiel was a true prophet of God.

## The Timing of the Coming of the Messiah

A third prophecy that was fulfilled to the exact day, despite the fact it was give hundreds of years in advance was given to the prophet Daniel by the angel Gabriel and concerns the timing and circumstances of the coming of the Jewish Messiah, or savior. This prophecy will be discussed in detail in Chapter 18.

#### Conclusion

Looking at the prophecies contained in this chapter, what can we say other than God's hand was at work when the Bible was written? What other book could so accurately and precisely foretell events that would occur hundreds and thousands of years into the future and get them right, often to the exact day? The Bible is truly unique among all other written works – not only for the historical reliability and historical evidence that was discussed in the previous chapters, but because it is clearly divinely inspired. This is especially true when you consider that the Bible contains over 500 specific prophecies that have already been fulfilled similar to the above with 100 percent accuracy, despite the fact that many prophecies were often given hundreds, if not thousands, of years ahead of their actual fulfillments.

The implications are simply that we must believe in the God of the Bible, the word of God as contained in scripture. There is simply no other conclusion one can draw from a book that has shown that it could foretell the future to the exact day, multiple times thousands of years in advance.

#### **Discussion Questions**

- Can you think of another book in history that has accurately predicted even one event ahead of time with 100 percent accuracy? What about multiple events being predicted ahead of time?
- The following are three prophecies from Joseph Smith, a supposed prophet of God and the founder of the Mormon faith. What do these prophecies tell us about Joseph Smith? Can prophecy really be used to indicate if a book or prophet is divinely inspired or not?
  - o One prophecy predicted the return of Jesus in 1891. Obviously, this did not happen.
  - A second set of prophecies concerned the Civil War. To his credit, in one verse, we find Joseph Smith did predict that the Civil War would begin in South Carolina. However, this is not such a prophecy as might be thought since when this prophecy was made (approximately 30 years before the War), South Carolina had threatened to secede from the United States, and speculation about a coming civil war was rife. Another verse

- predicted that the coming war would spread to all nations, with Great Britain being specifically named. This did not take place. In another verse, a slave rebellion is predicted in connection with the Civil War. This did not happen. A final verse predicts a full-scale war with the Native American tribes in connection with the Civil War. This too failed to come to pass.
- The third prophecy concerned the building of the Mormon temple on a particular spot in Independence, Missouri. Due to the Mormons being run out of Missouri, the temple was eventually built in Salt Lake City, Utah.

# Part 3 The Case for Jesus

# **CHAPTER 15**

# WHO WAS JESUS?

The name of Jesus is not so much written as plowed into the history of the world.

- Ralph Waldo Emerson

Regardless of what anyone may personally think or believe about him, Jesus of Nazareth has been the dominant figure in the history of Western culture for almost twenty centuries...it is from his birth that most of the human race dates its calendars, it is by his name that millions curse and in his name that millions pray. — Jaraslov Pelikan

I think I understand somewhat of human nature and I tell you all these were men, and I am a man, but not one is like him; Jesus Christ was more than man. Alexander, Caesar, Charlemagne, and myself founded great empires; but upon what did the creations of our genius depend? Upon force. Jesus alone founded His empire upon love, and to this very day millions would die for him. – Napoleon Bonaparte<sup>1</sup>

The nature of Christ's existence is mysterious, I admit; but this mystery meets the wants of man. Reject it and the world is an inexplicable riddle; believe it, and the history of our race is satisfactorily explained.

— Napoleon Bonaparte

In the first section of this book, we examined the first question that the introductory chapter of this book raised on the road to belief in Christianity – namely, how did the universe and life get here? In the second section, we examined the second question and that is whether the Creator is an impersonal force of some sort or a personal God. In the third section of this book, we examined the third question – namely, is the Bible the word of God? Was it divinely inspired? These three questions are at the heart of what separates Christians from Atheists, Hindus, Buddhists and Muslims.

In this section, we will look at the fourth and final question on the road to belief in Christianity – specifically, is Jesus the son of God? It's one thing to believe that Jesus existed and was perhaps even a good person, a moral teacher or maybe even a prophet, but it's entirely something else to believe that Jesus was more than human – that he was God in human form as Christians claim. This section will examine the core question of Christ's identity and the evidence for Christ's divinity.

# The Importance of Jesus in History<sup>2</sup>

Jesus is the most influential person in human history – no one else even comes close. Despite what one may personally think of Jesus, no reasonable person can deny the critical role Jesus has played in human history. Consider the following:

- More than half the people of the world regard him as at least a major prophet in their religion, if not more.
- Jesus was the founder, primary teacher, God and Savior of Christianity, which is the largest religion in the world.
- Islam, the second largest religion in the world, regards Jesus as a holy prophet. A sinless man who performed miracles something even the prophet Muhammad didn't even claim of himself.
- No one can hope to understand world events either historically or in modern times without understanding the person, context and claims of Jesus Christ. Pick up any newspaper and what are the headlines? Chances are they involve the worldwide battle against terror, conflicts in the Middle East, social issues in the United States (such as gay marriage, abortion, etc.) or issues of social justice. All of these issues are impossible to truly understand without at least knowing about the history and influence of Jesus Christ.
- The history of western civilization is largely the history of how people have viewed Jesus and how their view of him shaped the rest of their lives. From the early Church history, to the transformation of the Roman Empire under Constantine, to the Middle Ages to the Renaissance to the Reformation, through the impact Christianity had on the abolition of slavery and civil rights through the conflicts in the Middle East all of these events had roots in Christianity.

#### Who Was Jesus Christ?

So Jesus Christ was important throughout history, but who was he really? Was he a legend? Was he a great prophet as the Muslims teach? Was he a liar? A lunatic? Or was he the actual son of God? Perhaps this is the most important question that anyone must face in their life.

The following flowchart outlines the four key questions that lead to the only five options that exist regarding the identity of Jesus Christ:

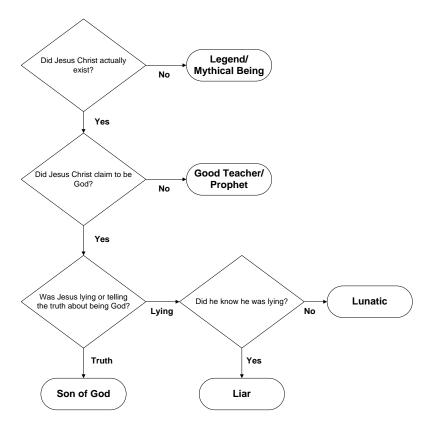


Figure 21: Options Regarding the Identity of Jesus Christ

## Evidence of His Existence<sup>3</sup>

The first question that we need to evaluate was did Jesus Christ actually exist as a human being? Was he an actual person or just a myth or legend of some kind? Based on the archeological, documentary and other evidence we'll evaluate in the subsequent chapters, there is no question that Jesus was a real human being who:

- Was born about 4 B.C.
- Was Jewish
- His father was Joseph who was a carpenter
- Grew up in Nazareth in Galilee
- His ministry was first closely associated with that of John the Baptist
- Was related to John the Baptist
- Preached and taught in various places in Galilee
- · He called disciples who went with him during his ministry
- He went to Jerusalem for the Passover around A.D. 30 or so
- He caused a disturbance in the temple area concerning the money changers
- He was executed by crucifixion on the order of Pontius Pilate
- His disciples soon after his death began saying that he had risen from the dead

All the New Testament authors clearly testify to the fact that Jesus was a real human being. As discussed before, of the eight New Testament authors, six were eyewitnesses of Jesus Christ and the

two that were not eyewitnesses (Luke and Mark) received their information from living eyewitnesses. Two of the New Testament authors were family members of Jesus (James and Jude) and all eight authors remained true to their testimony until death. Not one author of the New Testament recanted any testimony even though all were severely punished and/or died for their witness to Christ. Clearly, Jesus was a real person. We know from these authors that:

- Christ had a human body: He experienced fatigue (John 4:6) and hunger (Matthew 4:2).
- Christ had human emotions: He experienced anger (Mark 11:15-17), love (Mark 10:21) and sadness (John 11:32-26).
- Christ had human experiences: including temptation (Mark 1:13), learning (Luke 2:46-52), work (Mark 6:3) and obedience (Luke 2:51).

In addition, numerous independent, non-Biblical sources agree to the existence of Jesus and agree on the basic facts concerning his life. As we will see in Chapter 16 on Corroborating Evidence, these historical sources include: the Talmud itself (the comprehensive commentary of the Jewish Law); Josephus, a Jewish historian and defender of Rome; Tacitus, a Roman historian and governor of Turkey; Suetonius, the official historian of Rome during the Reign of both Emperor Trajan and Adrian; Pliny the Younger, consul during the reign of emperor Trajan and later appointed governor of the Roman province in Northwest Turkey; Lucian of Samosata, a government official in Alexandria Egypt; Hegesippus, a Christian historian and various others.

While it may be possible to find a skeptical scholar that may deny this, there is no credible scholar or body of work that denies Christ's earthly existence and the basic facts of his life. As such, the option to believe that Jesus Christ was a Legend or Mythical Being is not really an option for the serious minded.

#### Who Did Jesus Claim to Be?

The second question that we need to evaluate was who did Jesus Christ himself claim to be? Contrary to the popular view that Jesus was simply one of many great religious teachers (a view held by Muslims and Buddhists, among others), Jesus himself did not claim this. Rather than teaching a moral or social program, Jesus taught to center attention on himself. This is what differentiates Jesus from all other religious figures. Although Moses, Buddha, Muhammad, etc. all claimed to be wise persons, they never claimed to be divine or the sons of God. Only Christ did. Christ never claimed to be a moral teacher – he personally claimed to be the Son of God.

#### Examples include:

- Matthew 25:31-32, 40, 45 Jesus claims to judge the world.
- Mark 8:29-30 Jesus asked the disciples who they thought he was. When Peter answered, "You are the Christ", Jesus told them not to tell people about him yet. In Matthew 16:15-17, Christ's response to Peter's response was "Blessed are you for this was not revealed to you by man, but by my Father in heaven."
- Luke 22:30 Jesus says "my kingdom."
- John 6:35 Jesus says "I am the bread of life."
- John 8:12 Jesus says "I am the light of the world."
- John 10:30 Jesus says "I and the Father are one."
- John 11:25 Jesus says "I am the resurrection and the life."
- John 14:6 Jesus says "I am the way and the truth and the life."
- John 14:9-10 Jesus says "...Anyone who has seen me has seen the Father. How can you say, 'Show us the Father?' Don't you believe that I am in the Father and the Father is in me?...Believe me when I say what I am in the Father and the Father is in me."

- Jesus claimed that as "the Son", he alone could reveal "the father" to others (Matthew 11:27; Luke 10:22).
- In the story of Jesus walking on the water (Matthew 14:22-33 and Mark 6:45-52), most English translations hide the Greek by quoting Jesus as saying, 'Fear not, it is I'. Actually, the Greek literally says, 'Fear not, I am.' Those last two words are identical to what Jesus said in John 8:58, when he took upon the name of God that God used with Moses in Exodus 3:14.
- Christ's most common reference to himself was 'Son of Man'. Although most believe this is a title
  he used to reference his human frailty, it is actually a reference to Daniel 7:13-14: "In my vision at
  night I looked, and there before me was one like a son of man, coming with the clouds of
  heaven."
- Christ's references to God as 'Abba' father is quite significant, since it implies that Jesus had a
  degree of intimacy with God that is unlike anything in the Judaism of his day. 'Abba' is the
  equivalent of 'Daddy' in our language.

Most importantly, not only did Christ claim to be God, but his enemies knew this as well:

- The high priests of the time condemned Jesus for blasphemy for claiming to be God's son (Mark 14:61-64; John 19:7). When asked 'are you the Christ, the Son of the Blessed One?' Christ replied, 'I am; and you shall see the Son of Man sitting at the right hand of Power, and coming with the clouds of heaven.' Tearing his cloths, the high priest then said, 'What further need do we have of witnesses? You have heard the blasphemy; how does it seem to you?' And they all condemned him to be deserving of death.
- Mark 2:1-12 Jesus forgave the sins of a paralyzed man, an audacious thing for Jesus to have
  done since only God could forgive sins in the Jewish culture. The reaction of the scribes who
  heard made it clear that they clearly understood this to mean Jesus was claiming to be God.

Perhaps the best evidence that Christ actually claimed to be divine is that this is precisely what the early Christians believed. All the early Christians accepted Jesus as the Jewish God, which was a major departure from their religion. Jews did not take lightly someone claiming to be God – rather, it was considered the height of blasphemy since Jews only believed in one God. Yet, all the Gospels and epistles make this claim written from very early after Christ's death. Indeed, the reason Jesus Christ was crucified was because of his claim to be God. To believe that these early writings were all in error and he was crucified for some other reason has no basis in reality.

Some people wonder why wasn't Christ more direct in simply saying "I am God." It's not because he didn't think of himself in those terms, it's because the Jews of his day didn't have any concept of the Trinity. They only knew God the father – whom they called Yahweh – and not God the Son or God the Holy Spirit. If someone just said that he was God, it wouldn't have made any sense to them and would have been counter-productive to his efforts to get people to listen to his message, so Jesus continually tried to frame his identity in the context of what the people around him could understand.

Why is Jesus so different than other prophets or great teachers throughout history? Why is it no one gets upset when you discuss God, Buddha, Mohammed or Confucius, but when Jesus is mentioned, people get defensive? The reason is that these other religious leaders didn't claim to be God himself, but Jesus did. Furthermore, Jesus claimed more than just being God - he claimed that he was the only way to heaven:

Jesus answered, "I am the way and the truth and the life. No one comes to the Father except through me." - John 14:6

Salvation is found in no one else, for there is no other name under heaven given to men by which we must be saved. – Acts 4:12

So if Jesus did claim to be God and the only way to know the true God, then how can Muslims or Buddhists believe that he never did actually claim this? The only way to get around Christ's claim of divinity is to somehow argue that the Bible has been corrupted in some way, so that what we have in the Bible today is not an accurate representation of what Christ actually said. However, as we saw in the third section of this book, there is more documentary evidence for the accuracy of the Bible than any other historical book in history and historical finds have confirmed that the Bible we have today is an accurate representation of the writings that existed two millennia ago.

If you accept the Bible as accurate, then belief in Jesus is not one of many options that ultimately leads down the same path to heaven or spiritual enlightenment. According to the Bible, God did not devise multiple plans of salvation to appease a variety of different belief systems. He did not take into account cultures that might choose to worship other gods and practice other means of atonement. God chose one plan: Jesus. This is what makes the claims of Jesus Christ so unique. If you accept the Bible, then you accept the claim that Jesus alone is the savior of the world. So, we must either accept him as God's divine Son or we reject him. As C.S. Lewis noted, Jesus did not leave open any other option:

A man who was merely a man and said the sort of things Jesus said would not be a great moral teacher. He would either be a lunatic – on a level with the man who says he is a poached egg – or else he would be the Devil of Hell. You must make your choice. Either this man was, and is, the Son of God; or else a madman or something worse. You can shut him up for a fool, you can spit at him and kill him as a demon; or you can fall at his feet and call him Lord and God. But let us not come with any patronizing nonsense about his being a great human teacher. He has not left that open to us. He did not intent to.<sup>5</sup>

Therefore, we cannot consider Jesus Christ to be just an interesting philosopher from long ago because that's not who he claimed to be. Jesus is either the one and only route to a personal relationship with God, or he's not. Christ's claim of exclusivity – that he is the one and only way to God and salvation is what frustrates skeptics and challenges everyone to make a decision – for or against – the Bible and Jesus Christ.

## Was Christ Lying?

Let's accept that Christ did indeed claim to be God and move onto the third question that we need to evaluate, and that is whether it's possible Christ was lying regarding his identity. If we choose to accept that he was a real person, but reject Christ as the son of God and the only path to heaven, then he had to have been lying and we are left with only one of the following two options to choose from as it relates who Jesus really was:

- Christ knew he was lying. Jesus wasn't the son of God, but he intentionally misled people to think that he was. The problem with this view are many:
  - No one has ever proposed that he was consciously lying about being divine. After all, what would be the motivation? A false claim of divinity in the Jewish culture wouldn't lead to fame, fortune or power, it would lead to persecution and death, which is ultimately why Christ was crucified.
  - Christ would have had to die for this lie. Not many people would be willing to die for something they knew is not true.
  - Although it is easy to say one is God, the question is can that person back it up? In the same way that someone can confirm they are president by showing residence in the White House, having a Secret Security detail, being recognized by Congress, etc., Christ confirmed he was who he said he was by performing miracles things that only God could do: amazing feats of healing, demonstrations of power over nature, divine insights into people, the ability to resurrect people from the dead, etc. These miracles will be discussed in Chapter 19.

- o If Christ was lying, his teaching would have been dishonest. While he was teaching that others be honest, he would have been living and teaching a colossal lie. The problem with this view is that the considered opinion of the philosophers and religious leaders throughout history is that Jesus was the most holy and moral human being who ever walked the Earth, so believing he was lying about the most important aspect of his ministry who he was contradicts the very essence of who he was.
- Christ was a lunatic. Jesus wasn't the son of God, but he unintentionally misled people to think that he was because he was mentally deranged. The problem with this view is the clarity, wisdom and power of his teachings make such an assessment impossible. As C.S. Lewis notes: "The discrepancy between the depth and sanity of his moral teaching and the rampant megalomania which must lie behind his theological teaching unless he is indeed God has never been satisfactorily explained."

Specifically and psychologically:6

- o He was loving, but didn't let compassion immobilize him.
- He didn't have a bloated ego, even though he was often surrounded by adoring crowds.
- He maintained balance despite an often demanding lifestyle.
- He always knew that what he was doing and where he was going.
- He cared deeply about people, including women and children who weren't seen as being important back then.
- He was able to accept people while not merely winking at their sin.
- o He responded to individuals based on where they were and what they uniquely needed.
- o In short, Jesus had no signs of suffering from any known mental illness.

Was Christ a liar or lunatic? Was he the true son of God or a legend? That is for you to decide, but we can never say that Jesus Christ was just a 'great moral teacher'. Christ's claim of who he was doesn't leave that option open to us. How can we accept someone as a great and moral teacher if he knowingly misleads people at the most important point of his teaching – namely his own identity?

#### **Discussion Questions**

- Is there an incident in your life where you doubted someone's story until he or she offered some corroborating evidence?
- What would be some of the differences between a patient in a mental hospital claiming to be God and Jesus making the same assertion about himself?
- Reading Matthew 5:1-12, what observations can you make about Christ's intellect, eloquence, compassion, insight into human nature and ability to teach profound truths? Does this lend itself to a conclusion that Christ was mentally unstable?
- What do you think are some reasons why Jesus was evasive in his disclosing of who he was to the public? How could an early proclamation of his deity have harmed his mission?

# **CHAPTER 16**

# EVIDENCE OF HIS RESURRECTION

For what I received I passed on to you as of first importance: that Christ died for our sins according to the Scriptures, that he was buried, that he was raised on the third day according to the Scriptures.

— Paul. 1 Corinthians 15:3-4

In its favor as living truth there exists such overwhelming evidence, positive and negative, factual and circumstantial, that no intelligent jury in the world could fail to bring in a verdict that the Resurrection story is true. – Lord Darling, Former Lord Chief Justice of England

If Jesus had merely *claimed* to be the divine son of God and the savior of the world, one might be excused for doubting his claim. After all, anyone can make this claim. But the startling testimony of his followers – and at least one former enemy of his followers – is that Jesus rose bodily from the grave. If that's true, then Jesus' claims have about as strong corroboration as one could want. After all, no one in the span of human history has ever shown the ability to have power over death.

According to the Gospels, Jesus was buried in the tomb of Joseph of Arimathea, a member of the Jewish high council know as the Sanhedrin. The burial was done quickly so as to be finished before the Jewish Sabbath day. The tomb was sealed with a large stone. From archaeological finds, we know that this would have been a disk-shaped stone that probably took a couple of strong men to move. Then, early on the first day of the week, Mary Magdalene and some other women went to the tomb to apply more spices and fragrances to the body. They found the tomb empty and encountered an angel there, who told them that Jesus had risen. The women told Jesus' male disciples, who also went to the tomb to verify that it was empty. Later, Jesus appeared in bodily form to his disciples and talked and ate with them on various occasions over a period of forty days. Such is the record of the Gospels.

The question is whether this story is true, because if it is – and Christ actually rose from the dead – then it represents one of the most incredible events in human history.

#### **Christ Prophesies His Own Death & Resurrection**

One important factor to consider when evaluating the claims of Christ's resurrection is that Christ actually predicted that he would be killed and would rise from the dead prior to this event happening. These prophecies were not only known to his disciples, but also to his enemies who cited them at his trial:

[Christ] answered, "A wicked and adulterous generation asks for a miraculous sign! But none will be given it except the sign of the prophet Jonah. For as Jonah was three days and three nights in the belly of a huge fish, so the Son of Man will be three days and three nights in the heart of the earth." – Matthew 12:39-40

From that time on Jesus began to explain to his disciples that he must go to Jerusalem and suffer many things at the hands of the elders, chief priests and teachers of the law, and that he must be killed and on the third day be raised to life. – Matthew 16:21

As they were coming down the mountain, Jesus instructed them, "Don't tell anyone what you have seen, until the Son of Man has been raised from the dead." – Matthew 17:9

When they came together in Galilee, [Christ] said to them, "The Son of Man is going to be betrayed into the hands of men. They will kill him, and on the third day he will be raised to life." And the disciples were filled with grief. – Matthew 17:22-23

"We are going up to Jerusalem, and the Son of Man will be betrayed to the chief priests and the teachers of the law. They will condemn him to death and will turn him over to the Gentiles to be mocked and flogged and crucified. On the third day he will be raised to life!" – Matthew 20:18-19

Then Jesus told them, "This very night you will all fall away on account of me, for it is written: 'I will strike the shepherd, and the sheep of the flock will be scattered.' But after I have risen, I will go ahead of you into Galilee." – Matthew 26:31-32

[Christ] then began to teach them that the Son of Man must suffer many things and be rejected by the elders, chief priests and teachers of the law, and that he must be killed and after three days rise again. – Mark 8:31

As they were coming down the mountain, Jesus gave them orders not to tell anyone what they had seen until the Son of Man had risen from the dead. They kept the matter to themselves, discussing what "rising from the dead" meant. – Mark 9:9-10

[Christ] said to them, "The Son of Man is going to be betrayed into the hands of men. They will kill him, and after three days he will rise." But they did not understand what he meant and were afraid to ask him about it. – Mark 9:31-32

They were on their way up to Jerusalem, with Jesus leading the way, and the disciples were astonished, while those who followed were afraid. Again he took the twelve aside and told them what was going to happen to him. – Mark 10:32-34

"But after I have risen, I will go ahead of you into Galilee." - Mark 14:28

And [Christ] said, "The Son of Man must suffer many things and be rejected by the elders, chief priests and teachers of the law, and he must be killed and on the third day be raised to life." – Luke 9:22

Then the Jews demanded of him, "What miraculous sign can you show us to prove your authority to do all this?" Jesus answered them, "Destroy this temple, and I will raise it again in three days." The Jews replied, "It has taken forty-six years to build this temple, and you are going to raise it in three days?" But the temple he had spoken of was his body. After he was raised from the dead, his disciples recalled what he had said. Then they believed the Scripture and the words that Jesus had spoken. – John 2: 18-22 -

"The reason my Father loves me is that I lay down my life – only to take it up again. No one takes it from me, but I lay it down of my own accord. I have authority to lay it down and authority to take it up again. This command I received from my Father." – John 10:17-18

The next day, the one after Preparation Day, the chief priests and the Pharisees went to Pilate. "Sir," they said, "we remember that while he was still alive that deceiver said, 'After three days I will rise again." – Matthew 27:62-63

The only logical conclusion for how a person could prophesy his own death and resurrection is that they are divine and have foreknowledge, or they are somehow mentally disturbed. The fact that Christ did indeed prophesy this is one compelling evidence for his divinity.

#### **How Did Christ Physically Die?**

It's common knowledge that Christ died through crucifixion. The story of his death is well known and is told here as recorded by Luke:

Two other men, both criminals, were also led out with him to be executed. When they came to the place called the Skull, there they crucified him, along with the criminals—one on his right, the other on his left. Jesus said, "Father, forgive them, for they do not know what they are doing." And they divided up his clothes by casting lots. The people stood watching, and the rulers even sneered at him. They said, "He saved others; let him save himself if he is the Christ of God, the Chosen One." The soldiers also came up and mocked him. They offered him wine vinegar and said, "If you are the king of the Jews, save yourself." There was a written notice above him, which read: THIS IS THE KING OF THE JEWS. One of the criminals who hung there hurled insults at him: "Aren't you the Christ? Save yourself and us!" But the other criminal rebuked him. "Don't you fear God," he said, "since you are under the same sentence? We are punished justly, for we are getting what our deeds deserve. But this man has done nothing wrong." Then he said, "Jesus, remember me when you come into your kingdom." Jesus answered him, "I tell you the truth, today you will be with me in paradise." It was now about the sixth hour, and darkness came over the whole land until the ninth hour, for the sun stopped shining. And the curtain of the temple was torn in two. Jesus called out with a loud voice, "Father, into your hands I commit my spirit." When he had said this, he breathed his last. The centurion, seeing what had happened, praised God and said, "Surely this was a righteous man." When all the people who had gathered to witness this sight saw what took place, they beat their breasts and went away. But all those who knew him, including the women who had followed him from Galilee, stood at a distance, watching these things. - Luke 23:32-49

Although the story of Christ's crucifixion is well known, the following details are not as well known:<sup>7</sup>

- The medical term for Jesus sweating blood in the Garden of Gethsemane prior to his crucifixion is called *hematidrosis*. It's not very common, but it is associated with a high degree of physiological stress, consistent with what Christ would have experienced knowing that he was facing an imminent crucifixion. Severe anxiety causes the release of chemicals that break down the capillaries in the sweat glands. As a result, there's a small amount of bleeding into those glands, and the sweat comes out tinged with blood. This would have the effect of leaving a person's skin very, very sensitive.
- The beating Jesus undertook by the Roman soldiers would have left muscles, sinews and other body parts open to exposure. It was quite common for people who were flogged in this way to die from hypovolemic shock (death from losing a large amount of blood). As such, Christ would have been quite weak when he went to the cross.
- The word *excruciating* literally means 'ex-crucifixion' it was a word created for the purpose of describing the pain of crucifixion.
- The nails that hammered Christ to the cross would have gone through the wrist, crushing the median nerve (the largest nerve going out to the hand). When you hit your funny bone, it's actually another nerve called the *ulna* nerve. It's extremely painful. Crucifixion would be similar to someone taking a pair of pliers and squeezing that nerve as hard as they could. The nails through the feet would have a similar effect.

- During crucifixion, the arms are stretched typically about six inches and both shoulders would have become dislocated. This would have fulfilled the Old Testament prophecy in Psalm 22 which foretold that the messiah's 'bones [would be] out of joint'.
- Once someone is put on a cross in the vertical position, death comes through agonizingly slow
  asphyxiation (suffocation). The reason is that the stresses on the muscles and diaphragm put the
  chest into the inhaled position; basically in order to exhale, the individual must push up on his feet
  so the tension on the muscles would be eased for the moment. Once the exhaustion of doing this
  sets in, the person wouldn't be able to push up and breathe anymore.
- Once the person slows down his breathing, the person goes into respiratory acidosis the carbon dioxide in the blood is dissolved as carbonic acid, causing the acidity of the blood to increase.
   This eventually leads to an irregular heartbeat. With his heart beating erratically, Jesus would have known that he was at the moment of death, which is when he was able to say, 'Lord, into your hands I commit my spirit.' And then he died of cardiac arrest.
- Before he died, the hypovolemic shock would have caused a sustained rapid heart rate that would have contributed to heart failure, resulting in the collection of fluid in the membrane around the heart, called a *pericardial effusion*, as well as around the lungs, which is called a *pleural effusion*. This is important because when the Roman soldier came around and thrust a spear into his side, the spear apparently went through the right lung and into the heart, so that when it was pulled out, the pericardial effusion and the pleural effusion came out. This would have the appearance of a clear fluid, like water, followed by a large volume of blood coming out, confirming the event described in the Bible.

### **Did Christ Actually Die?**8

Based on the medical analysis, there was no doubt that Jesus was dead when he was removed from the cross. Although people have argued that Jesus could have just have fainted and been buried alive later to escape from the tomb, the medical facts don't support this hypothesis, and certainly the condition that Jesus would have been in would not fit with the description of Christ after the resurrection – walking with his disciples, inspiring them to go out and proclaim that he had triumphed over the grave, etc.

The fact that Christ died on a Roman cross is about as certain a historical fact as can ever be. Not only did all four Gospels report Jesus' crucifixion and state clearly that he died, but the rest of the New Testament is in full agreement on this fact. Furthermore, extra biblical historical sources – such as the Roman historian Tacitus, the Jewish historian Josephus, and the Jewish Talmud all confirm as fact that Jesus was crucified. No first-century document even mentions a rumor or scenario where this was not the case. None-the-less, about a billion people on the earth believe this.

In the doctrine of Islam, Christ never died. According to the Koran, the Jews claimed to have slain Jesus, but they "slew him not nor crucified him, but it appeared so unto them," rather, "Allah took him up unto Himself" (Sura 4:157-158). In other words, Jesus ascended directly to Heaven without ever dying. According to Muslim tradition, someone else (Judas Iscariot is the most often suggested) got mistakenly crucified by the Romans instead.

Because there is no historical evidence for it, serious difficulties face anyone seeking to defend the Muslim position. The Jewish leaders of the time had seen Jesus in the Temple and certainly would known and objected if the Romans were crucifying the wrong man. We have at least two independent accounts that various friends and family members of Jesus (including his mother) witnessed his death and burial (Luke 23:49-56; John 19:25-27, 38-42).

To get around this, Muslims sometimes claim that God miraculously made Judas look exactly like Jesus. Some even say that it was not a real man, but only something God made appear to look like Jesus. There are three problems with these suggestions:

- First, there is no evidence for these alternative explanations. They are sheer speculation.
- Second, these explanations have nothing in their favor except a fanciful belief to justify one's
  position. The only reason for suggesting that God miraculously made the crucified man look like
  Jesus is to save the theory (for which there is no evidence) that Jesus wasn't on the cross. The
  only reason someone would claim that is to deny the resurrection ever happened.
- Third, these theories implicate God in a deception one that resulted in the religion of Christianity being founded on the mistaken idea that Jesus died on the cross. What would God's motivation have been for this? What would this say about God's character?

The other theory denying that Jesus died on the cross admits that he was actually crucified, but claims that he merely passed out, or became unconscious on the cross. This theory is motivated by a naturalistic dislike of the notion that Jesus Christ actually rose from the dead. There are many different variations of these theories – how he revived, how long he survived after being revived, etc. which we will explore later in this chapter, but there are three general problems with these alternative theories:

- First, these theories require believing part of the historical account and not other parts specifically advocates pick and choose parts that fit with their naturalistic explanation of his resurrection. For instance, advocates make much of the fact that Pilate was surprised that Jesus was dead after being on the cross for about six hours (Mark 15:25, 22-34, 44), but discounts the fact that Jesus' death was verified by a Roman centurion (Mark 15:44) as must they discount the fact that the tomb was sealed with a stone (Mark 15:46). Advocates must also explain away John's report that a soldier pierced Jesus' side with a spear, despite the fact that John was an eyewitness to this event and his insistence that he was telling the truth (John 19:34-35).
- Second, these theories don't account for the fact that the early Church all believed that Christ had risen from the dead not that he merely survived the crucifixion. This belief led to the rapid spreading of belief in Jesus' divinity, something that would not have happened if he was just lucky and survived the crucifixion in some manner since he would have been too weak and bloodied to have convinced anyone that he was the immortal, glorified Messiah.
- Third, these theories ignore the fact that the Romans crucified people all the time they were quite proficient at it, and numerous centurions and people were around to watch. It is no more likely that the Romans crucified the wrong person or that Christ somehow survived the crucifixion only to be revived later, than it is to believe that someone in our society would mistakenly be given the death penalty and survive this sentence unknown to all around only to be revived later.

Why do people seek alternative explanations for Christ's death? Simply because believing that Christ actually died and rose from the dead would mean recognizing Jesus as the only Savior, the divine son of God. It is not surprising, then, that skeptics and non-Christian religions seek alternative explanations – either that Jesus did not die after all or that, if he did die, his death had no special significance. Unfortunately for the skeptics, there is no historical evidence to support these theories.

#### The Facts of Christ's Death

The following are the facts surrounding Christ's death that can be confirmed based on the Bible and various historical records of the time.

## The Tomb (Sepulcher)9

- The tomb's owner was Joseph of Arimethea, a rich follower of Christ's.
- The tomb was new, it had never been used before (Matthew 27:60; Luke 23:53).
- The tomb was located in a garden very near Golgotha, the crucifixion site (John 19:41).
- The tomb was cut horizontally into rock (Matthew 27:60; Mark 15:46; Luke 23:53).

## The Burial 10,11

- Old testament law required that that a body be buried the same day a person was hanged (Deuteronomy 21:22-23).
- The people who buried Christ were Joseph of Arimethea and Nicodemus, both members of the Jewish Sanhedrin (John 19:38,39; John 3:1).
- Also in attendance at the burial were Mary Magdalene and Mary the Mother of Jesus who were eyewitnesses to the event (Mark 15:47).
- Christ was buried in linen cloth purchased by Joseph of Arimethea (John 19:39). The burial spices consisted of myrrh and aloes brought by Nicodemus (John 19:39). They likely weighed a total of 100 lb.

#### The Stone<sup>12</sup>

- Christ's body was placed in a solid rock tomb and a large stone (weighing about two tons) was rolled against the entrance of the tomb.
- The stone was very large (Matthew 27:60). Too large for at least three women to move (Mark 16:3).
- The stone was positioned against the tomb's entrance (Matthew 27:60).
- Following the Resurrection, the large stone was moved up and away from not just the entrance, but from the entire massive burial chamber, looking as if it had been carried away.

#### The Guards<sup>13</sup>

- Multiple Roman soldiers were charged with guarding the tomb (Matthew 27:65-66, Matthew 28:4, Matthew 28:11, Matthew 28:12, Matthew 28:15).
- The guards were stationed by the tomb by order of Pontius Pilate, Roman governor of Judaea (Matthew 27:65, Matthew 28:14). Under Roman law, a soldier who deserted a post or was caught sleeping on duty was punishable by death.<sup>14</sup>
- Roman guards were strictly disciplined men and set to guard the tomb. Fear of punishment produced flawless attention to duty in the Roman military.

#### The Seal<sup>15</sup>

- The Roman soldiers affixed on the tomb a Roman seal, a stamp of Roman power and authority. The seal was meant to prevent vandalizing. Anyone trying to move the stone would have broken the seal and Roman law. The seal's purpose was to secure the grave and prevent theft of the body (Matthew 27:62-66).
- If the Roman seal was broken, it meant automatic crucifixion upside down for those who did it.

## The Empty Tomb<sup>16</sup>

We've established the historical basis for Christ's human existence and death. However, the next logical question to ask is how do we actually know the tomb was empty? How do we know Christ isn't still buried somewhere in Jerusalem?

- First, all four Gospels state that the tomb was empty.
- Second, the Gospels present at least two independent accounts of the discovery of the empty tomb, since John's account is markedly different than those of the other three Gospels. Mark's account is also free of miraculous or theological elements. Mark clearly wasn't being defensive or pressing an agenda, but rather reporting in a very matter-of-fact way.

• Third, following the resurrection, the disciples declared that the tomb was empty. Audiences could easily go to the tomb and see for themselves. The site of Christ's tomb was known to Jews and Christians alike. So if it weren't empty, it would be impossible for a movement founded on a belief in the Resurrection to have come into existence in the same city where this man had been publicly executed and buried. Peter basically invited folks to go check it out, comparing David's tomb with that of Christ's in Acts 2:28-32:

Brothers, I can tell you confidently that the patriarch David died and was buried, and his tomb is here to this day. But he was a prophet and knew that God has promised him on oath that he would place one of his descendants on his throne. Seeing what was ahead, he spoke of the resurrection of Christ that he was not abandoned to the grave, nor did his body see decay. God has raised this Jesus to life, and we are all witnesses of this fact.

As such, if the Resurrection didn't happen, the most difficult place on earth to convince people that it did would be Jerusalem. A 15-minute walk to the tomb could end the discussion. The disciples didn't trip off to Rome, Ephesus, Athens or Caesarea of Philippi. They went straight to Jerusalem to proclaim Christ rose from the dead in the presence of the most adamant critics. At any moment they could have been proven wrong just by someone going to the tomb and producing a body.<sup>17</sup>

- Fourth, the early debate after Christ "rose" was not whether the tomb was empty or not, but rather whether the guard at the tomb had fallen asleep and the disciples stole the body. Even skeptics of the time did not deny the tomb was empty. In fact, no Jewish writings contest the historicity of the empty tomb. No one claimed that the tomb still contained Christ's body. The key question to debate then is what happened to the body? The Jews proposed an unlikely story that the guards fell asleep and the disciples stole the body. They were clearly grasping for straws, but the point is that they started with the assumption that the tomb was empty, because they knew it was and everyone else knew it was. The event was too notorious to be denied. The fact the tomb was not empty could not be denied for a single day in Jerusalem.
- Fifth, there is archeological evidence for the empty tomb. In Paris there is a white marble slab from Nazareth with a decree of Caesar written on it that dates to A.D. 45-50 decreeing that anyone removing bodies from tombs will be subject to capital punishment. Evidently, Claudius associated tomb-robbery with the unrest in Rome between the Jews and Christians of the time and in A.D. 49 expelled all Jews from Rome because of that unrest, which the Roman writer Suetonius in his biography of Claudius blamed on Christ. This is another piece of evidence that the tomb was empty since the decree was focused on addressing the rumors that the disciples had stolen the body.
- Finally, all the Gospels agree that the first people to find the tomb empty were women. If the disciples stole the body, and made up the story, why would they have chosen women in the narrative? The problem is that women's testimony at the time was considered of little or no value. Therefore, in a fictional narrative, one would have avoided making women the critical witnesses of the resurrection since they were incapable of giving valid testimony in rabbinic Judaism.

Therefore, based on the evidence, we can confidently conclude that Christ's tomb was actually empty on the third day as the Gospels recorded.

# His Appearances<sup>18,19,20</sup>

An empty tomb by itself would be a mystery. However, the day the tomb was found empty, people started seeing Jesus alive. An empty grave, by itself, does not a resurrection make since we have no eye witnesses to the actual resurrection event itself. So how do we know that Christ actually rose from the

dead? The same way we know that dinosaurs walked the earth – we evaluate the evidence, and the most powerful evidence is Christ's appearances after his death to various people at the time.

On early Sunday morning following his death: (1) the tomb was empty and (2) people started claiming that they had seen Jesus alive. Such sightings might be dismissed, but taking these two facts together is compelling evidence that Jesus was indeed alive. If Jesus did, in fact, die on the cross; the tomb was found empty; and then at least 515 different people saw Christ alive afterward, then the only logical conclusion is that Jesus actually rose from the dead.

Provided below are the appearances of Christ after the Resurrection. In total, there were at least 515 eyewitnesses to Christ's resurrection:

Time	Witness
Sunday Morning	<ul> <li>To Mary Magdalene (John 20:10-18; Mark 16:9)</li> </ul>
	<ul> <li>To women returning from the tomb (Matthew 28:9,10)</li> </ul>
	<ul> <li>To Peter later in the day (Luke 24:34; 1 Corinthians 15:5; Mark</li> </ul>
	16:7)
Sunday Afternoon	To the Emmaus disciples (Luke 24:13-33)
Sunday Evening	<ul> <li>To the apostles, Thomas absent (Luke 24:33-49; John 20:19-24)</li> </ul>
The Following Sunday	<ul> <li>To the apostles, Thomas present (John 20:26-29)</li> </ul>
The Following 32	To the seven by the Lake of Tiberias (John 21: 1-23)
Days	<ul> <li>To a multitude of 500-plus believers on a Galilean mountain (1</li> </ul>
	Corinthians 15:6)
	<ul> <li>To James (1 Corinthians 15:7)</li> </ul>
	<ul> <li>To the eleven (Matthew 28:16-20; Mark 16:14-20; Luke 24:33-52; Acts 1:3-12)</li> </ul>
	<ul> <li>At the ascension (Luke 24:50-52, Acts 1:3-12)</li> </ul>
After His Ascension	• To Paul (Acts 9:3-6, 1 Corinthians 9:1: 'am I not an apostle? Have I
	not seen Jesus our Lord?' and in 1 Corinthians 15:8: 'Last of all he
	appeared to me also') Paul made it clear that he saw Christ personally.
	To Stephen (Acts 7:55)
	<ul> <li>To Paul in the temple (Acts 22:17-21; 23:11)</li> </ul>
	To John on Patmos (Revelation 1:1-19)

Table 11: Christ's Appearances Following His Resurrection

- The first person to see Jesus, Mary Magdalene, had been delivered by Jesus from seven demons during his ministry (Luke 8:2). This combined with the fact that Mary was a woman, would have made her an unreliable witness at the time. During this time, women's testimony was regarded as so worthless that they weren't allowed to serve as legal witness in a Jewish court of law. Surely, if the disciples had made up the story, they would have picked a more reliable man such as Joseph of Arimathea. The conclusion is that the Gospels report women as having been the first to see Jesus alive from the dead, because in fact, they were the first people to have such an experience. Of course, had these been the only witnesses, the story that Jesus was alive would have gotten no traction, but it's interesting that all four accounts of the Gospels tell the same story. None of the Gospel writers tried to hide this fact, so we should recognize that the writers were trying in good faith to tell what really happened, since the accounts have clear marks of candor even with facts embarrassing to their cause.
- Interestingly, the Gospel of Matthew records that the guards who were charged with guarding the tomb of Jesus also saw Christ and "were so afraid of him that they shook and became like dead men." After the ordeal, they then "went into the city and reported everything that had happened," but the chief priests who met with the guards bribed them to make up a story that the disciples

came during the night and stole the body. The soldiers accepted the bribe to keep out of trouble (Matthew 28:1-15).

• According to both the Gospels and Paul's epistles, Jesus then appeared to his male disciples, both individually and in groups, over a period of time following the first report of his resurrection.

For what I received I passed on to you as of first importance: that Christ died for our sins according to the Scriptures, that he was buried, that he was raised on the third day according to the Scriptures, and that he appeared to Peter, and then to the Twelve. After that, he appeared to more than five hundred of the brothers at the same time, most of whom are still living, though some have fallen asleep. Then he appeared to James, then to all the apostles, and last of all he appeared to me also, as to one abnormally born. – 1 Corinthians 15:3-8

- Following Christ's initial appearances, Christ then walked the earth for more than a month, appearing to the disciples in various groups and most significantly to a multitude of more than 500 believers prior to his ascension (departure to heaven).
- Following his ascension, the Bible records that Christ appeared to Paul, Stephen and John. Paul is significant since in Paul himself we have an indisputable first-hand testimony of a man who says that he saw the risen Christ. Probably as important, it's almost impossible to find anyone who will state that Paul was lying about having seen the risen Jesus, for two reasons: (1) Paul was an arch-opponent of the Christian message, actively persecuting Christians until his encounter with Christ, and (2) For the rest of his life, Paul suffered tremendously, experiencing numerous imprisonments, beatings, and other forms of mistreatment in various cities from non-Christians, as well as opposition from many Christians suspicious of his claims of apostleship. As such, it's unreasonable to believe that Paul was making the whole thing up.

What gives a special authority to the list of witnesses presented in the Bible as historical evidence is the fact that many of the 515 people who saw Christ would have still been alive when the Gospels were written and circulated. The Gospel accounts say, in effect, "if you do not believe us, ask them." Such a statement in genuine letters written within about 30 years of the event is almost as strong evidence as one could hope to get for the resurrection event.

#### Alternative Theories of the Resurrection<sup>21</sup>

There have been many different theories proposed over time regarding Christ's death and resurrection by people trying to avoid the claim of his resurrection. If Christ was resurrected, then you have to accept the fact that he was something more than human – he was who he claimed to be, namely, the divine son of God. For people motivated by a dislike of the idea Jesus Christ actually rose from the dead, the following theories provide a naturalistic explanation for the historical events. However, as we will see, there is little historical or logical support for these theories.

#### Jesus Did Not Really Die on the Cross

The first alternative theory supposes that Jesus did not actually die on the cross – rather, Jesus was somehow mistaken for dead, and placed into the tomb unconscious only to be revived three days later. This theory explains the empty tomb and the disciples believing that Christ had risen from the dead. However, the problems with this theory are plentiful as discussed earlier:

- You would have to explain the physical evidence of hypovolemic shock evidenced by the separation of blood and water coming out of Christ's body when he was pierced with the spear (John 19:34).
- You would have to explain the Soldier's judgment that Christ was dead on the cross (John 19:33).
- You would have to explain why Joseph and Nicodemus' thought Christ was dead when they
  prepared his body for burial (John 19:38-42).

- You would have to explain why the soldiers reported to Pilate that Christ was dead (Mark 15:44-45).
- You would have to explain Tacitus' historical record. Tacitus was a Roman historian who reported that Christ was killed.
- Most importantly, you would have to explain how a barely alive man, desperately in need of
  medical attention, could wriggle out from 100 pounds of grave wrappings, roll away a two-ton
  stone, get past the Roman guards who were standing watch, walk 7 miles to Emmaus and then
  convince everyone that you had conquered death and the grave.

Given the medical condition of Jesus at the time based on the events surrounding his death, this theory obviously stretches the imagination.

#### They Went to the Wrong Tomb

The second alternative theory supposes that the women and disciples went to the wrong tomb. They then spread the word that Christ had risen when they found an empty tomb. This theory explains the empty tomb, but not the accounts of Christ's appearances. The problems with this theory include:

- The women who were the first to discover the empty tomb were eyewitnesses to Jesus being laid in the tomb (Matthew 27:61; Mark 15:47; Luke 23:55). As such, they would have known where the true location was.
- You would have to explain how, after hearing the report of the women, the disciples then also went to the wrong tomb to discover the tomb was empty for themselves.
- You would have to explain why Peter and John saw his grave clothes in the tomb (Luke 24:12).
- You would have to explain why an angel confirmed it was the right tomb (Matthew 28:6).
- Most importantly, such a mistake by the women and the disciples would have been easily
  corrected by the Roman guards, the Jews or hundreds of other people who knew the location of
  the tomb and would have been more than happy to produce the body and point out the mistake to
  immediately and effectively stop the rumors from spreading that Christ was alive.
- Finally, you would have to explain why no Jewish writings contest the historicity of the empty tomb. No one claimed that the tomb still contained Christ's body. The Jewish explanation started from the position that the tomb was indeed empty as they grappled with the issue of what had happened to the body.

Clearly, this theory also stretches the imagination.

#### The Disciples Stole the Body

The third alternative theory supposes that the disciples stole the body. They then spread the word that Christ had risen from the dead to promote an agenda. This was the theory concocted by the chief priests following reports by the guards that Christ had risen (Matthew 18:11-15). This theory explains the empty tomb, but one is left to assume that the numerous accounts of Christ's appearances were all lies. The problems with this theory are many:

- You would have to explain how the disciples would rally to show such courage in an undertaking when they all scattered in fear and cowardice when Jesus was arrested.
- You would have to explain how the disciples somehow got past the guards. Roman soldiers do
  not fall asleep on guard for fear of execution, and certainly moving the stone would have
  awakened the soldiers.
- You would have to explain how the disciples rolled away the heavy stone and stole the body.
   Each of the Gospel writers mention the stone having been rolled away not just from the

- entrance of the bomb, but from the entire massive sepulcher. It was in such a position that it looked as if it had been picked up and carried away. How would the disciples accomplish this?
- You would have to explain why the report of the guards whose testimony of the things that had happened was never questioned (Matthew 28:11-15).
- The grave clothes in the tomb are a testimony against a theft. If the disciples did roll away the stone and steal Jesus' body, why would they remove the burial cloths and leave them folded in the grave?
- One would have to explain how so many people then saw Christ alive following his resurrection.
  Christ appeared to more than 515 people following his resurrection. Were they all lying? For what purpose? It's hard to imagine that many people holding to a lie especially when the consequence for many of them was death.
- One would then have to explain why almost all the disciples then proceeded to endure
  persecution and death to defend that lie. All of the disciples died martyrs deaths except John
  who was exiled. You would have to explain why the disciples stole the body and what their
  motivation for doing so was. Most importantly, you would have to explain why the disciples died
  for what they knew was a lie.
- Finally, you would have to explain why more than 3,000 people were converted to Christianity seven weeks later (Acts 2) and how the Christian movement spread so quickly if it were based on a lie. If it were not for the fact that eyewitnesses claimed to have seen Christ alive after his resurrection, what would explain the rapid spread of Christianity?

Given the evidence, it's clear that a rational person would have a very hard time making the case that the disciples stole the body.

#### Someone Else Stole the Body

A fourth alternative theory suggests that someone else stole the body. This would explain the empty tomb and the disciples and women's reaction to finding the empty tomb, but it leaves a major new question unanswered, namely, who stole the body?

- It couldn't have been the Jewish leaders they had no motivation. Christ's death on the cross marked the end of a false prophet for the Jewish leaders who actively sought to have him killed. Why would they steal the body and then suggest that the disciples did it?
- It couldn't have been the Romans they were totally against rival kings and perpetuating tumults, riots and unrest. The Romans opposed Christianity from the start – literally killing people who believed in Christ. The Romans had no motivation.

Even if you did suggest a group that had a motivation and capability to carry out such a task, you would still need to explain how these people got past the guards, rolled away the stone without the Roman guards noticing, why so many people claimed to have seen Christ alive following his death, and why the movement spread so quickly if not for the fact of the resurrection.

#### Resurrection Appearances Were Hallucinations

A final alternative theory suggests that the disciples and others who saw Christ following his death were all hallucinating. This theory is almost laughable as you consider it for the following reasons:

- Hallucinations happen to individuals, not groups of people like the disciples.
- Hallucinations do not involve the sense of touch, unlike Jesus' appearances (i.e. Thomas).
- Hallucinations are restricted to certain places and times, unlike the resurrection appearances
  which occurred over the span of a month. You would then need to explain why the resurrection
  appearance ended abruptly after 40 days.

• Hallucinations happen to people who are wishing, anticipating, and predisposed to mystic encounter or vision. The disciples had to be convinced against their will that Christ had risen.

As can be seen, all of the alternative theories proposed are fanciful and improbable. They flounder, struggle or grasp at straws to try and explain away the empty tomb and Christ's appearances following his death. The argument then is "well, they are more probable then someone rising from the dead", which then moves this to a philosophical debate about whether miracles are possible, rather than a discussion based on the evidence.

#### Conclusion<sup>22</sup>

Based on the evidence, there is really only one explanation for the events described in the Gospels, by the eyewitness accounts, and by the historical documents we'll consider in the next chapter. Namely:

- Jesus predicted his resurrection; therefore he either told the truth or was mentally disturbed.
- The resurrection is the only reasonable explanation for the empty tomb.
- The resurrection is the only reasonable explanation for how the early disciples changed from cowering and fearful folk into bold proclaimers of a living Christ.
- The resurrection is the only reasonable explanation for the growth of the church in the face of persecution under the Romans that followed the resurrection.
- The resurrection is the only reasonable explanation for the hundreds of eyewitnesses who said they had witnessed a resurrected Christ.
- The resurrection is the only reasonable explanation for the total transformation of Paul from a zealous Pharisee engaged in the systematic persecution of Christians to Paul the apostle, the most prolific advocate of Christ as the resurrected Savior and living Lord.

### **Discussion Questions**

- The resurrection boils down to two questions: Did Jesus die? And was he later seen alive? How would you answer those two questions?
- What evidence do you find most compelling regarding the empty tomb? Christ's resurrection?
- Everyone in the ancient world admitted the tomb was empty. The issue was how the body got away. Can you think of any logical explanation for the vacant tomb other than the resurrection of Jesus?
- Read Mark 15:42-16:8, the earliest account of Christ's burial and the empty tomb. Do you agree that it is "stark in its simplicity and unadorned by theological reflection"? Why or why not?
- How would you evaluate as credible the list of appearances? How would this compare to the list
  of witnesses to an event in a court of law?

# **CHAPTER 17**

# CORROBORATING EVIDENCE

Taking all the evidence together, it is not too much to say that there is no historic incident better or more variously supported than the resurrection of Christ. – Brooke Foss Westcott, English Scholar

The Gospels are naturally the best source for historical accounts of the life of Jesus, but what about other sources? What other corroborating evidence exits outside of the Bible to validate the accounts given in scripture? Despite the overwhelming documentary evidence for the accuracy and reliability of the Gospel accounts, what if there was still a question about whether Jesus Christ actually existed, or whether he actually claimed to be God, or whether he performed the miracles that the Gospel accounts record?

What if you set aside the Bible as evidence and look to see what other ancient texts exist to verify the claims of Christianity? It turns out; there are many third-party historical documents, which largely confirm the events described in the Gospels.<sup>23</sup>

#### The Jewish Talmud<sup>24</sup>

The Babylonian Talmud (Part I) is a comprehensive commentary of the Jewish Law that was written by various Jewish scholars between 100 B.C and 499 A.D. A second collection of writings (Part II) was written by another group of Jewish scholars following the destruction of the Temple in A.D. 70. These became known as the Jerusalem or Palestinian Talmud.

The Babylonian Talmud (Sanhedrin Text 43a, Baraitha) states:

It has been taught: On the eve of Passover they hanged Yeshu, the Nazarene. And an announcer went out, in front of him, for forty days (saying): 'Yeshu, the Nazarene, is going to be stoned, because he practiced sorcery and enticed and led Israel astray. Anyone who knows anything in his favor, let him come and plead in his behalf.' But, not having found anything in his favor, they hanged him on the eve of the Passover.

This reference to Jesus ('Yeshu', 'Yeshua' or 'Y'shua' is the most common form of the name "Jesus" when "Jesus Christ" was alive – 'Yeshua' means "he saves") confirms many details of Christ's crucifixion ("hanging"). Specifically, this passage in the Talmud confirms:

- The crucifixion occurred during the time of the Passover Feast (Mark 15:42-43).
- Jesus came from Nazareth (Matthew 2:23).

- Jesus was accused of "sorcery", which would be consistent with Matthew 12:22-29 which states
  that Jesus was accused of sorcery by the Pharisees after he cast a demon out of the man who
  was blind and dumb.
- The fear from the Jewish leaders that Jesus "enticed and led Israel astray" (John 11:47-48).
- The fact there was a trial before his execution, as all the Gospels record, given the calling for witnesses prior to the trial.
- The fact that the original punishment was to be stoning. This would have been consistent with Jewish Sanhedrin law which provided for the death penalty by stoning. However, the Roman government had removed the authority for capital punishment from the Jewish authorities during this period. They could not execute Jesus on their own authority for violating their Jewish religious laws:

Pilate told the priests that he saw no crime worthy of death and said "Take him yourselves and judge him by your own law." "But we have no right to execute anyone," the Jews objected." This happened so that the words Jesus had spoken indicating the kind of death he was going to die would be fulfilled. — John 18:31-32

The Jews problem was resolved by switching the accusation against Jesus from the religious sphere to the political one, where Roman law leaned toward instant crucifixion for anyone who attempted a political revolt against the empire. Pilate was finally convinced to exercise the ultimate Roman authority by ordering Christ's death by crucifixion.

Many scholars believe that the absence of significant additional references to Jesus in the Jewish Talmud suggests that Jesus never existed, however it's important to keep in mind that the Talmud contains very little information about individuals who lived during the time of the Second Temple, from the Babylonian Captivity in 606 B.C. to the burning of the Temple in 70 A.D. As an example, despite the tremendous importance of the Maccabbean Rebellion against the Syrians in 168-165 B.C., there are no references in the Talmud to the name of the Rebellion's Jewish hero, Judas Maccabeus. The Talmud also doesn't contain any mention of Paul at all, or a single quotation from the Jewish apocalyptic writings, so the fact the Talmud contains any information at all on Jesus is significant.

#### **Josephus**

Josephus was a Jewish Pharisee and historian who was a defender of Rome. He was born in A.D. 37 and lived in Jerusalem. In his book *The Antiquities*, Josephus describes how Ananias took advantage of the death of the Roman governor Festus – who is also mentioned in the New Testament – in order to have James killed:

He convened a meeting of the Sanhedrin and brought before them a man named James, the brother of Jesus, who was called the Christ, and certain others. He accused them of having transgressed the law and delivered them up to be stoned.<sup>25</sup>

In addition, Josephus wrote a passage called the *Testimonium Flavianum* which is a remarkable corroboration of the Gospel accounts:

About this time there lived Jesus, a wise man, if indeed one ought to call him a man. For he was one who wrought surprising feats and was a teacher of such people as accept the truth gladly. He won over many Jews and many of the Greeks. He was the Christ. When Pilate, upon hearing him accused by men of the highest standing among us, had condemned him to be crucified, those who had in the first place come to love him did not give up their affection for him. On the third day he appeared to them restored to life, for the prophets of God had prophesized these and countless other marvelous things about him. And the tribe of Christians, so called after him, has still to this day not disappeared.<sup>26</sup>

The above passages are significant since they confirm:

- Jesus existed and had a brother named James.
- Jesus was known as a wise man.
- He was known to have performed miracles.
- His ministry won over many Jews and non-Jews.
- Pilate condemned Christ to be crucified.
- Three days after being crucified, Christ appeared to his disciples resurrected.
- There were prophecies fulfilled through Christ.
- Christianity grew through the loyalty of his followers.
- He was the Christ this alone is significant since Josephus is acknowledging Christ's claim to be the Messiah.

This is a watershed passage to corroborate the life of Christ since Josephus was a Jew, not a Christian, and is generally acknowledged as one of the greatest and most accurate historians of the time. As a result, many have sought to question the authenticity of the second passage by Josephus, but there are no manuscripts that have ever been found that do not contain the disputed passage on Jesus. All versions of Josephus' book, including the early Russian and Arabic language versions contain this disputed passage about the life of Christ.

Why is this passage so important? Because it effectively destroys any possibility that Christ was just a good teacher or prophet, and that he never claimed to be anything more. Was it possible that the disciples or the early Church "exaggerated" the claims of Christ? The clear testimony of Josephus, effectively a "hostile witness" who lived in the generation immediately following the life of Christ, is that Jesus indeed claimed to be the Jewish Messiah.

#### **Tacitus**

Tacitus was a Roman historian and governor of Turkey in A.D. 112, and was probably the most important historian of the time. His writings also attest to the life of Christ and the spread of Christianity. Note in this passage that the "superstitution" cited is most likely a reference to the resurrection:

Nero fastened the guilt and inflicted the most exquisite tortures on a class hated for their abominations, called Christians by the populace. Christus, from whom the name had its origin, suffered the extreme penalty during the reign of Tiberius at the hands of one of our procurators, Pontius Pilatus, and a most mischievous superstitution, this checked for the moment, again broke out not only in Judaea, the first source of the evil, but even in Rome...Accordingly, an arrest was first made of all who pleaded guilty: then, upon their information, an immense multitude was convicted, not so much of the crime of firing the city, as of hatred against mankind.<sup>27</sup>

The above passage is significant since it shows:

- Jesus was executed as a criminal under the authority of Pontius Pilate.
- Pilate ruled Judea under the reign of Emperor Tiberius.
- Christianity, which began in Judea and spread throughout the empire, derived their worship and religion from the person known as Christ.
- The Christian religion spread despite the leader suffering death and that an 'immense multitude' held so strongly to their beliefs that they were willing to die rather than recant.
- Christianity spread rapidly within thirty-two years of Christ's death.

- Nero persecuted the Christians as scapegoats to divert suspicion away from himself for the great fire that devastated Rome in A.D. 64.
- The reason Tacitus and many other Romans hated the Christians is because the Christians refused to worship the pagan gods and Emperor Nero himself.

This passage represents significant corroboration since it is an authoritative testimony by an unsympathetic witness to the existence and death of Christ, and to the rapid spread of the Christian movement.

#### **Suetonius**

Suetonius was the official historian of Rome during the reign of both Emperor Trajan and Adrian. He wrote that Christians caused disturbances in Rome, and as a result Claudius (who ruled from A.D. 41 to 54) banished them from the city:

As the Jews were making constant disturbances at the instigation of Chrestus, he expelled them from Rome."<sup>28</sup>

This statement proves that a significant number of Christians lived in Rome before A.D. 54, only two decades after Jesus. The passage also confirms Luke's statement (in Acts 18:2) that the Jews were exiled from Rome during the reign of Claudius.

Suetonius also wrote about the persecution of Christians during the reign of Nero:

The Christians were punished; a sort of men of a new and magical superstition.

This criticism confirms that Christianity was (1) new during the time of Suetonius, and (2) this new faith was based on the resurrection, a fact that would certainly quality as a "magical superstition" to a pagan Roman historian.

#### Pliny the Younger

Caius Plinius Secundus, known as Pliny the Younger, was born in A.D. 62 near Milan, Italy. He served as consul during the reign of Emperor Trajan and was later appointed governor of the Roman provinces of Bithynia in Northwestern Turkey. He wrote to the emperor to request specific instructions about the interrogation of the Christians whom he was persecuting:

I have asked them if they are Christians, and if they admit it, I repeat the question a second and third time, with a warning of the punishment awaiting them. If they persist, I order them to be led away for execution; for, whatever the nature of their admission, I am convinced that their stubbornness and unshakable obstinacy out not to go unpunished...They also declared that the sum total of their guilt or error amounted to no more than this: they had met regularly before dawn on a fixed day to chant verses alternately amongst themselves in honor of Christ as if to a god, and also to bind themselves by oath, not for any criminal purpose, but to abstain from theft, robbery, and adultery. This made me decide it was all the more necessary to extract the truth by torture from two slave-women, whom they called deaconesses. I found nothing but a degenerate sort of cult carried to extravagant lengths.<sup>29</sup>

The above passage is significant since it was written about A.D. 111, and it attests to:

The rapid spread of Christianity.

- The inclusion in Christianity among every class of person. Note that slave women were deaconesses in this local church.
- It also talks about the early worship of Jesus as God, which included reciting verses, and taking oaths to serve Christ.
- It demonstrates that Christians maintained high ethical standards, abstaining from theft, robbery and adultery.
- It shows that Christians were not easily swayed from their beliefs refusing to recant even to the point of death.
- More importantly, this passage makes it clear that Christian believers would not worship Emperor Trajan, nor would they curse their leader, Jesus Christ, even under torture.

#### **Lucian of Samosata**

Lucian lived in Syria during the reign of Emperor Adrian in the century following Christ. Lucian served as a government official in Alexandria, Egypt. In a book entitled *The Passing Peregrinus*, Lucian wrote the history of a well known Greek traveler named Proteus, who was forced to flee his country after committing several crimes. Traveling the world under the name Peregrinus, he met some followers of Jesus in the early Church. Lucian wrote:

At which time he learned the wonderful doctrine of the Christians, by conversing with their priests and scribes near Palestine...they spoke of him as a god, and took him for a lawgiver, and honored him with the title of master...They still worship that great man who was crucified in Palestine, because he introduced into the world this new religion...Moreover their first lawgiver has taught them, that they are all brethren, when once they turned, and renounced the gods of the Greeks, and worship that master of theirs who was crucified, and engage to live according to his laws.<sup>30</sup>

This passage confirms many independent facts concerning Christ. Specifically:

- The fact Jesus was crucified in Israel because he introduced a new religion.
- The fact Jesus was considered a lawgiver and that he was worshiped as the only God.
- The fact his followers committed themselves to follow Christ's laws.

## Hegesippus

Hegesippus was a Christian historian who recorded the following interview which occurred between Christ's descendants and Caesar Domitian who ruled from A.D. 81 to A.D. 96. Domitian's concern was whether the surviving grandsons of Jesus' brother, Jude, posed any threat by claiming they were Jewish royalty. The relatives demonstrated by their calloused hands that they were only poor farmers:

And there still survived of the Lord's family the grandsons of Jude, who was said to be his brother, humanly speaking. These were informed against as being of David's line, and brought…before Domitian Caesar, who was as afraid of the advent of Christ as Herod had been. Domitian asked them whether they were descended from David, and they admitted it. Then he asked what property they owned and what funds they had at their disposal….Then they showed him their hands, putting forward as proof of their toil the hardness of their bodies and the calluses impressed on their hands by incessant labor. When asked about Christ and his Kingdom – what it was like, and where and when it would appear – they explained that it was not of this world or anywhere on earth but angelic and in heaven, and would be established at the end.<sup>31</sup>

The Bible is clear that Mary and Joseph did have additional children after the birth of Jesus (Matthew 13:54-56). This passage not only confirms the record that Christ's family existed and was interviewed by Caesar, but also the fear that the emperor of Rome had about a challenge to his kingship.

Think about this interview. Caesar Domitian, the most powerful man in the world at the time with hundreds of thousands of troops at his disposal, hauls the grandsons of Christ's brother up and questions them about Christ and his Kingdom. More specifically, he questions about where and when Christ's Kingdom would appear. These descendants clearly understood that Christ's kingdom was a spiritual Kingdom, at least until the time of the end, but Caesar clearly did not. Domitian's questions are not those of a person who believed that Jesus was dead in a tomb somewhere. They are the questions of a man who believed that Christ had indeed risen and was afraid of a challenge to his rule! Caesar's own interview confirms that he believed Christ rose from the dead!

The testimony of Hegisippus is that Domitian Caesar was "as afraid of the advent of Christ as Herod had been." Did Caesar believe that Christ was still buried in a tomb in Palestine? Did Caesar believe that Christ's body was simply stolen by the disciples? No, it was the clear belief by the most powerful man in the world at the time that Jesus Christ had risen, was on the Earth and could potentially mount a military campaign with his followers that would challenge Caesar.

## **Phlegon**

Phlegon was a writer, pagan and former slave who was granted freedom by the Emperor Adrian. In A.D. 138, Phlegon wrote:

In the fourth year of the two hundred and second Olympiad (nineteenth year of the reign of Tiberius Caesar) there was a great and extraordinary eclipse of the sun, distinguished among all that had happened before. At the six hour of the day was turned into dark night, so that the stars in the heavens were seen, and there was an earthquake in Bithynia which overthrew many houses in the city of Nice.<sup>32</sup>

#### This passage confirms:

- That darkness covered the earth when Christ died (during the sixth hour, which is equivalent to our noon hour), at the precise time recorded in Matthew 27:45.
- A great earthquake occurred at the same time as the eclipse, as recorded by the Gospels, which
  was powerful enough reach Turkey (Bithynia) and to destroy many houses there.
- The fact that there was a full moon present (known from astronomy) makes it certain that this darkness was not an eclipse, but rather a supernatural event.
- The fact this was described as "a great and extraordinary eclipse of the sun," implies that it was beyond anything that had been seen up until that time.

#### **Tertullian**

Tertullian was an early Christian writer. He wrote:

At the same time at noonday there was a great darkness. They thought it to be an eclipse, who did not know that this also was foretold concerning Christ. And some have denied it, not knowing the cause of such darkness. And yet you have that remarkable event recorded in your archives.

Tertullian clearly confirms the unique darkness that happened at noon as the Gospels record as well. Although Tertullian was a Christian, it's interesting to note that he confirms (1) the prophecies concerning

Christ, and (2) confirms that the great darkness was recorded in the archives of Rome – pointing out that his claim could be easily verified.

#### **Thallus**

Thallus was a chronologer and historian who wrote a history of the eastern Mediterranean in the first century. It confirms Phlegon and Tertullian's individual reports and validates the Bible's account of the earthquake and darkness that occurred upon Christ's death:

This phenomenon, evidently, was visible in Rome, Athens, and other Mediterranean cities. According to Tertullian...it was a "cosmic" or "world event." Phlegon, a Greek author from Caria writing a chronology soon after 137 A.D., reported that in the fourth year of the 202<sup>nd</sup> Olympiad (i.e., 33 A.D.) there was "the greatest eclipse of the sun" and that "it became night in the sixth hour of the day [i.e. noon] so that stars even appeared in the heavens. There was a great earthquake in Bithynia, and many things were overturned in Nicaea.<sup>33</sup>

Note that this reference from Thallus cites both Phlegon and Tertullian as confirmation that these events actually occurred and were not a localized event, but rather a "cosmic" or "world event".

#### **Others**

In addition to the above, the martyr Lucian wrote "Look into your annals; there you will find that in the time of Pilate, when Christ suffered, the sun was obscured, and the light of day was interrupted with darkness." This reference confirms the existence of Christ, the timing of his existence (during the time of Pilate) and the darkness that occurred at his death as told by the Gospels.

## **Summary**

Looking at the above references, we can independently corroborate the following evidence about Jesus and early Christianity from sources other than the Gospels:

- Jesus existed, came from Nazareth, had a brother named James, and lived in Palestine in the first part of the first century.
- Jesus was a Jewish teacher who was known as a wise man. His ministry won over many Jews and non-Jews.
- Jesus was known to have performed many miracles.
- Jesus was accused of "sorcery" by the Jewish leaders, which would be consistent the Gospels where Jesus was accused of this by the Pharisees after he cast a demon out of the man who was blind and dumb.
- Some people believed that Jesus was the Messiah, including Josephus who acknowledged his claim to be the Messiah.
- Jesus was rejected by the Jewish leaders who feared Jesus.
- Jesus was tried and convicted under Pontius Pilate during the reign of Emperor Tiberius.
- The original punishment for Christ was to be stoning, but consistent with the Biblical account of Jesus being passed off from the Jewish leaders to the Romans due to the limited authority the Jews had for capital punishment, Christ was crucified under Roman law instead.
- The crucifixion occurred during the timing of the Passover Feast as the Gospels record.

- When Christ died, a super-natural darkness covered the earth at the precise time recorded by the Gospels. This darkness was accompanied by a great earthquake, which was powerful enough reach Turkey and to destroy many houses there.
- Three days after being crucified, Christ appeared to his disciples resurrected.
- Despite Christ's death, Christianity spread rapidly based on his follower's belief that he was
  resurrected. Within thirty-two years, this new religion spread quickly beyond Palestine to the
  point that there were multitudes of followers in Rome by 64 A.D.
- Christianity grew through the loyalty of its followers. Christians held their beliefs so strongly, they were willing to die rather than recant their testimony of Christ's resurrection.
- Christians maintained high ethical standards, abstaining from theft, robbery and adultery.
- All kinds of people from the cities and country men and women, slave and free, worshiped Jesus as God.
- There were many prophecies fulfilled through Christ.
- The reason Tacitus and many other Romans hated the Christians is because the Christians refused to worship the pagan gods and the Roman emperors themselves.
- Nero persecuted the Christians as scapegoats to divert suspicion away from himself for the great fire that devastated Rome in A.D. 64.

As discussed in Chapter 12 on the New Testament, it's clear that the Gospels provide more historical evidence for the life and ministry of Christ than that of any other figure in history. There is no question of the historical accuracy of the Bible. However, even without the Gospel accounts, the various non-Biblical accounts discussed in this chapter independently confirm all the key events of Christ's life and ministry.

Together, the Gospels and these accounts support one another, and provide indisputable proof of Jesus Christ and the key events of his life.

### **Discussion Questions**

- What do you consider the most persuasive corroborating evidence about the life of Christ?
- Ancient sources say Christians clung to their beliefs rather than to disavow them in the face of torture. Why do you think they had such strongly held convictions?
- Given the evidence, why do you think some people still hold the view that Christ didn't actually exist?

# **CHAPTER 18**

# **EVIDENCE FROM ARCHEOLOGY**

It may be stated categorically that no archeological discovery has ever controverted a Biblical reference. Scores of archaeological findings have been made which confirm in clear outline or in exact detail historical statements in the Bible. And by the same token, proper evaluation of Biblical descriptions has often led to amazing discoveries. — Dr. Nelson Glueck, Jewish Archaeologist

I know of no finding in archaeology that's properly confirmed which is in opposition to the Scriptures. The Bible is the most accurate history textbook the world has ever seen.

- Dr Clifford Wilson, formerly director of the Australian Institute of Archaeology

Of the hundreds of thousands of artifacts found by the archeologists, not one has ever been discovered that contradicts or denies one word, phrase, clause or sentence of the Bible, but always confirms and verifies the facts of the biblical record. – Dr. J.O. Kinnaman, respected scholar

Archeology is an important tool for evaluating the evidence for Christianity, because archeology can add or subtract credibility from a historical account by demonstrating the accuracy of a document. If names, places, etc. are correct or wrong, that adds support for or against the accuracy of the other information contained in the document.

There is no question that the credibility of the New Testament has been enhanced by archeology over the ages. In this chapter, we'll evaluate the archeological support for the Bible, both Old and New Testaments.

#### The Old Testament<sup>34</sup>

Only fifty years ago many liberal scholars rejected the historical accuracy of the Bible because they claimed that the Scriptures spoke of kings, places, and individuals that could not be confirmed from any other historical or archeological records. However, recent discoveries have confirmed many Biblical details, events and personalities. For example:

• King David and Solomon: For years, many scholars rejected the existence of King David and Solomon (the two greatest kings of Israel as described in the Bible) since no evidence existed that they were actually real. For example, Professor Philip R. Davies wrote, "I am not the only scholar who suspects that the figure of King David is about as historical as King Arthur". However, recently Israeli archeologists discovered an ancient stone inscription, near the ancient city of Dan at the foot of Mount Hermon in northern Israel. This inscription from a stone column victory monument was written in the Aramaic language and mentions both "the house of David" and the "King of Israel" It was created by an enemy of Israel in approximately 900 B.C., to

describe their defeat of a Jewish army. This is the first time the name David has been found in any ancient inscription outside of the Bible and the inscription not just mentions his role as king, but also "the house of David" – implying a family dynasty, which would be the case since Solomon, who ruled after David, was David's son.

- The Flood (Genesis 6-8): Reports of a terrible flood where a man was told to build a boat, enter the boat and then God flooded the Earth, have been discovered in many cultures around the world including the Greeks, Hindus, Mexicans, Hawaiians, Sumerians and Chinese. These flood epics tend to verify Noah's account of the flood since we are told his descendants subsequently scattered throughout the earth, which obviously would account for how the flood story made its way into so many different diverse cultures.
- Common Language (Genesis 11: 1): Language experts agree that early mankind all spoke a common language and that all known languages can be traced back to an original tongue. This supports the Biblical account of the tower of Babel where mankind originally shared a common language.
- Sodom and Gomarrah (Genesis 14): Until 1974, the five cities of the plains mentioned in Genesis 14:8 were unheard of except in the Bible. In 1974 however, two University of Rome professors discovered 17,000 tablets in northern Syria. One of these tablets refers to all five cities in the exact sequence and exact spelling as contained in the Bible: Sodom, Gomorrah, Admah, Zeboiim and Zoar.
- Walls of Jericho (Joshua 6): In the Biblical account, the walls of the city of Jericho were
  destroyed not by the Israelites as they circled and laid siege to the city, but by God, as a sign of
  his power. In 1930-1936, John Garstang excavated the city of Jericho. He discovered the walls
  fell outwards. Every other city's walls that have been found fell inward from the invading army's
  siege. The fact that the walls of Jericho fell outward provides strong evidence for the Biblical
  account.
- Other evidence found in this century confirms the historical existence of the Biblical kings: Arioch, Ahab, Ahaz, Omri, Hezekiah, Hoshea, Jehu, Jeroboam II, Manasseh, and Pekah.

#### The New Testament<sup>35,36</sup>

Like the Old Testament, there is strong archeological support for the New Testament as well:

- Pontius Pilate: In 1961, archaeologists discovered archaeological proof for the historical existence of Pontius Pilate, the Roman governor who sentenced Jesus to death by crucifixion. While partially effaced, a stone tablet inscribed to the Roman Emperor Tiberias, found in Caesarea, bears the name of "Pontius Pilate, Prefect of Judea."
- The Census (Luke 2:1-3): The Gospel of Luke says "and it came to pass in those days, that there went out a decree from Caesar Augustus, that all the world should be taxed. And this taxing was first made when Cyrenius was governor of Syria. And all went to be taxed, every one to his own city." The historical evidence reveals that during the reign of Caesar Augustus such a census did actually occur. The ancient Oxyrhunchus papyrus and another papyrus (number 904) held at the British Museum did compel all Roman citizens to return to their places of birth for a census. The papyrus states: "Because of the approaching census it is necessary that all those residing for any cause away from their homes should at once prepare to return to their governments in order that they may complete the family registration of the enrollment..." Justin Martyr, a famous Church writer from North Africa also stated that official Roman census records were still available in his day (A.D. 110-165) to prove the truth of Christ's prophesized birth in Bethlehem. Archaeologists show that the Romans held censuses every 14 years. Luke refers to the first census under Quirinius, although another census is mentioned in Acts 5:37 to which Josephus verifies.
- **Pool of Bethesda** (John 5:2): For years the Gospel of John was considered suspect because John talked about locations that couldn't be verified. For example, in John 5:1-15 Jesus healed an invalid by the Pool of Bethesda. John says that the pool had five porticoes. For a long time,

people cited this as an example of John being inaccurate, because no such place had been found. However, recently the Pool of Bethesda has been excavated in the northeast quarter of Old Jerusalem. It lies 40 feet below ground. Sure enough, there were exactly five small porticoes - exactly as described in John's Gospel.

- Caiaphas: In 1990, Archaeologists found the ossuary (burial box) of Caiaphas, the Jewish high
  priest who led the interrogation of Jesus before the Sanhedrin, prior to handing him over to Pilate
  with a demand for his crucifixion. <sup>39</sup>
- Lysanias (Luke 3:1): Luke refers to Lysanias being the tetrarch of Abilene in about A.D. 27. 'Tetrarch' is a Greek term meaning "ruler of a quarter" and was applied to rulers of minor principalities owing allegiance to Rome. For years scholars pointed that Luke wasn't credible since everyone knew that Lysanias was not a tetrarch but rather the ruler of Chalcis half a century earlier. If Luke couldn't get that basic fact right, then what else didn't he get right? Then archeology discovered an inscription from the time of Tiberius from A.D. 14-37 which names Lysanias as tetrarch in Abila near Damascus just as Luke had written. It turns out, there had been two government officials named Lysanias. Luke was shown to be right.
- **Politarchs** (Acts 17:6): Luke refers to "politarchs" (which is translated "city officials" in the NIV) in the city of Thessalonica. For a long time, people thought Luke was mistaken, since there were no references to the term "politarchs" in any ancient Roman documents. However, an inscription on a first-century arch was later found that began "in the time of the politarchs..." Archeologists then found more than 35 other inscriptions that mention politarchs, several of which in Thessalonica from the same period Luke was referring to.
- Sergius Paulus: In Acts 13, Luke records that Paul met Sergius Paulus, a Roman governor who
  converted to Christianity. A stone marker discovered in Psidian Antioch, inscribed with the name
  of Sergius Paulus and his title, proconsul, bears witness to Luke's historical accuracy.
- **Governor Quirinius** (Luke 2:2): Critics had argued the Quirinius could not have been governor of Syria at the birth of Jesus. However, an inscription was found in Antioch ascribing Quirinius to this post in 7 B.C.
- Gallio the Proconsul (Acts 18: 12): An inscription at Delphi, in central Greece, records a
  proclamation of the Emperor Claudius that Gallio became proconsul of Achaia in July AD 51.
  From other sources we know Gallio ruled for only one year, and thus Paul's journey can be dated
  with precision.
- Erastus, City Treasure of Corinth (Romans 16:23): During a 1929 excavation of Corinth, Professor T.L. Shear found a pavement with this inscription: Erastus, curator of public buildings, laid this pavement at his own expense.
- Theater in Ephesus (Acts 19:29, 31): Excavation has unearthed a 25,000 capacity theater in Ephesus.
- Ephesus: Keeper of the Temple of Artemis (Acts 19:24-35): An inscription in the theater dated to 103 A.D. tells of a Roman official, C. Vibius Salutaris, who presented a silver image of Artemis to be set on a pedestal at the citizen-body meetings in the theater. In Acts 19:35, Ephesus is called the "Neokoros" (literally "temple sweeper") or warden or guardians of Artemis. A Greek inscription describes Ephesus as "Temple-Warden of Artemis."
- Zeus and Hermes Worshipped in Lystra (Acts 14:8-14): Sir William Calder in 1910 discovered an inscription near Lystra dedicating a statue of Hermes to Zeus. In 1926, Calder discovered a stone altar near Lystra dedicated to Zeus (the Hearer of Prayer) and Hermes.
- Publius, Chief Man in Malta (Acts 28:7): Both Greek and Latin inscriptions attest Luke's rather unusual title to the governor of Malta as the "First Man of the Island."
- **Gentiles in the Temple** (Acts 21:27-36): Paul was falsely accused of bring Gentiles into the Temple and thus incurring the death penalty. An inscription found in Jerusalem in 1871 by C.S. Clermont-Ganneau reads: "No foreigner may enter within the barricade which surrounds the temple and enclosure. Anyone who is caught doing so will have himself to thank for his ensuing death."

- **Manner of Crucifixion**: The following archeological evidence has been discovered confirming the manner of Roman crucifixions: 41,42,43
  - Crossbeam weighed 75 to 125 pounds. It was carried by the condemned to the crucifixion site (John 19:17).
  - Titulus a board with the name and crime of the criminal was nailed to the top of the crossbeam (John 19:19).
  - Nails square nails 5-7 inches long and 3/8 inches wide were standard (John 20:25).
  - Crucifragium a hammer designed specifically for the purpose of breaking a man's legs with a single blow to prevent leg-lifting while a person was on the cross (John 19:32,33).
  - Scourging the weapon of whipping was a Roman flagrum a three lash whip with pieces of bone or lead at the tips. The victim was tied to an upright stake or bent over a thrashing post (John 19:1).
- In addition, there have been many discoveries of tombs and ossuaries dating to the time of Christ. Many suspected to be that of Mary, Martha, Lazarus and Sapphira of the New Testament. These bear the symbol of the cross of Christ, inscriptions such as "Jesus the Lord" and date to the 40's and 50's. These provide compelling evidence that early believers did believe in the resurrection and for the timing of Christ's ministry.

Clearly, there is solid archeological evidence that adds to the credibility of the historical accuracy of the Bible, which obviously supports the historical accuracy of the other information contained in it.

Most importantly, archeology has never produced a finding that blatantly contradicts a New Testament reference. This dispels the belief that the Gospels were written too far after the time of Christ to be very accurate. By contrast, let's consider the *Book of Mormon*. Of the historical cities mentioned in the *Book of Mormon*, none have ever been located. No historical person, place, nation or name has ever been found. No artifacts, scriptures, inscriptions...nothing that would demonstrate that the *Book of Mormon* is anything other than a myth or invention has *ever* been found. By contrast, based on archeology, the New Testament must be accepted as a remarkably accurate source book.

# Sir William Ramsay<sup>45</sup>

Sir William Ramsay, a brilliant English scholar, travelled as a young man to Asia Minor over a century ago with the sole purpose of disproving the Bible's history as described by Luke in his Gospel and his book of Acts. Young Ramsay and his skeptical professors were convinced that the New Testament record must be terribly inaccurate. He believed that Luke could not possibly be correct in his Gospel history about Christ or in his account in the book of Acts about the growth of the Church during the first decades following the death of Christ. Ramsay began to dig in the ancient ruins of Greece and Asia Minor, searching for ancient names, boundary markers, and other archeological finds that would prove conclusively that Luke had "invented" his Gospel history of Christ and his Church. To his amazement, Ramsay discovered that the statements of the New Testament Scriptures were accurate in the smallest detail. Although Ramsay began his research as a confirmed skeptic, his extensive archeological discoveries throughout the Middle East finally forced him to declare that the archeological and historical evidence was overwhelming. Luke's account in the Gospel and the book of Acts was accurate and reliable:

Luke is a historian of the first rank; not merely are his statements of fact trustworthy; he is possessed of the true historical sense...In short this author should be placed along with the very greatest of historians.<sup>46</sup>

As a result, Sir William Ramsay became both a Christian and a great Bible scholar. His books have become classics in the study of the history of the New Testament.

#### The Dead Sea Scrolls & Christ<sup>47</sup>

When the Dead Sea Scrolls were discovered in 1947, many Christian scholars naturally wondered if they might contain evidence relating to Christianity. Despite intense interest, the scholars were frustrated for almost fifty years by the decision of the small group of original scroll scholars to withhold release and publication of a significant number of these scrolls. After 45 years, the team responsible for the huge number of scrolls discovered in Cave Four had published only twenty percent of the five hundred scrolls in their possession. Due to a public relations campaign led by *Biblical Archeology Review*, the remaining scrolls were finally released to the world. To the great joy of many scholars, the scrolls contained references to the New Testament and to Jesus of Nazareth:

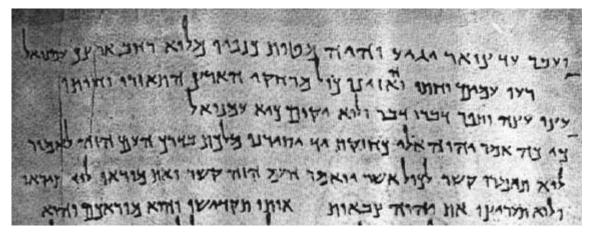


Figure 22: The Isaiah Dead Sea Scroll

- The Isaiah scroll contains information and prophecies concerning the death of the Messiah. The scroll refers to Isaiah and his famous prophecy (chapter 53) that identifies the Messiah as one who would suffer for the sins of his people. Many Jews expected the Messiah would come and rule forever without dying. This scroll reveals that the Jewish Essene writer understood the dual role of the Messiah.
- The Isaiah scroll identifies the Messiah as the "Shoot of Jessee" (King David's father) and the "Branch of David." It also references that he was "pierced" and "wounded".
- The Isaiah scroll describes the Messiah as the "leader of the community" who was "put to death".
- The "4Q246" scroll refers to the Jewish hope for a future Messiah and refers to him as "the son of God" and the "son of the Most High". These remarkable words are identical with those recorded in the Gospel of Luke.

He shall be called the son of God, and they shall designate [call] him son of the Most High. Like the appearance of comets, so shall be their kingdom. For brief years they shall reign over the earth and shall trample on all; one people shall trample on another and one province on another until the people of God shall rise and all shall rest from the sword. – Scroll 4Q246 "The Son of God Scroll"

He will be great and will be called the Son of the Most High. The Lord God will give him the throne of his father David...The angel answered, "The Holy Spirit will come upon you, and the power of the Most High will overshadow you. So the holy one to be born will be called[a] the Son of God. – Luke 1:32, 35

The presence of these statements in the Dead Sea Scrolls suggests that some of the Essenes had either accepted the messianic claims of Jesus that he was the Son of God or had anticipated this concept. This is especially true since Jews believe that the Messiah will be a great man with

- a divine mission, like Moses, while Christians believe the Messiah would be uniquely "the Son of God."
- The "4Q521" scroll declares that the Messiah will display supernatural powers identical to those described in the Gospels. This scroll is remarkable since it reveals a number of prophecies about the coming of the Messiah that are virtually identical to Christian teachings about Jesus Christ as detailed in the four gospels.

The heavens and the earth will obey his Messiah, the sea and all that is in them. He will not turn aside from the commandment of the Holy Ones. Take strength in his mighty work all ye who seek the Lord. Will ye not find the Lord in this, all ye who wait for him with hope in your hearts? Surely the Lord will seek out the pious, and will call the righteous by name. His spirit will hover over the poor; by his might will he restore the faithful. He will glorify the pious on the throne of the eternal kingdom. He will release the captives, make the blind see, raise up the down trodden. Forever I will cleave to him against the powerful and I will trust in his loving kindness and in his goodness forever. His holy Messiah will not be slow in coming. And as for the wonders that are not the work of the Lord, when he, that is the Messiah, comes then he will heal the sick, resurrect the dead, and to the poor announce glad tidings. He will lead the holy ones, he will shepherd them. He will do all of it.

- Taken together, the Dead Sea Scrolls make it clear that the Essene people believed that the Messiah would suffer initial defeat, but that he would ultimately triumph in the end of days.
- In 1971, a Spanish biblical scholar named Jose O'Callaghan studied the small fragments of scrolls discovered in Qumran that were categorized as "fragments not identified" and found striking similarities to the New Testament book of Mark. Although not definitive (since the fragments were small), these fragments would prove a dating of the book of Mark to within only a few years after the death of Jesus. In total, O'Callaghan ultimately identified eight scroll fragments that appear to be quotations from New Testament passages including Mark, Acts, Romans, 1 Timothy and James. Naturally, many Jewish scholars disagree with O'Callaghan's conclusions and the debate continues to this day.

### The Shroud of Turin<sup>48</sup>

Certainly one of the most controversial artifacts related to Christianity is the Shroud of Turin. Millions of Christians believe the Shroud is the burial cloth used by the disciples to wrap the body of Christ following his crucifixion. On the other hand, skeptics reject the claims and argue that the Shroud is simply the result of a clever medieval artistic forger, which isn't improbable given the fact that the medieval period produced thousands of fake relics for the curious and naïve religious pilgrims who were easily fooled. Regardless, everyone will admit that the Shroud of Turin is the most fascinating and controversial of all claimed relics. Despite many attempts, no one has been able to successfully explain how the mysterious image of a crucified man could have been produced by a medieval artist on the surface fibers of this linen cloth despite twenty years of testing by some of the world's best scientists.

What is a Shroud? Simply a cloth that would have been wrapped around Christ at his burial (Matthew 27:59-60, Mark 15:46, Luke 23:53, Luke 24:12, John 20:5-8). What's compelling about the Shroud of Turin is the following:



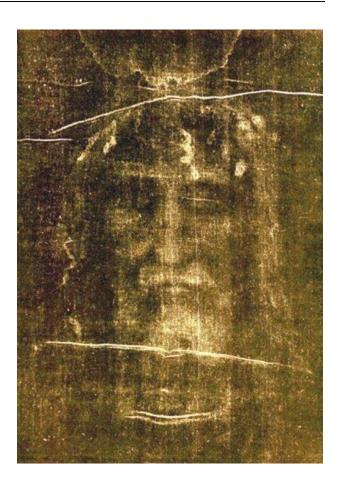


Figure 23: The Shroud of Turin

- The Shroud contains the image of a dead male who was crucified. On May 28, 1898, amateur Italian photographer Secondo Pia took the first photograph of the shroud and was startled by the negative in his darkroom. Negatives of the image give the appearance of a positive image, which implies that the shroud image is itself effectively a negative of some kind. Later image analysis by scientists at the Jet Propulsion Laboratory found that rather than being like a photographic negative, the image unexpectedly has the property of decoding into a 3-D image of the man when the darker parts of the image are interpreted to be those features of the man that were closest to the shroud and the lighter areas of the image those features that were farthest. This is not a property that occurs in photography, and researchers could not replicate the effect when they attempted to transfer similar images using techniques of block print, engravings, a hot statue, and bas-relief. Indeed, the mystery of how the image was transferred to the Shroud is still a mystery today. Many theories have been put forth, but none can replicate the truly unique nature of the image that the Shroud contains.
- The blood stains shows a body that has been whipped and crucified, with spike wounds through the wrists, feet and a wound in the man's right side. These are all consistent with the Gospel record of Christ's crucifixion.
- A scientific analysis shows a naked, well-formed, muscular adult male in his thirties. He has a
  mustache, full beard, and shoulder-length long hair. This is consistent with what one would
  expect with Jewish customs at the time of Christ.

- The body measures approximately 5' 10", with a weight of approximately 175 pounds, which is about average for Jewish males of the first century.
- The wounds are consistent with wounds formed by the Roman whip, known as the flagrum. This is a multiple-thonged whip with lead or bone dumbbell-shaped weights attached to the ends of the whip that would tear the skin and flesh.
- The shroud shows a body that was not fully washed, which is contrary to ancient Jewish burial practices. However, such a description would be consistent with the body of Christ, which was rushed to burial right before the beginning of the Sabbath, since Jewish law would have prevented the washing of a body during the Sabbath.
- The shroud reveals a man's whose legs were not broken, which would be unusual for a Roman crucifixion, but consistent with the description of Christ (John 19:31-33).
- What's unique about the Shroud is that there is no evidence of any body decomposition. Of the
  thousands of other burial cloths found in Egypt and North Africa, all contain stains from body
  decomposition. The Shroud of Turin shows signs of rigor mortis (which would have ended after
  two days), but no evidence of decomposition, which would be consistent with that of Christ.
- Significantly, although there are over one hundred and twenty blood stains on the Shroud, there are no blood smears. Experiments with corpses prove that it is impossible to lift a body from a burial cloth without causing blood smears.
- The scalp reveals over thirty separate small wounds covering both the top of the skull and the
  area around the head, indicating that the crown of thorns was not like the wreath that we see in
  many paintings, but rather a large mass of thorns that literally covered his head.
- Laboratories have tested the stains on the cloth and determined they are the stains of human blood.
- The linen flax cloth is composed of hand-spun threads woven on a loom in a three-to-one herringbone twill, which is a common weave in antiquity, especially in ancient Syria. However, the type of fabric used was not found in Europe in the medieval period when the Shroud first appeared in 1357. The Shroud contains small amounts of cotton fibers called Asian Gossypum herbaceum, a fact consistent with Middle East origin. If the Shroud is a fake, the artist would have had to obtain ancient linen cloth from the Middle East for his work.
- When analyzed using a VP-8 image analyzer, a complex cathode-ray tube device developed by NASA, it's clear the image is three-dimensional, not two-dimensional which is what one would expect of produced by an artist. This means the Shroud was actually produced from a genuine three-dimensional physical body, a fact derived by the varying distances between the different parts of the body and face and the linen cloth as it lay covering the body.
- The eyes are covered with coins. Specifically, when analyzed, a coin known as the lepton. The coin has twenty-four points in common with coins minted by Pilate between 29 and 32 A.D. It was common practice in the Middle East to bury bodies with coins over their eyes.
- Using pollen analysis, the Shroud was found to contain pollen from six plants that are known to grow only in Jerusalem (Bassia muricata Asch, Echinops glaberrimus DC, Fagonla Moills Del., Hyoscymus aureus L, Onosma sydacum Labil, Zygophyllum dumosum B). This provides compelling evidence that the Shroud's origin was Jerusalem.
- Evidence of plants and herbs on the Shroud (used as part of the burial custom) provides evidence of many plants and spring flowers that blossom at the very time of the Gospels record the crucifixion of Jesus took place on Passover.
- The dirt contained on the Shroud have tested to contain particles of limestone, the most prevalent form of rock in Jerusalem and were concentrated in the feet area consistent with what one would expect for a barefoot Jesus walking with the cross up to Calvary.

The main objections to the Shroud being authentic are the following:

 The shroud does contain trace amounts of paint particles – not on the image which was not formed by any kind of paint or dye, but in trace amounts on the cloth. This however, would be consistent with paint particles haven fallen on the cloth at various times over the centuries when the Shroud was exhibited in Churches, which it was known to have been.

- In 1988, three different Carbon-Dating results on a small corner of the Shroud placed the Shroud's origins between A.D. 1260 and 1390, disqualifying the Shroud from being authentic. However, many critics of the tests argued that at least fourteen scientific protocols that were established prior to the tests were not followed and the tests were not performed on an image portion of the Shroud. This is important, since the Shroud was known to have been damaged and contains evidence of patches haven been sewn into the cloth. These conclusions suggest that other samples, from a part of the shroud not mended or tampered with, would need to be tested in order to ascertain an accurate date for the shroud. Since the Vatican has refused to allow such testing, the age of the shroud remains uncertain. It is also important to point out that the Shroud was known to have been damaged by fire in 1532. A fire would have produced carbon, which could easily have thrown off the proportions of carbon atoms in the Shroud and thereby produce a more recent apparent date.
- There is little historical trail of the Shroud prior to 1357 when the French Templar knight Sir Geoffrey II de Charney personally presented the Shroud to the small church in Lirey, France. Since this time, the Shroud is known to have been in the possession of the royal family of the powerful House of Savoy and eventually the exiled King of Italy, King Umberto II who gave it to Pope John Paul II in 1983. However, no continuous record exists of the ownership of the Shroud for more than a Millennium.

Although the Shroud is fascinating as an archeological artifact, we are left to conclude that the Shroud could not have been created by a medieval artist, since the level of detail and level of sophistication would far exceed that of any artist's capabilities at the time. Second, despite tens of thousands of hours of testing and lab work, no one has found conclusive proof that the Shroud is a fraud. Third, many items of evidence combine to make a powerful argument that the Shroud is a burial cloth from Israel of a crucified man consistent with the description of how Christ was crucified.

Ultimately, more testing is essential to determine the Shroud's authenticity, but if the Shroud is shown to be that of Jesus of Nazareth, it would certainly constitute the most powerful evidence of the existence of the historical Christ and especially of his resurrection from the tomb.

## **Discussion Questions**

- 1. What are some of the shortcomings and benefits of using archaeology to corroborate the New Testament?
- 2. If the New Testament writers are shown to be accurate in reporting incidental details, does this increase your confidence that they would be accurate in reporting important events?
- 3. What do you find most compelling in the stories of Sir William Ramsay, the Dead Sea Scrolls or the Shroud of Turin?

# **CHAPTER 19**

# **EVIDENCE FROM PROPHECY**

The world was not created but only for the Messiah – the Jewish Talmud<sup>49</sup>

He had no beauty or majesty to attract us to him, nothing in his appearance that we should desire him. He was despised and rejected by men, a man of sorrows, and familiar with suffering. – Isaiah 53:2

Rejoice greatly, O Daughter of Zion! Shout, Daughter of Jerusalem! See, your king comes to you, righteous and having salvation, gentle and riding on a donkey. – Zechariah, Zechariah 9:9

For to us a child is born, to us a son is given, and the government will be on his shoulders. And he will be called Wonderful Counselor, Mighty God, Everlasting Father, Prince of Peace. Of the increase of his government and peace, there will be no end. He will reign on David's throne and over his kingdom, establishing and upholding it with justice and righteousness form that time on and forever.

— Isaiah, Isaiah 9:6-7

The evidence for the resurrection of Jesus Christ is compelling enough to establish Jesus as the Son of God, but the word 'Messiah' implies something more. The title 'Messiah' literally means 'savior' and implies a person who would come in fulfillment of the prophecies of the ancient Jewish Scriptures. One of the central themes of the prophecies of the Old Testament (the Jewish scriptures) was that a 'Messiah' would come to redeem Israel and fulfill the promises God had made to Abraham, Isaac, Jacob and David. This Messiah would restore Israel as the leading nation in the world and would bring about a new time of peace and prosperity among all nations.

This message was especially compelling to the people of Israel, who were being held captive during the time these prophecies were delivered (627 B.C. to 400 B.C.) The glory that was Israel under King Solomon was gone, and the nation of Israel was enslaved in a foreign land. The promise of the Messiah gave the people of Israel hope that their former glory would return. They were looking for and end to "the time of the Gentiles" and were eagerly anticipating the restoration of their former nation.

The Old Testament contains at least 456 passages that were interpreted in ancient Jewish writings to apply to the coming of the Jewish Messiah. 75 of these passages are from the five books of Moses (Genesis through Deuteronomy), 243 are from the writings of the prophets, and 138 from the balance of the Old Testament.<sup>50</sup> Like fingerprint evidence that is used in a trial, these prophecies are a way that we can uniquely identify who the true Messiah is.

What's sad is that there came a Jew who claimed to be the Messiah. He came exactly when the prophecies said he would, performed miracles, and fulfilled many of the prophecies related to the Messiah, but the people of Israel, the very people who should have recognized him and eagerly welcomed his arrival, rejected him. Why?

The Old Testament prophets described two different portraits of the coming Messiah: one portrait depicts him as a humble servant who would suffer for others, be rejected by his people and would die to save them from their sins. This portrait of "the suffering Messiah" is primarily seen in Isaiah 53. The other portrait shows the Messiah as a king who comes to rescue the world at the point of global war, and comes to reign over Israel and restore the former glory that existed under King Solomon. This portrait of "the conquering Messiah" is seen in Zechariah 14 and Isaiah 9:6-7.

Writer Hal Lindsey offers an explanation of these seemingly contradictory views of the Messiah: 51

Imagine a man looking at a range of mountains. He is able to see the peak of one mountain, and beyond it the peak of another. However, from this vantage point, he cannot see the valley that separates these two mountains. Men viewed the two portraits of the Messiah in the same manner. They saw two different persons, but missed the connection. They did not perceive that there could be just one Messiah, coming in two different roles, and separated by a valley of time.

Jesus presented his credentials as the suffering Messiah, but many rejected him because they were looking for a great conqueror. They were looking for a political leader who would deliver them from the Roman oppression. In their blindness they discounted more than 300 *specific predictions* in their own sacred writings about this Messiah.

What's interesting is that Jewish commentaries of the Talmud do proclaim two future messiahs. One Messiah (Messiah Ben Joseph) will appear before the War of "Gog and Magog" (a future war described in Ezekiel 38-39). This Messiah will lead the forces of Israel to victory over their foes. The Talmud then claims the Messiah will be killed in the battle, thus fulfilling the suffering Messiah prophecies. Then, the second Messiah (Messiah Ben David) will come forth. He will lead Israel into the promised kingdom and the "age of redemption". This interesting interpretation is the Jewish way of reconciling the two undeniable descriptions of the Messiah in Scripture. Namely, a first Messiah that will suffer persecution and death and a second Messiah that will achieve glorious victory over the enemies of God and Israel.

These are precisely the claims of the New Testament. However, Christians present the evidence that Jesus of Nazareth fulfilled the prophecies of the first Messiah during his First Coming and believe that he will return to redeem both Israel and the Church in the future in the Second Coming.<sup>52</sup>

# **Prophecies of the Timing of the Messiah**<sup>3</sup>

Although many people are aware that the Old Testament contains many prophecies concerning the coming of the Messiah outlined above – likely very few people are aware that the Bible actually predicted the *exact day* of the Messiah's coming, which was foretold by the prophet Daniel.

In 538 B.C., during the time that Israel was being held captive by the Babylonians, the prophet Daniel recognized that the time of Israel's captivity would soon be coming to an end. It had been sixty-seven years since Jerusalem was conquered by Babylon, and Daniel had been studying the prophecies that said the captivity would last only seventy years. He then proceeded to pray for the people of Israel and that the prophecies concerning the 70-year captivity would be fulfilled. During this time of prayer, the angel Gabriel appeared to Daniel and provided one of the most amazing prophecies in all of scripture (Daniel 9:23-27). Although the seventy years of captivity would come to an end, the angel of God declared that this would not be the end of Israel's punishment for breaking God's covenant. Rather, the punishment would last 'seventy sevens':

<sup>&</sup>lt;sup>3</sup> This calculation originally performed in 1895 by Sir Robert Anderson, the head of Scotland Yard in *The Coming Prince*, p. 127

Therefore, consider the message and understand the vision: Seventy 'sevens' are decreed for your people and your holy city... from the issuing of the decree to restore and rebuild Jerusalem until the Anointed One, the ruler, comes, there will be seven 'sevens,' and sixty-two 'sevens.' It will be rebuilt with streets and a trench, but in times of trouble. After the sixty-two 'sevens,' the Anointed One will be cut off and will have nothing. The people of the ruler who will come will destroy the city and the sanctuary...(Daniel 9:23-26a)

In essence, Gabriel was correcting Daniel's misunderstanding concerning when the Messianic Kingdom would be set up. He did this by providing a timeline and series of events that would not only lead to the end of the Babylonian captivity and the restoration of Jerusalem, but also to the first coming of the Messiah and various other future events related what most know of as the Tribulation period, which occur prior to Christ's second coming. For the sake of this article, however, we will only focus on the timeline leading up to the first coming of Christ.

The key to understanding this passage (Daniel 9:23-27) is to recognize that the 'sevens' mentioned refer to seven-year periods. This is certainly the case: the original Hebrew translation of this phrase supports this interpretation and Daniel had clearly been thinking about the years of captivity Israel had endured. Gabriel was essentially using a play on words in the Hebrew text, pointing out that the Messiah's Kingdom would not be established in "seventy years", which is what Daniel had been expecting, but rather "seventy sevens of years" (seventy times seven, a total of 490 years). Therefore, the "seventy sevens" refers to seventy, seven-year periods of time. Essentially, what the angel was telling Daniel about Jeremiah's prophecy was similar to what we saw related to Ezekiel's prophecy – namely that the punishment of Israel was to be multiplied by seven due to Israel's disobedience.

The seventy 'sevens' are divided into three separate units – seven 'sevens', 62 'sevens' and one 'seven'. The second block of time is said to immediately follow the first for a total of 69 'sevens' or 483 years (69 periods of 7 years each). The first event we read of in Daniel's timeline is "the issuing of the decree to restore and rebuild Jerusalem." From history we know that this decree was issued by the Persian King Artaxerxes on March 14, 445 B.C., which started the countdown of Daniel's seventy 'sevens'. The decree was issued at the request of Nehemiah, an advisor to the king, who was deeply concerned upon hearing news that the remnant that traveled back to Jerusalem had run into significant difficulties in rebuilding the city of Jerusalem itself. From the issuing of this decree in 445 B.C., this prophecy says there will be 483 years until the "anointed one, the ruler, comes". Who is this "anointed one?" The Hebrew translation of this word literally means "mashiach" or "the Messiah". Therefore, this is a prophecy about the timing of the coming of the Messiah to the earth.

What will the arrival of the Messiah look like? The prophet Zechariah provides the answer: "Shout, Daughter of Jerusalem! See, your king comes to you righteous and having salvation, gentle and riding on a donkey, on a colt, the foal of a donkey." (Zechariah 9:9). Zechariah's prophecy describes the coming of the Messiah, riding into Jerusalem. The people of Israel were awaiting a political savior to ride into the city of Jerusalem and free them from the nations that ruled over them. Zechariah describes this event, but describes it not as a conquering King riding into the city on a lofty steed, but rather as a humble savior riding in a humble donkey.

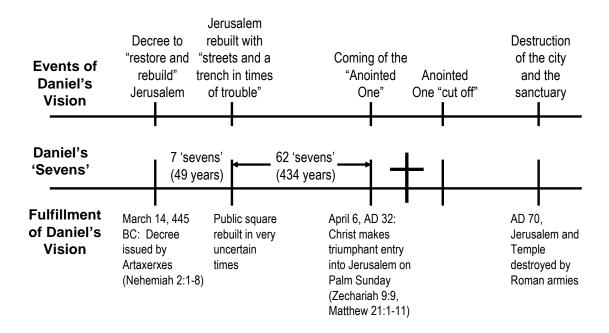


Figure 24: Daniel's Prophetic Timeline

Converting between the Jewish and Christian calendars, the 483 years mentioned in this prophecy (the first 49 plus the second 434) add up to 173,880 days. If we add this time to March 14, 445 B.C., we end up with the 6<sup>th</sup> day of the 4<sup>th</sup> month of the 32<sup>nd</sup> year or April 6, 32 A.D, which is when we would expect the Messiah to arrive. What happened on this day? Exactly 173,880 days from the issuing of Artaxerxes' decree, Jesus Christ made his triumphal entry into the city of Jerusalem on Palm Sunday and fulfilled this prophecy just as it was predicted.

The passage then goes on to say that various events would happen after the sixty-nine 'sevens'. These events include the "cutting off" of the Anointed One, the destruction of the city and the Temple, and the continuation of wars. These events were fulfilled just as they were predicted. The Hebrew word "cut off" translated is a common word used in the Mosaic Law and simply means, 'to be killed'. This is fitting with the coming of Jesus Christ and his death on a cross. The destruction of the city and the Temple a second time we know from history would occur in 70 A.D. at the hands of the Romans.

The implications of this single prophecy and what it describes are enormous – this Old Testament passage actually predicted that the Messiah would come in 32 A.D. and would later be killed at some point before the destruction of the city and the Temple which we know would later occur in 70 A.D. It is amazing to consider why so many Jewish people ignored this prophecy regarding the coming of the Messiah and rejected Jesus Christ, when they had waited so patiently for his arrival and their own Scriptures predicted the exact day of his coming. If the Messiah was not on earth 483 years after the decree was issued to rebuild Jerusalem and then was not killed in accordance with this prophecy sometime before the destruction of the city and the Temple in 70 A.D., then Daniel was a false prophet and his book shouldn't be included in the Hebrew Scriptures. But if Daniel was not a false prophet, then there is no other conclusion but that Jesus Christ was truly the Messiah that the Hebrew Scriptures describe. There is simply no other person that could have fulfilled this prophecy – and he fulfilled it to the exact day it was predicted to occur.

It should be noted that the timing of the coming of the Messiah was not something new to Jewish scholars.<sup>53</sup>

- The Gospel of Matthew records that the eastern magi, or wise men, came to Jerusalem to visit King Herod. They requested information about the birthplace of the new king. When the jealous king Herod inquired of the high priests and scribes, they replied immediately that he would be born in Bethlehem as prophesized by Micah 5:2. There was an expectation that the Messiah would appear about that time.
- The Jewish historian, Flavius Josephus, refers to a popular messianic calculation, which was well known in the first century, which suggested that the Messiah would appear shortly. He referred to "an ambiguous oracle that was also found in their sacred writings, how about that time, one from their country should become governor of the habitable earth." This reference likely points to Daniel 9:24-27.
- The pagan Roman writer Tacitus records that there was an authoritative and popular prophetic speculation that suggested a great leader would arise from the East to rule the world: "The majority were deeply impressed with a persuasion that it was contained in the ancient writings of the priests that it would come to pass that at the very time, that the East would renew its strength and they that should go forth from Judea should be rulers of the world." 55
- Seutonius wrote: "A firm persuasion had long prevailed through all the East that it was fated for the empire of the world at that time to devolve on someone who should go forth from Judea."

## Prophecies of the Messiah's Lineage & Birth

The following is a summary of various prophecies regarding the Messiah's lineage and birth, and how Christ fulfilled these prophecies:

Table 12: Prophecies of the Messiah's Lineage & Birth

Prophecy	Old Testament Prophecy	New Testament Fulfillment
Messiah to be of the family of Shem	Genesis 9:26	Luke 3:36
Messiah to be a descendant of Abraham	Genesis 12:3; 18:18; 22:18; 26:4	Matthew 1:1; Luke 3:23-37; Acts 3:25; Galatians 3:8, 16
Messiah to be a descendant of Isaac	Genesis 17:19	Luke 3:23,24
Messiah to be a descendant of Jacob	Genesis 28:14; Numbers 24:17, 19	Luke 3:23-24
Messiah to be from the tribe of Judah	Genesis 49:10	Revelation 5:5
Messiah to be a descendant of Jesse	Isaiah 11:1; 2 Samuel 7:12-16; Jeremiah 23:5	Matthew 1:1-17; Luke 3:23-37
Messiah to be a descendant of David	2 Samuel 7:12-16; 1 Chronicles 17:11-14	Matthew 1:1-17; Luke 3:23,21
Messiah to be born of a woman	Genesis 3:15	Galatians 4:4
Messiah to be born of a virgin	Isaiah 7:14	Matthew 1:18-25
Messiah to be the son of God	Psalm 2:7; 2 Samuel 7:14; 1 Chronicles 17:13	Matthew 1:17, 3:17, 17:5; Luke 1:35; Acts 13:33; Hebrews 5:5; 2 Peter 1:17-18
Messiah to be the son of man	Daniel 7:13	Matthew 16:13
Messiah to be born in Bethlehem in Judea	Micah 5:2	Matthew 2:1-8; Luke 2:4-6

It's notable that during Jesus' life and for two hundred and fifty years thereafter, no one questioned his genealogical right to David's throne. If there was a problem with Christ's lineage in terms of the fulfillment of these prophecies, surely Christ's Jewish enemies would have challenged the accuracy of the Gospel accounts of his lineage. The Jewish people at the time of Christ had access to the genealogical records, which were available for legal examination in the Temple until A.D. 70. The silence of his critics on this issue clearly suggest that they didn't disagree with the lineage of Jesus Christ as presented in Matthew (listing Joseph's ancestors) and Luke (listing Mary's ancestors).

Since the genealogical records of Israel were lost in the burning of the Temple in August, 70 A.D., no other Jew is now able to provide legal evidence that his ancestry traces back to King David. Therefore, Jesus of Nazareth is the only one who can prove he has a legal right to sit on the throne of David as Israel's Messiah.<sup>57</sup>

## **Prophecies of the Messiah's Ministry**

The following is a summary of various prophecies regarding the Messiah's ministry on earth and how Christ fulfilled these prophecies:

Table 13: Prophecies of the Messiah's Ministry

Prophecy	Old Testament Prophecy	New Testament Fulfillment
Messiah to be recognized as a Prophet	Deuteronomy 18:15-19	Jesus Christ was
		recognized as a prophet: Matthew 21:11;
		John 1:45, 6:14;
		Acts 3:22-23.
		In fact, the greatest
		passage of prophecy in
		scripture was given by Jesus in Matthew 24
Messiah to be a light to the Gentiles	Isaiah 40:3	Acts 13:47-48
Messiah to be brought forth out of Egypt	Hosea 11:1	Matthew 2:15
Messiah to be preceded by a prophet	Isaiah 40:3	Matthew 3:1-8
Messiah to minister in Galilee	Isaiah 9:1	Matthew 4:12-16
Messiah to live at Capernaum and give light to the land of Zebulun and Naphtali	Isaiah 9:2	Matthew 4:13-16
Messiah to be healer of the deaf and the blind	Isaiah 35:4-6, 42:7	Matthew 9:35, 11:3-5; John 11:47
Messiah to teach by the use of parables	Psalm 78:2	Matthew 13:34
Messiah to be meek	Isaiah 42:2	Matthew 12:15-21
Messiah to be rejected by his brethren	Psalm 69:8; 118:22	John 7:5,48
Messiah to come to the second temple	Malachi 3:1	Matthew 21:12
Messiah to enter Jerusalem in triumph on a	Zechariah 9: 9;	Matthew 21:1-11;
donkey	Genesis 49:11	Luke 19:35-37
Messiah to be called Lord	Psalm 110:1	Luke 2:11
Messiah to be a Priest	Psalm 110:4	Hebrews 3:1
Messiah to be a King	Psalm 2:6	John 18:37

# **Prophecies of the Messiah's Conviction & Trial**

The following is a summary of the prophecies regarding the conviction and trial of the Messiah and how Christ fulfilled these prophecies:

Table 14: Prophecies of the Messiah's Conviction & Trial

Prophecy	Old Testament Prophecy	New Testament Fulfillment
Messiah to be opposed by kings and rulers	Psalm 2:2	Mark 15:1
Messiah to be despised and rejected. People will mock him and hurl insults at him.	Isaiah 49:7	Matthew 27:39; Mark 15:29-32; Luke 23:39
Messiah to be betrayed by a friend with whom he shared bread	Psalm 41:9	Matthew 26:47-49; Mark 14:10; John 13:18-27
Messiah's value judged at 30 shekels of silver. This money would be cast into the Temple and finally, would be given to a potter for the graves of poor people (a "potter's field" is where potters dug clay for making pottery. These fields were frequently full of holes, so it was easy to bury people there who had no family tombs).	Zechariah 11:12-13	Matthew 26:14-15, 27:3-10
False witnesses will rise up against Messiah	Psalm 35:11	Mark 14:56
Messiah to be stricken on his back	Isaiah 50:6	Matthew 27:26
Messiah to be spat upon	Isaiah 50:6	Matthew 26:67; Matthew 27:30
Messiah's appearance to be marred	Isaiah 52: 14	Mark 14:65
Messiah to stand quiet before accusers	Isaiah 60:6, 53:7	Matthew 26:62-64, 27:13-14, 30; Mark 14:60-61, 65, 15:19; Luke 22:63; John 19:1; 1 Peter 2:23
Messiah as shepherd of the flock, would be smitten, and the sheep would be scattered	Zechariah 13:7	Matthew 26:31, 56b; Mark 14:50

# **Prophecies of the Messiah's Death**

The following is a summary of the prophecies regarding the death of the Messiah and how Christ fulfilled these prophecies on Good Friday:  $^{58}$ 

Table 15: Prophecies Concerning Messiah's Death

Prophecy	Old Testament	New Testament	
Messiah to be killed – to die for our sins	Prophecy	Fulfillment	
Wessian to be killed – to die for our sins	Isaiah 53:4-12;	Luke 23:34;	
	Daniel 9:26	John 19:16;	
		Romans 5:8-9;	
		2 Corinthians 5:21; 1 Peter 2:24	
Messiah's death to be extremely painful. The Messiah's bones would be pulled out of his joints and his strength would be taken away	Psalm 22:14-15	These would be logical results of crucifixion	
Messiah's bones would not be broken	Exodus 12:46	John 19:33-36	
Messiah's body to be hung on a tree; but would not hang overnight	Deuteronomy 21:22-23	John 19:31	
Messiah's body would be pierced	Zechariah 12:10; Psalm 22:16	Matthew 27:35; John 19:34-37; Revelation 1:7	
Blood and water would flow out of Messiah's body at his death	Psalm 22:14	John 19:34	
Messiah will suffer thirst at his death	Psalm 22:15, 69:21	Mark 15:29; John 19:28-29	
Vinegar to be offered to Messiah for his thirst	Psalm 69:21	Matthew 27:34	
Messiah to cry out "My God, my God, why have you forsaken me?"	Psalm 22:1	Matthew 27:46	
Onlookers would mock and wag their heads	Psalm 22:6,7; Psalm 109:25	Matthew 27:39	
Actual words of a passersby	Psalm 22:8	Matthew 27:43	
Messiah will be stared upon	Psalm 22:17	Luke 23:35	
Messiah's garments divided & gambled for	Psalm 22:18	Mark 15:24; John 19:23-24	
Messiah will commit his spirit to God at death	Psalm 31:5	Luke 23:46	
Messiah's friends will stand far off	Psalm 38:11	Luke 23:49	
Messiah would be numbered with transgressors (i.e., considered a criminal or sinner)	Isaiah 53:12	Mark 15:27; Luke 22:33,37	
Messiah would be assigned a grave with the	Isaiah 53:9	Roman soldiers intended	
wicked and with the rich when he died		to bury Christ's body with	
		the wicked since they	
		considered him a criminal.	
		Instead, he was given a	
		burial in the tomb of a	
		wealthy man Matthew	
		27:57-60	
Messiah's body would not undergo decay	Psalm 16:10	Acts 2:31	
Messiah would be rejected, but "rejected stone	Psalm 118:22		
will become cornerstone"	1 Julii 110.22	Matthew 21:42;	
Docume completions		Acts 4:10-12;	
		1 Peter 2:6-8	
The Sun will be dark at noon at time of Messiah's death	Amos 8:9	Matthew 27:45	

### Prophecies of the Messiah's Resurrection & Ascension

The following is a summary of the prophecies regarding the resurrection and ascension of the Messiah and how Christ fulfilled these prophecies:

Table 16: Prophecies Concerning Messiah's Resurrection & Ascension

Prophecy	Old Testament Prophecy	New Testament Fulfillment
Christ's prediction of his own resurrection on the third day*	Matthew 12:39-41	Matthew 28:1; Mark 16:1
Messiah would ascend to heaven	Psalm 68:18	Mark 16:19; Luke 24:50-51; Acts 1:9; Ephesians 4:8-10

<sup>\*</sup>Note: obviously, this is not an Old Testament prophecy, but is included here for completeness

#### **Probabilities**

The above prophecies were all given in the Old Testament between 500 and 2,000 years prior to the coming of Christ. At the time these prophecies were written, the death and resurrection of Christ was indeed prophecy. Now, of course, it's history.

The question that needs to be asked is what are the odds that Jesus Christ could have come and just pretended to be the Messiah? Could he, knowing the Jewish prophecies, manufacture his identity as the Messiah? The answer is that it would have been statistically impossible. Although Christ could have 'manufactured' the fulfillment of some of the prophecies (for example, Jesus could have 'acted' by not defending himself at his trial or by calling out "My God, my God, why have you forsaken me?"), there are at least 15 prophecies listed in this chapter that are quite specific and couldn't have been manufactured by Jesus himself. For example, Jesus certainly couldn't control the city where he was born, his family lineage or the price that was paid for his betrayal.

In statistics, the probability of any events happening together is the product of the probability of the events happening individually. So, if the probability of one event happening is 1 in 10 and the probability of another event is 1 in 5, then the probability of both events happening is 1 in 50. If a person assigns probabilities to the above prophecies and multiplies them together, it's easy to see that it is beyond the realm of possibility that one person could come and fulfill these prophecies unless he truly was the Messiah.

For instance, if you assume the odds of the Messiah being born in Bethlehem is 1 in 200, the odds that he would be betrayed by a friend is 1 in 10, the odds that he would be betrayed for thirty pieces of silver 1 in 100, etc. and then multiply together for a dozen of the most common and indisputable prophecies, the combined probability quickly reaches the order of one chance in 10 to the 19<sup>th</sup> power or 1 in 10,000,000,000,000,000,000.<sup>4</sup> If you take the odds of any one of the above prophecies at one chance in 10 and multiply together for a dozen of these prophecies, the odds are one in 10 to the 12<sup>th</sup> power or 1 in 10,000,000,000,000.

<sup>&</sup>lt;sup>4</sup> For a complete prophecy by prophecy analysis, see Grant R. Jeffrey, *Armageddon: Appointment with Destiny*, Chapter 1

Regardless of the specific odds applied to any one prophecy, it's clear that the prophets could not have accurately predicted these events by chance alone and that Jesus Christ could not have come simply pretended to be the Messiah. The odds are just too astronomical.

## Counter-Arguments<sup>59</sup>

Numerous people (especially Jews) have tried to explain away the prophecies related to the Messiah. These arguments include:

- The Coincidence Argument: the argument that Jesus merely fulfilled the prophecies by accident. The problem with this explanation is the statistical probabilities discussed above.
- The Altered Gospel Argument: the argument that the Gospels were fabricated to make Jesus fit the prophecies above concerning the Messiah. The problem with this is that when the Gospels were first being circulated, there were people living at the time who had been around when these things happened people with specific motives (i.e. the Jewish community) who would have jumped at the chance to discredit the Gospels by pointing out any falsehoods. Even though the Jewish Talmud refers to Jesus in derogatory ways, it never once makes the claim that the fulfillment of the prophecies were falsified. Had they been, the Jewish leaders at the time certainly would have made this case.
- The Intentional Fulfillment Argument: the argument that Jesus maneuvered his life to intentionally fulfill the prophecies. The problem with this explanation is it's inconceivable for Jesus to have controlled the way, date, place, lineage, etc. in which he was born and to control the way in which he died. One example is the 30 pieces of silver paid by the Sanhedrin to Judas. This could not have been pre-arranged along with dozens of other of the prophecies above.
- The Context Argument: the argument that the prophecies above were taken out of context or pulled from the Old Testament to specifically point to Jesus. The problem with this argument is that the above prophecies are all well known specific prophecies regarding the Messiah and were are documented in the Talmud as such.

### **Discussion Questions**

- The Old Testament contains at least 456 passages that were interpreted in ancient Jewish writings to apply to the coming of the Jewish Messiah. Since the Jewish Messiah had been long-awaited and expected by the Jewish people, what explanations can you offer for why they didn't recognize Jesus Christ as the Messiah? How many Christians do you think are familiar with the prophecies concerning the end-times today?
- Daniel's prophecy concerning timing of the Messiah is very specific. It not only provides an exact date for the coming of the Messiah, but also makes it clear the Messiah had to come to earth and be killed before 70 A.D. when the city of Jerusalem and the Temple would be destroyed. What explanations can you offer other than divine inspiration for how Daniel could have predicted this?
- Evaluating the counter-arguments frequently cited by Jews and non-Christians, which do you think is the most compelling? Why?

# **CHAPTER 20**

# **EVIDENCE FROM HIS MIRACLES**

For the invisible things of him from the creation of the world are clearly seen, being understood by the things that are made, even his external power and Godhead; so that they are without excuse.

— Paul, Romans 1:20

#### Miracles as Evidence<sup>60,61</sup>

One of the most compelling evidences that Jesus was, in fact, the son of God is the miracles he performed while on earth. Naturally, *anyone* can claim to be God, but the miracles that Christ performed (in addition to the resurrection previously discussed, which itself is a miracle) demonstrate that his claim was true.

In the book of Acts, Luke throws down a challenge to skeptics based on the miracles performed by Christ:

Men of Israel, listen to this: Jesus of Nazareth was a man accredited by God to you by miracles, wonders and signs, which God did among you through him and yourselves know. – Acts 2:22

In this passage, Luke clearly points out miracles as evidence to Christ's claims of divinity, and challenges listeners to believe based on their personal knowledge of these events. This challenge would have fallen on deaf ears if these events were not true, but Luke based his assertion on the knowledge that the audience knew of, and observed, these miraculous events for themselves.

The event we commonly call a "miracle" is usually called "a sign," "a wonder," "a work," or "a power," in the original Greek language of the Gospels, reflecting the fact that the writers intended to refer to the supernatural event as a purposeful act of God to reveal his power and Message to humanity. It is important to note that the word "wonder" is never applied to a miracle by itself. The word "wonder" always appears in the Gospels in connection with the word "signs" but never on its own. The consistent evidence presented by the Gospels is that a miracle is never produced by God solely as a "wonder" but rather as a demonstration of God's supernatural power to authenticate his revealed message or his messenger, Jesus Christ.

Many people wonder whether Jesus' miracles as recorded in the Gospels could be myth. But as one studies the evidence and the logic for the truth claims of Christianity, it becomes evident that the miracles recorded by the Bible actually happened. Here are several reasons why:

• Some people want to give naturalistic or scientific explanations for the miracles. But miracles, by definition, fall outside scientific explanations. Miracles are God's intervention in nature to

- demonstrate God's supernatural power. If God exists, miracles are possible—even probable. To say that miracles can't exist is really just atheism.
- If God could create the universe out of nothing, any of the miracles performed by Jesus would have been trivial. If we believe in God as a creator, we should have no hesitancy in accepting the miracles of Christ.
- The factual nature of the miracle stories is evident from the text of Scripture. Some people think that perhaps, for example, the people Jesus healed were not really sick in the first place. But such explanations are not faithful to the text. There were witnesses to the healings—before and after. Or to say that Jesus' turning water into wine can be explained by some sleight of hand is specious. There is nothing in the description of the miracle events that remotely suggests that we should look for naturalistic explanations for the miracles. They are presented in the text as truly supernatural.
- The miracles stories are not embellished like mythology. They are straight-forward matter-of-fact historical narrative accounts. As C. S. Lewis, a professor of ancient history and literature, stated, "I have been reading poems, romances, vision-literature, legends, myths all my life. I know what they are like. I know that not one of them is like this [the biblical miracles]." 62
- There was not enough time after the events took place for myths to have crept into the accounts. The miracles accounts are part of the text from the very beginning, so if the Gospel writers falsified them or the events did not really happen, then people living at the time could have easily pointed this out. When you carefully consider the miracles, it's obvious that many would instantly be rejected as absurd if they were not true. For example, the feeding of the 5,000. Obviously, there were eyewitnesses to this event and if it didn't happen, it would be easy to discredit the miraculous claims of this event. Likewise for turning water into wine at the wedding. We have no historical evidence of eyewitnesses denying these events.
- Not only did the writers of the Bible attest to Jesus' miracles (John 2:11, et al) but Jesus himself based his claim of divinity partly on his miracles (John 10:25, 38, John 14:11, John 15:24). It is clear from the biblical texts, that the writers of the New Testament considered the miracles genuine evidence for Christ's divinity. They considered them to be from God (John 3:2, John 20:30-31, Acts 2:22), "convincing proofs" (Acts 1:3, Hebrews 2:3-4) and not "cleverly devised myths" (2 Peter 1:16).
- Jesus' greatest miracle, the resurrection, has overwhelming evidence in its favor as discussed previously in this book. Certainly if the resurrection is a fact of history, Jesus' other miracles are believable.
- There is no compelling reason to doubt the Bible. The historical, archeological and documentary
  evidence supports the reliability of Scripture throughout. A high view of Scripture is demonstrably
  correct from the evidence. A high view of Scripture demands that the miracles happened.
- To deny the miracles leaves the Bible as a secular book, which gives one the option of ignoring it.
  If you start throwing out the miracles, you will likely begin picking and choosing among other
  things you like or don't like in the Bible. The Christian faith, as presented by Jesus, does not
  leave room for picking and choosing doctrines at will.
- Both the Talmud and the Koran admit that Christ performed miracles including raising people from dead. If these events did not happen, the Talmud certainly would have disputed it since the Jewish Rabbi's were Christ's chief critics. Likewise, the Koran's support of Christ's miracles adds further weight to the credibility of the claims.

In summary, there is no valid reason to doubt the miracle accounts, and many good reasons to believe that they actually happened—just as the Bible says.

#### The Miracles of Christ<sup>63</sup>

According to the Gospels, Jesus worked many miracles in the course of his ministry, which may be categorized into healings, exorcisms, controlling nature, resurrections and various other miracles.

### Healings

The largest group of miracles mentioned in the New Testament is those concerning disease and disability. The Gospels give varying amounts of detail for each episode, sometimes Jesus cures simply by saying a few words, or laying on of hands, and at other times employs elaborate rituals using material (e.g. spit or mud). These miracles include:

- **Fever**: The Gospels describe Jesus as healing the mother-in-law of Simon Peter when he visited Simon's house in Capernaum, around the time of Jesus recruiting Simon as an Apostle. The Gospels imply that this led other people to seeking out Jesus, and him traveling over the whole of Galilee to preach to them.
- Leprosy: The Gospels state that, early in Jesus' ministry, he healed a leper, whom he then instructed to offer the requisite ritual sacrifices as proscribed by the Old Testament Jewish Code. Jesus instructed the ex-leper not to tell anyone who had healed him; but the man disobeyed, increasing Jesus' fame, and thereafter Jesus withdrew to deserted places. Luke also states that later, while on his way to Jerusalem, Jesus sent ten lepers, who had sought his assistance, to the priests, and that they were healed as they went, but that the only one that came back to thank Jesus was a Samaritan.
- Long term bleeding: The Gospels state that while heading to Jairus' house (see the section below on power over death), Jesus was approached by a woman who had been suffering from bleeding for 12 years, and that she touched Jesus' cloak (fringes of his garment: Matthew 9:20, 14:36), and was instantly healed. Jesus turned about and, when the woman came forward, said "Daughter, your faith has healed you, go in peace". Most scholars believe that the duration of this affliction, 12 years, makes it likely this condition was akin to hemophilia.
- Withered hands: The Gospels state that Jesus entered a synagogue on the Sabbath and found a man with a withered hand there, whom Jesus then healed, having first challenged the people present to decide what was lawful for a Sabbath - to do good or to do evil, to save life or to kill. Mark records that this angered the Pharisees so much that they started to contemplate killing Jesus.
- **Dropsy**: The Gospel of Luke states that, during a Sabbath, Jesus ate in the house of a prominent Pharisee, opposite someone who suffered from dropsy (an abnormal accumulation of fluid beneath the skin), and Jesus asked the Pharisees that were present if it was lawful to heal on the Sabbath, but, after getting no reply, healed the man. Jesus then challenged the Pharisees to say that they would not immediately pull out an ox, or a son, if it fell into a well during a Sabbath.
- **Deafness**: The Gospel of Mark states that Jesus went to the Decapolis (a group of ten cities on the eastern frontier of the Roman Empire) and met a man there who was deaf and mute, and cured him. Specifically, Jesus first touched the man's ears, and touched his tongue after spitting, and then said "Ephphatha", an Aramaic word meaning "be opened."
- **Blindness**: The Gospels state that Jesus met a beggar who, though blind, still identified Jesus as the Jewish Messiah; Jesus said that the man's faith has healed him, and he received his sight, and was allowed to follow Jesus. This happened when Jesus was leaving Jericho, and Matthew adds that there was another healed at the same time. John mentions as similar event that happened near the Pool of Siloam, with the following details:
  - The disciples first questioned Jesus whether the man's curse was for his own sins, or those of his parents. Jesus said it was for neither reason, "but that the works of God should be made manifest in him".

- Jesus healed him by spitting on the ground, mixing his spit with mud, and putting the mixture into his eyes, then sent him to wash in the Pool of Siloam.
- The event happened on a Sabbath; therefore the Pharisees said, "this man is not of God, because he does not keep the Sabbath". They asked the formerly blind man concerning Jesus, who said, "he is a prophet".
- The Jews did not believe that the healed man was the same person as the man who had been blind from birth, and asked his parents if the healed man was their son. The parents responded that he was, and had been born blind.
- o Jesus identified himself as the Son of God, and the cured man worshiped him.
- Additionally, Mark states that Jesus went to Bethsaida and met another man there who
  was blind, and then cured him. Specifically, Jesus is described as spitting in the man's
  eyes, to which the man responded that his vision is now blurred; Jesus then touched the
  man's eyes, and the man responded that he can see clearly now.
- Paralysis: The Gospels state that a paralytic was brought to Jesus on a mat; Jesus told him to get up and walk, and the man did so. Jesus also told the man that his sins were forgiven, which according to the Gospels irritated the Pharisees, and according to John irritated the people in general. Jesus is described as responding to the anger by asking whether it is easier to say that someone's sins are forgiven, or to tell the man to get up and walk. The Gospels state that this happened in Capernaum, Mark and Luke adding that Jesus was in a house at the time, and that the man had to be lowered through the roof by his friends due to the crowds blocking the door. A similar account is given in John and occurs at the Pool of Bethesda; some have argued this is another version of the event described in the Gospels, rather than a separate cure.
- Unspecified sickness: All four Gospels state that Jesus was asked by an official to heal a person important to him, and although Jesus is somewhat annoyed at being constantly asked to perform miracles, rather than being asked for teachings, he says that the person would be healed, and the official returned home to find that this has happened. The Gospels state that official was a centurion, and that it was the centurion's servant that was sick, while the Gospel of John states that the official was a royal official, originating from Canaan, and that it was his son who was sick.

#### **Exorcisms**

According to the Gospels, Jesus performed many exorcisms of demon possessed people. The accounts in the Gospels include:

- A boy possessed by a demon at Capernaum: Jesus exorcised an unclean spirit and forbid the demon from informing people that he was the "Holy One of God".
- A man possessed by demons at Gerasenes: People tried to chain up the man, but the man escaped, lived in caves, and roamed the hills, screaming. Jesus inquired as to the man's name, but was told by the man/demons that his name was Legion, "...for we are many". The demons asked to be expelled into a group of swine, which Jesus did, and thereafter the pigs fell into a lake and drowned. The pig owners told the townsfolk what had happened, and when the townsfolk saw that the man was sane, they asked Jesus to leave "for they were taken with great fear". The man, on the other hand, informed the whole of the Decapolis what had happened.
- A mute man: Jesus drove a demon out of a mute man who then spoke. The Pharisees claimed it was by the power of Beelzebub.
- The possessed daughter of the Canaanite or Phoenician woman in Tyre: The woman asked Jesus to heal her daughter, but Jesus said "I am not sent but unto the lost sheep of the house of Israel". The woman replied, "Lord: yet the dogs eat of the crumbs which fall from their masters' table", whereupon Jesus told her that her daughter was healed, and when the woman returned home she found that this was true.

- The boy possessed by a demon: The boy was brought forward to Jesus after Jesus' transfiguration. The boy foamed at the mouth, gnashed his teeth, became rigid, and involuntarily fell into both water and fire. Jesus' followers could not expel the demon, and Jesus condemned the people as unbelieving, but when the father of the boy questioned if Jesus could heal the boy, Jesus said everything is possible for those that believe, so the father said he believed that the boy could be healed, and Jesus did so.
- Mary Magdalene: Jesus drove seven demons out of Mary Magdalene.

### **Controlling Nature**

The Gospels tell another group of miracles concerning Jesus' power over nature:

- The Feeding of the 5,000 and of the 4,000 men: Jesus, praying to God and using only a few loaves of bread and several fish, fed thousands of men, along with an unspecified number of women and children; there were even a number of baskets of leftovers afterward.
- The Cursing of the Fig Tree: Jesus cursed a fig tree, and it withered.
- Turning Water into Wine: At a wedding, when the host ran out of wine, the host's servants filled
  vessels with water at Jesus' command, and then a sample was drawn out and taken to the
  master of the banquet who pronounced the content of the vessels as the best wine of the
  banquet.
- Walking on water: Jesus walked on a lake to meet a boat.
- Transfiguration of Jesus: Jesus climbed a mountain and was changed so that his face glowed.
- The Catch of 153 fish: Jesus instructed the disciples to throw their net over the side of the water, resulting in them hauling in the huge catch (for hand fishing) of 153 fish.
- Calming a storm: During a storm, the disciples woke Jesus, and he rebuked the storm causing it to become calm. Jesus then rebuked the disciples for lack of faith.

#### Resurrections

The Gospels report three cases where Jesus calls a dead person back to life:

- **Jairus' daughter**: Jairus, a major patron of a synagogue, asked Jesus to heal his daughter, but while Jesus was on his way, men inform Jairus that his daughter has died. Jesus said she was only sleeping and woke her up.
- The son of the widow at Nain: A young man, the son of a widow, was brought out for burial in Nain. Jesus saw her, and his pity caused him to tell her not to cry. Jesus approached the coffin and told the man inside to get up, and he did so.
- The raising of Lazarus: A close friend of Jesus who has been dead for four days was brought back to life when Jesus commanded him to get up.
- Jesus' own resurrection from the dead.

#### Supernatural Knowledge

The ability of Jesus to know things by supernatural means could also be classed as a miracle. There are many examples, but the story of the Samaritan woman at the well is one example where Jesus supernaturally knew the history of the woman including the men in her life.

# Gospel References

The following table provides a complete list of the miracles performed by Jesus and the corresponding references in the Gospels for purposes of further study:

Table 17: The Miracles of Jesus

Healings	Matthew	Mark	Luke	John
Cleansing of a Leper	8:2	1:40	5:12	
Healing a Centurion's Servant	8:5		7:1	
Healing Peter's Mother-in-law	8:14	1:30	4:38	
Healing the Sick at evening	8:16	1:32	4:40	
Healing a paralytic	9:2	2:3	5:18	
Healing the Hemorrhaging woman	9:20	5:25	8:43	
Healing Two Blind Men	9:27			
Healing a Man's Withered Hand	12:9	3:1	6:6	
Healing the Gentile Woman's Daughter	15:21	7:24		
Healing the Epileptic Boy	17:14	9:17	9:38	
Healing a Blind Men	20:30	10:46	18:35	
Healing a Deaf Mute		7:31		
Healing a Blind Man at Bethsaida		8:22		
Healing the Infirm, Bent Woman			13:11	
Healing the Man with Dropsy			14:1	
Cleansing the Ten Lepers			17:11	
Restoring a Servant's Ear			22:51	
Healing the Nobleman's Son (of fever)				4:46
Healing an Infirm Man at Bethesda				5:1
Healing the Man born blind				9:1
Exorcisms	Matthew	Mark	Luke	John
Demons entering a herd of swine	8:28	5:1	8:26	
Curing a Demon-possessed Mute	9:32			
Casting Out an Unclean Spirit		1:23	4:33	
Curing a Demon-possessed,	12:22		11:14	
Blind and Mute man				
Controlling Nature	Matthew	Mark	Luke	John
Stilling the Storm	8:23	4:35	8:22	
Feeding the 5000	14:13	6:30	9:10	6:1
Walking on the Water	14:25	6:48		6:19
Feeding the 4000	15:32	8:1		
Temple Tax in the Fish's Mouth	17:24			
Withering the Fig Tree	17:24 21:18	11:12		
Withering the Fig Tree Draught of Fish		11:12	5:1	
Withering the Fig Tree Draught of Fish Turning Water into Wine		11:12	5:1	2:1
Withering the Fig Tree Draught of Fish Turning Water into Wine Second Draught of Fish	21:18			21:1
Withering the Fig Tree Draught of Fish Turning Water into Wine Second Draught of Fish Resurrections	21:18 Matthew	Mark	Luke	
Withering the Fig Tree Draught of Fish Turning Water into Wine Second Draught of Fish Resurrections Raising the Ruler's Daughter	21:18		<b>Luke</b> 8:40,49	21:1
Withering the Fig Tree Draught of Fish Turning Water into Wine Second Draught of Fish Resurrections	21:18 Matthew	Mark	Luke	21:1

#### **Counter Arguments**

There are several arguments that some have proposed over time to deny the miracles described in the Gospels.

#### Laws of Nature

Opponents sometimes argue that the "laws of nature" cannot be overthrown, and thus miracles can't possibly happen. Some philosopher's and critics take this to the extreme and argue as "proof" that:

- God cannot contradict his own unchanging laws, therefore it is unnecessary to even examine the
  evidence in the Bible for specific miracles because of this inherent possibility (Baruch Spinoza).
- Miracles are impossible by definition. A miraculous event, no matter how well attested by historical eyewitness evidence, could not be proven to be a miracle because you cannot prove that a natural law had actually been overthrown (David Hume). In other words, the rules of natural law can be redefined to declare that a miracle isn't a miracle after all.

Both of these demonstrate what lengths opponents have gone to escape the evidence of the supernatural. However, the problem still exists and that is if there is a God, then he certainly has the power by his omnipotence to perform the miracles described in the Bible. The "laws of nature" are only observations about how nature normally behaves, and cannot restrict the purposeful and supernatural actions of the creator of the Universe if he chooses to intervene in nature to show his power. Such "laws" exist for humans, but not for the God who created the universe. To God, the creation of a human baby is no less of a miracle than raising Lazarus from the dead. Likewise, if you accept that a God can exist, then restoring sight to the blind or turning water into wine are no different a manifestation of God's power than the birth of a baby or the creation of the earth itself.

## Symbolic References

Beginning with the Gnostics (an early cult that believe humans are divine souls trapped in a material world created by an imperfect god), it has been suggested that the reports of alleged miracles were actually intended just as allegories, not as factual events. Healing the blind has been argued to be a metaphor for people who previously could not, or would not, see the truth being shown it; healing the deaf has been interpreted as simply meaning that people who could not, or would not, listen to true teachings were made to; similarly, healing paralysis has been interpreted as an allegory for rectifying inaction; and healing leprosy for removing the societal stigmatism associated with certain stances.

The problem with this line of argument is that it ignores the context of the Gospels, which clearly present the factual nature of the miracle stories. There is nothing in the context of the Gospel accounts (keeping in mind that there were four different authors of the Gospels) that even remotely suggest this to be the case. They are presented in the text as truly supernatural and are then cited throughout the rest of the Bible, the early Church documents and historical documents as being believed by followers as true and accurate descriptions of historical events.

#### Herbal Medicines

Other scholars have suggested that the Bible is more literal than just symbolic references, but that the events can be scientifically explained by arguing that Jesus had a high knowledge of herbalism, as was common amongst the teachers of many mystery religions, and ascetic groups like the Essenes, and simply applied quite ordinary and scientific cures for the symptoms described. Though things like blindness and deafness may seem incurable without very modern medicine, it has been argued by these scholars that it is not true blindness, deafness, etc., being referred to, but more easily curable illness such as conjunctivitis, and glue ear.

As for exorcisms, some scholars dismiss them as simply being cases of mental illness and afflictions such as epilepsy. Other scholars see these exorcisms as allegorical, representative of Jesus' teachings clearing even the most troubled mind. Still others have suggested that the events could have been real, though with the scientific explanation of the illnesses, and that the cures given were really just psychological drugs that Jesus, like many others in the era, would have been aware of; for example, Sage and Mistletoe were used in early times to treat epilepsy, and Snakeroot was used to treat schizophrenia.

This line of thinking – that there is a natural explanation for the miracles Jesus performed – has been promoted by *The Jesus Seminar* (a group of about 150 liberal individuals, including scholars with advanced degrees in biblical studies, religious studies or related fields as well as published authors who are highly critical of the Bible). This group held that various cures Jesus gave for diseases are probably true, since there were many others in the ancient world credited with healing power through natural means.

The problem with this line of argument is that, like the symbolic reference argument, it ignores the context of the Gospels, which clearly present the miraculous nature of the miracle stories. There is nothing in the context of the Gospel accounts that suggest Jesus was just an "advanced doctor". The events described are presented as supernatural and are then cited throughout the rest of the Bible, the early Church documents and historical documents as such. The other problem with this argument is the miracles related to Christ's control over nature and power over death cannot be explained through herbal medications and even many of the healings – including bringing sight to the blind, hearing to the deaf, healing a man's withered hand, etc. can't be explained through medication.

#### **Discussion Questions**

- Do you believe miracles should be considered as valid evidence for the divinity of Jesus Christ? If so, why? If not, why not?
- What are the arguments for the literal interpretation of the Gospels and the stories of the miracles it contains? What are the arguments against the literal interpretation of the stories of miracles contained in the Gospels?
- Do you believe miracles still happen today? Why or why not?

# **CHAPTER 21**

# **EVIDENCE FROM HIS FOLLOWERS**

I have seen innumerable atheists regretting on their deathbeds that they have been godless; they called on Christ. Can you imagine that a Christian could regret when death is near that he has been a Christian and call on Marx or Lenin to rescue him from his faith? – Richard Wurmbrand

The life, the self-sacrifice, the blood, which they are ready to shed for their faith, is the greatest argument for Christianity presented by the underground church...Nobody in the world can defeat them.

— Richard Wurmbrand

Men do not reject the Bible because it contradicts itself but because it contradicts them. - Unknown

## Christ's Impact on His Disciples<sup>64,65</sup>

Following the crucifixion of Jesus Christ, the disciples were discouraged and depressed. They no longer had confidence that Jesus had been sent by God. They had been taught that God would not let his Messiah suffer death, so they dispersed. The Jesus movement stopped in its tracks. The cause they had committed themselves to literally died on the cross. As Jews, they were convinced that Christ was going to set up the kingdom of God and was going to rule over the people of Israel. Jews believed the Messiah would come and rein as a victorious political leader. He would release the Jews from bondage and restore Israel to its rightful place. It had been more than a generation from the time Romans took over Israel and encroached on their freedom. The dream of miraculous deliverance from a life of repression was the hope of every Jew including the disciples. After Jesus told his disciples he would go to Jerusalem and suffer, James and John asked him to promise that in his kingdom they could sit on his right and left hands (Mark 10:32-38). When Jesus predicted his suffering and crucifixion, the twelve apostles couldn't figure out what he meant (Luke 18:31-34). What kind of Messiah were they expecting?

Once Christ died, the dreams of being the chief officials in the Messiah's government died. But, yet, after a short time, we see them abandoning their occupations, regathering, and committing themselves to spread a very specific message – that Jesus Christ was the son of God who died on a cross, returned to life and was seen by all of them alive. There was no motivation for them to do this – doing so meant a life of hardship and persecution. Had there been any visible benefits accrued to them for their efforts – prestige, wealth, increased social status or material benefits – we might logically attempt to account for their actions.

However, they went without food, slept exposed to the elements, were ridiculed, beaten, imprisoned, tortured, stoned and executed in heinous ways. Every conceivable method was used to stop them from talking, yet they laid down their lives as the ultimate proof of their complete confidence in the truth of their message. The only rational explanation for this is they believed what they were saying about the resurrection was true. The table below demonstrates the commitment these early disciples had for their faith. Almost all paid the ultimate price for their belief in the resurrection.

Table 18: The Fate of the Early Disciples

Dissiple	Disciple's Esta
Disciple	Disciple's Fate
Peter	Crucified upside down on an X-shaped cross, according to church tradition, because he told his tormentors that he felt unworthy to die in the same position that Jesus Christ had died. Church tradition holds that Peter was heard to say as he was led to his crucifixion "None but Christ, none but Christ".
Andrew	Crucified on an X-shaped cross in Patras, Greece, after being whipped severely by seven soldiers. The soldiers tied Andrew's body to the cross with cords to prolong his agony. He followers reported that, when he was led toward the cross, Andrew saluted it in these words: "I have long desired and expected this happy hour. The cross has been consecrated by the body of Christ hanging on it." He continued to preach to his tormentors for two days until he died.
Matthew	Killed as a martyr by sword in Ethiopia
Mark	Died in Alexandria, Egypt, after being dragged by horses through the streets until he died.
Luke	Hanged in Greece, as a result of his tremendous preaching to the lost
Philip	Crucified
Simon	Crucified
Jude (Thaddaeus)	Killed by arrows when he refused to deny his faith in Christ
James (brother of Jesus)	Dropped more than a hundred feet down from the southeast pinnacle of the Temple (the same pinnacle where Satan had taken Jesus during the temptation) when he refused to deny his faith in Christ. James survived the fall, and his enemies then proceeded to beat James to death.
Thomas	Died by spear thrust in India during one of his missionary trips to establish a Church there.
Bartholomew	Was a missionary to Asia, in present day Turkey. He was flayed to death by a whip for his preaching in Armenia.
James (son of Zebedee)	Died by sword and was beheaded in Jerusalem. The Roman officer who guarded James watched in amazement as James defended his faith at his trial. Later, the officer walked beside James to the place of execution. Overcome by conviction, he declared his new faith to the judge and knelt beside him as James was beheaded for being a Christian.
John	Died by natural causes in exile after he was boiled in a huge basin of boiling oil during a wave of persecution in Rome. He miraculously survived this boiling and was then sentenced to the mines in the prison island of Patmos where he wrote his prophetic book of Revelation. He was later freed and returned to serve as Bishop of Edessa in modern Turkey. He died as an old man, the only apostle to die peacefully.
Matthias (apostle chosen to replace Judas)	Stoned and then beheaded
Barnabas (one of the group of seventy disciples)	Stoned to death
Paul	Tortured and then beheaded by the Emperor Nero at Rome in A.D. 67. Paul had endured lengthy imprisonment, which allowed him to write his many epistles to the churches.

Although people have died throughout history for men like Muhammad, they died believing that Muhammad was who he said he was, without actually observing him. People will die for their religious beliefs if they sincerely believe they're true, but people won't die for their religious beliefs if they know their beliefs are false.

The disciples were willing to die for something they had seen with their own eyes and touched with their own hands. Their great cause died on the cross. The Jews believed that when the Messiah came, he would be a reigning, political Messiah. He could not die, and he would throw the hated Roman oppressor out of the land. He would rule the world from Jerusalem. Jesus was their hope, but then their great hope was crucified. This explains why they left the crucifixion so discouraged and hid themselves. But something happened in a matter of days and weeks – not months and years. Their lives turned upside down. They went out and died martyrs' deaths, and for what? A dead cause? No — these men died martyrs' deaths for one thing – an empty tomb and the appearances of a man named Jesus after they had seen him die.

Remember, the disciples were cowards – when Jesus was arrested they ran and hid. Only after ample and convincing evidence did they believe. Take for example:

- Peter, who denied Jesus three times and deserted Jesus. But something happened, just a short time after Christ's crucifixion and burial, he showed up in Jerusalem preaching boldly, at the threat of death, that Jesus was the Christ and had been resurrected. He was crucified upside down because he felt unworthy to be crucified in the same manner as Christ. From denier and deserter to bold preacher and founder of the church. What happened?
- Thomas, who is known as doubting Thomas. Thomas refused to believe in Christ's resurrection until he was able to see Jesus Christ resurrected in the flesh. Once he did, he never doubted again. Thomas traveled to India and North Africa to spread the Gospel. While there, he was tortured with red-hot metal plates and then thrown into a glowing furnace. All the while, he proclaimed Christ. Spears were then thrown at him, one of which pierced his side and he died in the furnace. From doubter to bold proclaimer of the Gospel message. What happened?

Eleven credible people with no ulterior motives, with nothing to gain and everything to lose who all agree that they observed the same thing:

That which was from the beginning, which we have heard, which we have seen with our eyes, which we have looked at and our hands have touched—this we proclaim concerning the Word of life. The life appeared; we have seen it and testify to it, and we proclaim to you the eternal life, which was with the Father and has appeared to us. We proclaim to you what we have seen and heard, so that you also may have fellowship with us. And our fellowship is with the Father and with his Son, Jesus Christ. – John, 1 John 1:1-3

Many have undertaken to draw up an account of the things that have been fulfilled among us, just as they were handed down to us by those who from the first were eyewitnesses and servants of the word. Therefore, since I myself have carefully investigated everything from the beginning, it seemed good also to me to write an orderly account for you. – Luke 1:1-3

In my former book...I wrote about all that Jesus began to do and to teach until the day he was taken up to heaven, after giving instructions through the Holy Spirit to the apostles he had chosen. After his suffering, he showed himself to these men and gave many convincing proofs that he was alive. He appeared to them over a period of forty days and spoke about the kingdom of God. – Luke, Acts 1:1-3

There is no question the apostles were witnesses to Christ's resurrection (Luke 24:48; John 15:27; Acts 1:8, 2:24, 32, 3:15, 4:33, 5:32, 10:39, 10:41, 13:31, 1 Corinthians 15:4-9, 15, 1 John 1:2, Acts 22:15, 23:11, 26:16). What turned them from cowards to bold evangelists who were all willing to die for their

faith was the belief they saw Jesus after he died. They saw a risen man, whom they previously saw perform miracles that no one else could have. They saw who they believed to be the Messiah.

## The Conversion of Skeptics<sup>66</sup>

The belief by the disciples is compelling, but there were also hardened skeptics who didn't believe in Jesus before the crucifixion – and were dead-set against Christianity – who turned around and adopted the Christian faith after Jesus' death. There was no good reason for this apart from the resurrection:

- Saul (Paul), a Pharisee, who persecuted Christians. He was Christianity's most rabid antagonist. Paul was highly educated by the top rabbis of his time. He was vehemently anti-Christian because he believed salvation was through devotion to the Jewish law. Then, Paul saw Jesus and then became Christianity's most vocal and passionate evangelist. What happened?
- James, the brother of Jesus, didn't believe in his brother before the resurrection (John 7:5). He
  later became the leader of the Jerusalem church and was stoned to death due to his belief in his
  brother. He wasn't one of the original twelve, but was later recognized as an apostle. What
  changed his mind?
- Jewish people, who had have to abandon social structures that kept Judaism around for thousands of years to convert to the new faith of Christianity. Examples include:
  - Judaism had taught that since the time of Abraham and Moses, they needed an animal sacrifice to atone for their sins. All of the sudden, after the resurrection, the Jewish believers no longer offered sacrifices.
  - The Jews emphasized obeying the laws that God had entrusted to them through Moses. Yet, after Christ's resurrection, they began to say you don't become an upstanding member of the community merely by keeping Moses' laws.
  - Jews scrupulously kept the Sabbath. After the death of Jesus, this 1500 year old tradition changed.
  - Judaism taught monotheism only one God, while Christians teach a form of monotheism, they say that the Father, Son and Holy Spirit are one. This is radically different from what the Jews believed.
  - Christians pictured the Messiah as someone who suffered and died to take away the sins
    of the world. Jews had been trained to believe the Messiah was going to be a political
    leader who would destroy the Roman armies.

Judaism is based on tradition. Jews value nothing more – that is what's kept the religion alive for four thousand years. Abandoning these would be heresy and abandoning the social structures that were the foundation of the nation. Why would people do this and become social outcasts and face persecution if not for a firm belief based on eye-witness accounts of the resurrection?

One could argue that Muhammad had a conversion, so his faith is as valid as Paul's, James or various Jewish people, but the difference is no one knows anything about Muhammad's conversion. Muhammad claims he went into a cave and had an experience where God revealed the Koran to him. There is no eyewitness to verify this. Muhammad offered no miraculous signs to certify anything and Muhammad did have ulterior motives, because the early years of Islam was spread largely by warfare. Followers of Muhammad gained political influence and power over the villages they were conquering. By contrast, the early followers of Jesus saw various public events. They witnessed his miracles. More than 515 were eyewitnesses to his resurrection and none believed that becoming a Christian would lead to anything other than a life of hardship and persecution.

# Christianity's Impact on Rome<sup>67,68</sup>

Rome was the most powerful Empire in the history of the world at its time. It had assimilated many cultures and traditions, but consider the impact Christianity had on Rome. Shortly after the death of Jesus, Christianity started to spread. It spread so rapidly that in a matter of twenty years, it has reached Caesar's palace in Rome. Christianity then went from being a religion that the Roman Emperors persecuted to one that they embraced – and eventually became the state sponsored religion of Rome. How did this happen?

In its infancy, the Church was scattered throughout the Roman Empire. Because there was so many cities scattered throughout the empire, Christianity spread within the urban centers, which were populated by slaves and the poorer members of society. Christianity soon became known as "a religion of slaves."

During the first century, Roman authorities used the Christians who resided in their city as political scapegoats. Christians received the blame, and punishment, for everything from plagues and economic inflation to hostile invasions by barbarians. Under the Emperor Nero, the public execution of Christians became "sports" events in which the early believers were torched, fastened to crosses and torn to pieces by dogs.

In the face of these persecutions, the church in Rome birthed writers to defend the faith. These writers were known as "Apologists." The early apologists sought to explain Christian doctrine in philosophical terms to pagan intellectuals and Greek philosophers. Their writings provided a reasoned defense that served to quench the hysterical attacks of the unbelieving, but failed to convert the empire to Christianity.

When Constantine became Caesar in 306 A.D., infighting for the title of emperor erupted between other military leaders who sought to be the ultimate ruler: Galerius, Maximian, and Maxentius. Constantine was a soldier, but had been taught by his father, Constantius, to believe in prayer and the Supreme Being who "created all things and governed all things." One day, Constantine and his troops all saw a vision: there in the sky, shining brighter than the early afternoon sun was a cross with the inscription beneath it, "Conquer by this." That night, as Constantine pondered the vision, Jesus came to him in a dream with the same sign. "Make a likeness of this sign which you also saw in the heavens, and it will be a protection in all of your confrontations with your enemies." The cross became the symbol that was carried before the armies of Constantine wherever they went. Constantine marched into battle behind the sign of the cross and the name of Christ, and won a decisive battle over Maxentius's troops outside Rome in 312 A.D., which secured his place as emperor over the western half of the Roman Empire. He credited his success to the God of the Christians as he came to realize the symbols he was given where Christian in origin. He sought out those who knew this new religion and made them advisors. At every opportunity, they preached the Gospel to him, explaining that salvation came only through Jesus Christ.

Shortly thereafter, in 313 A.D., after facing nearly three centuries of hostility by Roman emperors, the persecution and martyrdom of Christians in Rome ended with the reforms of the Emperor Constantine (who ruled from 306-337 A.D.), starting with the Edict of Milan which ended persecution of Christians. Constantine was responsible for legalizing Christianity throughout the Roman Empire, and then became a patron and protector of the church. Many other things changed as well. Pastors became judges in civil lawsuits, courts and workshops were closed on Sundays, the branding of slaves and criminals on the face was forbidden, the crucifixion of slaves was abolished, gladiator games were prohibited, unwanted babies were no longer put to death, and sexual immorality became a crime in order to strengthen the institution of marriage.

In 380, the Flavius Theodosius (r. 379-395) made Christianity the official religion of Rome. At the close of the fourth century, the majority of Roman citizens had converted to Christianity. The separation between Church and state was all but extinguished. When the political power of the emperors collapsed with the fall of the Roman Empire, in 410, the Church and its leaders endured as the dominant influence in Roman culture and politics. The Church then became more powerful than the Roman Empire itself.

Although the reign of Constantine and the establishment of Christianity as the official religion of Rome brought a newfound freedom to Christians, it also led to problems. By uniting the power of the government and the power of the church into one head, expulsion from the church and accusations of heresy became political weapons to control others and hoard power. During the reign of Constantine, the cost of being a Christian also dramatically changed. Prior to Constantine's rule, deciding to acknowledge Jesus as Lord meant forsaking all, even to the point of death. Then, becoming a Christian was actually beneficial for the advancement of one's position in society. As a result, Christianity became corrupted by people who expressed faith only as a means to gain power, wealth and prestige. Ultimately this led to the Dark Ages and the abuses by the Catholic Church such as the inquisitions, but the point is this — Christianity spread rapidly during a time of intense persecution and ultimately transformed Rome.

How did this relatively rapid transformation of the most powerful empire on earth happen? How could this movement triumph over a number of competing ideologies and eventually overwhelm the entire Roman Empire? Christianity was started by a group of ragtag people whose message was that a poor, crucified carpenter from an obscure village in a tiny country of minorities who taught for less than three years had triumphed over the grave. Yet, it was so successful, that we name our children Peter and Paul, and not Caesar and Nero and our calendars are tied to the date of his birth. How did this happen? The answer is the resurrection, and the belief that these early believers had that Jesus Christ had risen from the grave and was truly was the son of God.

## Christ's Impact on Followers – the Way They Live<sup>69</sup>

Christ built no church, wrote no book, left no money, and erected no monument! Yet show me ten square miles in the whole world without Christianity, where the life of man and the purity of women are respected and I will give up Christianity. – Henry Drummond

The most powerful evidence of Jesus' existence as the son of God is the life-changing impact this truth has on the lives of men and women who have placed their faith and trust in him. What did Jesus tell us to look for in the way his followers would live as evidence of the reality of his life in them?

- Christ's followers would love one another: "by this all people will know that you're my disciples, if you have love for one another." (John 13:35 NASB)
- Christ's followers would proclaim the message of new life in God's eternal kingdom to people of all nations: "go therefore and make disciples of all nations" (the "Great Commission", Matthew 28:19). The spread of the gospel wouldn't be through military conquest, but through persuasive proclamation.

Obviously, not all who profess to be Christ's followers are. Toward the end of the Sermon on the Mount, Jesus said, "Not everyone who says to me, 'Lord, Lord,' shall enter the kingdom of heaven, but he who does the will of my Father who is in heaven" (Matthew 7:21). Indeed, Jesus predicted that many false prophets would arise in his name (Matthew 7:22-23; 24:11, 24) and many who professed to follow him would prove unfaithful (Matthew 24:11-12). Unfortunately, the history of Christianity is full of people proclaiming to do all sorts of evil things, often under the name of Christ.

However, as one considers the full scope of Christian history, there is no doubt that the attributes Christ told us to look for have provided powerful and ample evidence of the truth of the Gospel message.

#### Evidences of Love:

About A.D. 197, the theologian Tertullian reported that non-Christians were saying of Christians, "See how they love one another." During this time, the Church was in the midst of an incredible period of growth. During the second and third centuries, Christianity grew a thousand-fold, from a small sect of about seven thousand people to about seven million adherents – all before Constantine ended the persecution of Christians. While many factors no doubt played a part in

this astonishing growth, the love that Christians showed to one another clearly played a major role.

- During the past three centuries, love has become more and more a hallmark of Christianity throughout the world. Christian love led to the abolition of slavery in England, the United States, and in all nations around the globe where Christianity was dominant.
- Most of the humanitarian movements of the eighteenth and nineteenth centuries were explicitly Christian in origin and philosophy. Examples include the Red Cross and Salvation Army.
- Christians led efforts to reform prisons, enact child-labor laws, and to educate and feed the poor. They built hospitals, universities, orphanages and ran women's shelters.

### **Evidences by Sacraments:**

- Communion: What's odd is that followers of Jesus don't get together and celebrate his life they celebrate his death. Think about anyone else who has died and had a good life (e.g., John F. Kennedy). People remember the way the person lived, not the gruesome way in which he died. By contrast, Christians celebrate the crucifixion because they realized it was a step to a much greater victory his resurrection. Early believers celebrated his death because they saw the empty tomb.
- Baptism: By going under water, a Christian celebrates Christ's death. By coming out of the water, a Christian celebrates his resurrection "raised to newness of life". The Christian baptism is a symbol of the death and resurrection of Christ.

#### Evidences of Proclaiming the Message:

- Starting from a small group of Jewish disciples in Palestine in the first century, Christianity today has grown to over 2.2 billion people around the world.
- The Gospel has been preached around the world in the past century with amazing success. In fact, 70 percent of all progress made toward fulfilling the Great Commission has taken place since 1900 and is accelerating. Not only has the number of conversions per day risen dramatically, but so too has the number of Christians as a percentage of the total world population. This rate has increased so rapidly, that the number of people coming to know Christ every day has doubled in the past decade.

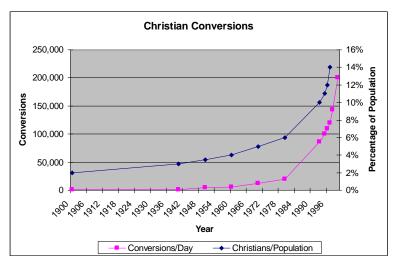


Figure 25: Growth of Christianity

- This recent success in spreading the Gospel is primarily the result of modern, communication technology. It is now far easier to translate the Bible, print Christian publications, and distribute Gospel information than it ever was before. Furthermore, broadcast media such as radio, TV, and the Internet are now making is possible to reach people groups that were impossible to reach before. As an example, a Billy Graham's messages a decade ago was carried by video to an estimated 281 million people in countries all around the world. Because of modern communication technology, Graham has probably reached more people with the gospel of Christ than all the evangelists in history combined. Even countries that have traditionally shut out Christian missionaries have experienced a transformation. In the Soviet Union for instance, the Gospel is now being freely preached across the country; this would have been unheard of even a decade ago.
- In China, where Christianity is illegal and believers must worship in underground churches, the
  total number of believers has grown dramatically. In 1948, when the communists in China forced
  out missionaries, there were perhaps one to two million believers. Today, there are between fifty
  and 150 million believers and thirty to thirty-five thousand new ones are being added each day.
- In West Africa, twenty thousand believers are being added daily. This represents twice the growth
  of the population as a whole. Because of this, it's now projected that over 45 percent of the five
  hundred million people living in Africa have become Christians.<sup>71,72</sup>

The list could go on and on. The fact is; the number of new countries where the Gospel is being spread and where God is working is staggering. For almost two thousand years, Christians have been praying and working toward the fulfillment of the Great Commission where the Gospel will be preached to the whole world. That is precisely what is happening now – the Gospel is literally being spread around the world. Starting in the first and second centuries, the Gospel headed west from Israel to Greece, Rome and the nations of the Mediterranean which became the 'center of gravity' for Christianity. From there, the gospel proceeded west to the nations of Europe and in the 19th century, Britain was the center of gravity for Christianity. In the 20th century, America was. In the 21st century, the center of gravity has moved west to the point that China and Korea are sending out more missionaries and have more Christians than America does. The Gospel is now continuing to proceed west and a real "back to Jerusalem" movement has formed where Christianity is now starting to spread in the Arab world. We are quite literally seeing the fulfillment of the Great Commission and Christ's prophecy that "this Gospel of the kingdom will be preached to the whole world" (Matthew 24:14).

# Christ's Impact on Followers – the Way They Die<sup>73</sup>

The reality of Christ in followers is evident not only in the way they live, but also in the way they die. According to Jesus himself, his followers would all too often be hated, mistreated, and even killed for their stand for Christ. Yet even in this suffering, they would find God's blessing: "Blessed are you when people insult you and persecute you, and falsely say all kinds of evil against you because of me" (Matthew 5:11 NASB). In response, Christ urged his followers to love those that treat them so: "But I say, love your enemies and pray for those who persecute you" (Matthew 5:44 NASB) and "This I command you, that you love one another. If the world hates you, you know that it has hated me before it hated you." (John 15:13-14, 17-18 NASB).

Many religions have inspired people to die for their faith. Mere zeal is no proof of truth. Throughout history, many believers have died for their faith. That people would choose to do this may be evidence of sincerity, but by itself is not strong evidence for the truth of their faith. Yet, the sheer number of believers in Christ who have accepted martyrdom, the long period of time over which Christians have become martyrs, and the way in which they have faced death, all considered together is very impressive evidence. It can only be explained by their unshakable confidence that they, like Jesus, will be raised from the dead.

The Church has experienced three main periods of intense persecution:

- The first period of persecution was from the beginning of the Church's history until the time of Constantine, or about the first three centuries. All of the Church's founding apostles except John were martyred. Their willingness to die for their faith is difficult to explain unless they were sure that Jesus had risen from the dead. As N.T. Wright observes, "If you follow a messiah and he gets killed, you obviously backed the wrong horse." Yet Jesus' disciples continued to "back" Jesus even though they knew he was killed and they would be next. They clearly believed he had risen and they would too. As Christianity spread, Christians were viewed as superstitious and disloyal to Rome because of their refusal to offer sacrifices to Caesar or to acknowledge him as god. Several Roman emperors sponsored persecution of Christians. Efforts were made to destroy the Bible. Christians were tortured and killed, but the more Christians were executed, the faster Christianity grew.
- The second period of persecution was from the late medieval era up to the time of the Reformation, when the Inquisition put many Christians to death for expressing their faith in ways that challenged the Roman hierarchy. Sadly, when the Christian institution became too powerful, it led to the temptation to abuse that power and the Church became corrupt.
- The third period of persecution has been during the last century and continues to this day. More Christians have been killed in the twentieth century for the name of Jesus than in the previous nineteen centuries combined. It has been calculated that since the death of Jesus in AD 33, at least forty-one million Christians have been martyred. According to the World Evangelization database, over 81 percent of these (twenty-seven million) have been killed since 1950 alone! Christians have become the most persecuted religious group in the world today. Right now, over two hundred million Christians live under the threat of persecution in more than thirty-five countries around the world. Most of this persecution is at the hand of communist and Islamic nations.

Below is a summary of the top ten groups that have persecuted Christians since the time of Christ:74

Rank	Name of Group	Number of Martyrs Under this Group from 33 A.D. to 2000*
1	State Ruling Powers	55,871,000
2	Atheists	31,689,000
3	Muslims	9,121,000
4	Pagan Religions	7,469,000
5	Other Christians	5,539,000
6	Quasi-religious Groups	2,712,000
7	Buddhists	1,651,000
8	Hindus	676,000
9	Zoastrians	384,000
10	Jews	60,100

Table 19: Top 10 Christian Persecuting Groups

\*Note: the totals above may overlap (i.e., a martyr killed under an atheistic state ruling power could be counted under "State Ruling Power" and "Atheists", etc.)

In the history of the persecution of the Church, followers of Jesus were known for going to their painful deaths with hymns and prayers on their lips. Is it probable (or possible) to imagine that hundreds of thousands of intelligent people would endure torture and martyrdom rather than deny their faith in the risen Jesus if they had the slightest doubt that he was truly God? Most of the early Church attested to their faith by eyewitness account. The only logical explanation is that these people were absolutely

convinced that Jesus was the son of God because they were eyewitnesses themselves, or because they had heard trustworthy accounts of the death and resurrection of Jesus from eyewitnesses. The remarkable growth of this Christian faith, despite the most horrendous persecution, is proof enough that these people were supernaturally motivated to reach the world with the Gospel of Jesus Christ. It is estimated that a significant portion of the Roman Empire became followers of Jesus within one hundred years of his resurrection.<sup>75</sup>

## Selected Examples of Martyrs<sup>76</sup>

He is no fool who gives what he cannot keep to gain what he cannot lose.

– Jim Elliot, killed by headhunters in Ecuador while serving as a missionary

Everything happening to me in this jail only serves to make Christ more accurately known, regardless of whether I live or die. They didn't shut me up; they gave me a pulpit! Alive, I'm Christ's messenger; dead, I'm his bounty. Life versus even more life! I can't lose.

- Paul, martyred in Rome, 65 AD (Philippians 1:20-21, The Message)

If a man hasn't discovered something that he will die for, he isn't fit to live. – Martin Luther King Jr.

For many, believing in Jesus means dying for him. In John 15:13 Jesus says, "greater love has no one than this, that he lay down his life for his friends." Many have chosen to do just this.

Below are some examples of those who did not compromise or recant their faith in Jesus Christ, even if it meant going to prison, being tortured, or facing death. This list is summarized from the books *Jesus Freaks, Volumes I and II by dc Talk*, which are excellent resources on those martyred for Christ. As you read through this list, consider how these people died and their attitude toward death:

- Stephen (34 A.D., Jerusalem, Israel): On trial, Stephen continued to preach and proclaimed; "Look! I see heaven open and the son of Man standing at the right hand of God". The Jewish leaders didn't let the trial continue. They dragged him out of the city and stoned him. He continued to preach all the way to his death. His last words were "Lord Jesus, receive my spirit. And Lord, do not hold this sin against them." Paul was one of those in attendance opposing Stephen prior to his own conversation.
- Polycarp (168 A.D., Smyrna now Izmar, Turkey): Polycarp, the well-known Bishop of Smyrna, was put on trial by a Roman proconsul. The proconsul tried to get Polycarp to deny Jesus Christ. The bishop stood firm and refused to recant Christianity and was sentenced to burning at the stake. Remarkably, in the midst of the fire, Polycarp was not burned. The executioner was then told to stab him with a sword. When he did, so much blood flowed from the wound that it put out the fire.
- Romanus (285 A.D., Antioch now Antakya, Turkey): The Roman prefect Asclepiades had invaded the city of Antioch, intending to force the Christians to renounce their faith, but Romanus encouraged them to fight back. As believers saw God working in Romanus, they were encouraged to stand firm. With one will and mind, they were able to fight off the armed Roman soldiers. Asclepiades had Romanus whipped, but instead of tears, sighs, and groans, Romanus sang psalms all the time of his whipping. To silence him, Romanus was beat, had his teeth knocked out, his beard pulled out, and his cheeks slit, to which Romanus replied "I thank thee, O Prefect. Look how many wounds I have, so many mouths I have whereby I may preach my Lord and Savior Christ, and praise God." Romanus was eventually cast into a mighty fire, but a great storm arose and put the fire out. Finally, the Asclepiades had him brought back into the prison and strangled.
- **Zenobius** (285 A.D., Aegaea, Cilicia near Kalamaki-Aydin, Turkey): Zenobius was the Bishop of the Church of Aegaea. He was brought before Lysias, the Roman proconsul. Lysias had offered Zenobius great wealth, honor and position if he would follow the command of the Emperor and serve the Roman gods, but threatened him with torture if he did not. He was roasted beside

his sister Zenobia on a red-hot iron bed. This torture failed to work and Zenobius gave praise to God. This made Lysias furious, who then had them thrown into boiling water. Miraculously, this did not kill the two believers either, and they continued to give praise to Jesus. Lysias then had them beheaded.

- Adrian (303 A.D., Nicomedia): During the last major Roman persecution under Emperors Diocletian and Maximian, a young military officer distinguished himself to his superiors by faithfully trying to suppress Christians. But Adrian's task of torturing Christians bothered him. In the face of pain and death, Christians were repeatedly peaceful and unrelenting in their commitment to their Lord. He saw in these men and women a courage greater than any he had ever seen in battle. Adrian became a Christian because he knew the Roman gods he was defending could never give a person such courage. He made his way to the front of the line of prisoners and stepped before the judge. "Put down my name with those to be tortured. I also have become a Christian." The Emperor's son Galerius tried to persuade Adrian to strike his name of the list of Christians and to beg the Emperor for forgiveness. What Adrian did not know was that his wife, Natalia, had secretly become a Christian sometime before and had been praying for him. Because of his status in the empire, Adrian was allowed to go home that he might make peace with his wife before being killed. When Natalia saw him coming down the road, she thought he had renounced Christ in order to be freed and wouldn't let him in the house! Adrian returned to prison where his arms and legs were broken and then he was killed. When they began to burn the bodies of the Christians, a thunderstorm arose, the furnace was extinguished and lightning killed several of the executioners. The bodies were released to their families. Adrian has been known as one of the patron saints of soldiers.
- Telemachus (391 A.D., Rome): Telemachus was a peace-loving monk, whom heard God tell him to "go to Rome". Telemachus packed and left immediately. When he arrived, he was swept along by the crowds to the Coliseum. Although Constantine had put an end to the death of Christians in the Coliseum and barred gladiator games roughly seventy years earlier, Honorius had given in to the whims of the populace and retracted the prohibition against the contests. Horrified to watch the spectacle of gladiators killing one another, Telemachus leapt from the wall separating the crowds from the arena and ran to a position between the two fighters nearest the Emperor's box. Telemachus cried out, "In the name of Christ, stop! Don't despise God's mercy in turning away the sword of your enemies by murdering one another!" One of the gladiators hit Telemachus and turned to resume the fight, but Telemachus rose back to his feet and stepped between them again, pushing them apart. "In the name of Christ, stop!" One of the gladiators turned on him suddenly and drove his sword up into the old man's stomach. The crowd quieted to an eerie silence. Telemachus sank to his knees and died. No one else said a word. Then, one by one, people slowly tricked out of the Coliseum in a painful, guilty silence. Never again were gladiator contests held in the Coliseum.
- Nunilo and Alodia (851 A.D., Osca, Spain): Nunia and Alodia's father was a Muslim man. With these two sisters desiring nothing more than to follow Jesus with all their hearts, they were forced to leave their home and flee to their aunt's house, who was also a devoted Christian. Being devout Christians and having a Muslim father brought the mark of apostasy on them from those in the community and they were soon called before a local Islamic judge. The judge offered them wealth and good marriages if they would recant Jesus and embrace the god of Muhammad, but they refused. The judge then turned to threats of torture and execution. The sisters gave the following testimony:

"O judge! How is it that you command us to turn away from true godliness, since God has made it known to us that no one is richer or a better bridegroom than Jesus Christ, our savior? No way of life is more blessed than the Christian faith by which we live...to dwell with him and to live in him is our only true provision, but to depart from him is eternal damnation. We will never be separated from communion with him as long as we live in this life...The transient riches of this world, which you have offered us, have no appeal: we count them as manure and loss that we might gain Christ, because we know that everything under the sun except Jesus and true faith in him is emptiness. Nor are we moved by your threats of punishment, for such things are even more temporary. As for death, the thing you have

presented to us as the final terror is a thing not to be feared but desired, because we know that through it we will go without delay to heaven, and to Christ our Bridegroom, and there to be embraced by him and forever more inseparable from him through his love."

The judge eventually sentenced the two sisters to execution by the sword.

- Pelagius (925 A.D., Cordova, Spain): When Pelagius was ten years old, he took the place of his uncle, Bishop Hermogius of Tuy, in the prison of the Muslim Caliph Abd ar-Rahmann III so that the bishop could return to his flock. After his initial time in prison, the caliph set the terms of the boy's release: that Pelagius convert to Islam and submit to the caliph's sexual advances. For this the caliph promised him wealth and freedom. In response, the young Pelagius preached about Jesus to the caliph and said he would die for the name of Christ before he gave into any of the caliph's demands. After more than three and a half years of refusals, the caliph commanded the guards to: "Take him and suspend him by iron tongs, pinch him with red-hot pincers, and haul him up and down the river until he either dies or renounces this Jesus as his Lord!" The thirteen-year-old boy was taken and tortured from morning until evening after which Pelagius again refused to leave Christ. The caliph then had Palagius killed. Palagius carried his faith with him to heaven.
- Wrunken (1500s, Roneses, Flanders in parts of present-day Belgium, France, and the Netherlands): In the 16<sup>th</sup> century, Philip II sent the Duke of Albra to Flanders to stamp out the Protestants who insisted on reading the scriptures. Anyone found studying the Bible was hanged, drowned, torn in pieces, or burned alive at the stake. The Inquisitors had found a Bible while inspecting the house of the Mayor of Brugge. The Bible belonged to a young maid-servant named Wrunken who when asked, boldly declared, "I am reading it!" When challenged with the threat of death, Wrunken chose not to lie and proclaimed: "This book is mine. I am reading from it, and it is more precious to me than anything!" She was sentenced to die by suffocation and buried alive in a city wall that was bricked over. As the bricks were laid, she stated "My savior died for me. I will also die for him. O Lord, forgive my murderers."
- William Tyndale (1536, Belgium): In the early 1500s, only scholars could read God's Word. The only legal Bible was Latin, which most common people could not understand. The Church of England relied on this fact to pervert Christianity. It was illegal to own an English Bible or even to memorize scripture in English. William Tyndale was a highly educated man who translated the New Testament into English. Tyndale's New Testament was widely distributed throughout England and the truths of the Bible became available to everyone. Anyone caught with this illegal book faced persecution. Tyndale himself was strangled and then his body was burned. His last words were a prayer: "Lord, open the King of England's eyes!" God honored Tyndale's prayer. Within three years, the King of England gave instructions that a copy of the "Great Bible" completed by Tyndale be placed in every church in England. Tyndale's translation became the basis for the King James Version of the Bible.
- Walter Milne (1551, Scotland): Walter Milne, once a parish priest was 82 years old. He was put
  in prison for his beliefs and tried for heresy. Milne was sentenced to be burned as a heretic.
   Before the crowd assembled at his death, Milne declared:

"Dear friends, I do not suffer today for any crime, but only for the defense of the faith of Jesus Christ, as set forth in the Old and New Testament. As other faithful martyrs have offered themselves gladly, knowing that they will receive eternal joy, I praise God today, that he was called me also, to seal up his truth with my life. I have received this life from him, and I willingly offer it for his glory. If you too would escape eternal death, depend only on Jesus Christ and his mercy, that you may be delivered from eternal judgment."

The fire was then lit. The crowd was so moved by his words that thousands became believers as a result. So many declared themselves willing to die for their beliefs that the Scottish government re-examined their views on executing "heretics" and no one else was put to death for their faith in Scotland.

• **John Denley** (1555, England): John Denley believed the Church was built upon the apostle and prophets, with Christ as its head, and that the present church, the Church of England, was not part of this true Church. For this belief, he was turned over to government officials and sent to

the stake to be burned. When the fire was started, Denley showed no fear and cheerfully sang a psalm as the flames rose around him. One of his tormentors picked up a piece of wood and threw it at him, hitting him in the face. Denley only responded, "Truly, you have spoiled a good old song." He then continued singing until he died.

- Pastor Kim and his Congregation (1950s, North Korea): For years, Pastor Kim and 27 of his congregation had lived in hand-dug tunnels beneath the earth. The tunnels were discovered when the Communists were building a new road. The officials brought them before a crowd of 30,000 in the village of Gok San for public trial and execution. They were told they would die if they didn't deny Christ. They refused. Not one of the believers would deny their faith. The Children were killed by hanging. The Christians were told to lie on the ground in the path of a steamroller. As the steamroller began to move, the congregation sang a hymn. All were killed.
- **Jim Elliott** (1956, Ecuador): Jim Elliot, Peter Fleming, Ed McCully, Nate Saint and Roger Youderian were missionaries who sought to bring the Gospel to a hostile tribe in Ecuador called the Huaorani. In their attempt to first meet the Huaorani, they were all killed. Although many thought the five men were foolish to try and make friends with such a savage Indian tribe, over a thousand young people volunteered to become missionaries in their places. In Ecuador, attendance by natives at mission schools and church services reached record levels, and the number of conversions skyrocketed. Eventually, the sister of Nate Saint and the wife of Jim Elliot went to live with the same men who had killed the five. They heard the story of Jesus, and how he had given his life to save us, just like the five missionaries died to bring salvation to the Huaorani. The Huaorani came to believe the Gospels, because they had seen the Gospel lived.
- Pastor Florescu (1960s, Romania): Communist torturers beat Pastor Florescu and had him cut with knives in order to obtain the names of others within his church. In the end, they brought his fourteen-year-old son and began to whip the boy in front of his father, saying that they would continue until the pastor told them what they wanted to know. This drove Pastor Florescu half crazy and when he cried to his son, "Alexander, I must say what they want! I can't bear your beatings anymore!" the son answered, "Father, don't do me the injustice of having a traitor as a parent. Withstand!" He then praised God. This enraged the Communists. They grabbed the boy and beat him to death. He died praising God.
- Cassie Bernall (1999, Columbine High School, Littleton, Colorado): At 17 years old, Cassie Bernall was asked "Do you believe in God?" She replied "Yes, I believe in God". She was then shot dead in the worse school massacre in U.S. history.

There are quite literally almost a hundred million other stories of martyrs just like those above – each with their own story of faith in the midst of persecution. This is the testimony and power of the Gospel message, as evidenced by those that paid the ultimate price for it. As the trends of society became opposed to Christian beliefs, faithful Christians stood up for their faith and against evil. The freedoms Christians have today to own a Bible, believe what seems right, go to the church, and follow God completely are all because of the Christian martyrs who died previously for what they believed.

These martyrs changed the world for the better, because they were willing to stand up for the freedom that is only found in Jesus. They did this not out of fear, but often with songs of praise because they fully expected to be joined with Jesus upon their deaths.

This is the testimony of true Christianity. The truth of the Gospel changes lives. More importantly, it changed the perspective of those who were being persecuted. The martyrs described didn't die thinking they were taking their Christianity to the grave. Rather, they died, thinking they were immediately going to be in the presence of Jesus Christ. This is perhaps the most powerful evidence for the truth of the Gospel message.

### **Discussion Questions**

- 1. Can you think of anyone in history who has knowingly died for a lie? What degree of certainty would you need before you would be willing to die for a belief?
- 2. What are your most cherished beliefs? What would it take for you to abandon or radically rethink those opinions? How likely is it that Jews would suddenly abandon the key social and religious structures that had survived for thousands of years shortly after the crucifixion?
- 3. Christianity is now the largest religion in the world. What do you think are the most compelling reasons Christianity has spread so well around the world to people of all cultures?
- 4. Why is it that Christianity often seems to grow the fastest during times of intense persecution? This happened in the first few centuries under Roman persecution, during the Reformation and even today in countries like China. What accounts for this?

# **CHAPTER 22**

# EVIDENCE FROM HISTORY

Socrates taught for forty years, Plato for fifty, Aristotle for forty, and Jesus for only three. Yet the influence of Christ's three-year ministry infinitely transcends the impact left by the combined one hundred and thirty years of teaching from these men who were among the greatest philosophers of all antiquity; yet, some of the finest paintings of Raphael, Michelangelo, and Leonardo da Vinci received their inspiration from him. Jesus wrote no poetry; but Dante, Milton, and scores of the world's greatest poets were inspired by him. Jesus composed no music; still Haydn, Handel, Beethoven, Bach, and Mendelssohn reached their highest perfection of melody in the hymns, symphonies, and oratories they composed in his praise. Every sphere of human greatness has been enriched by this humble Carpenter of Nazareth – Henry G. Bosch<sup>77</sup>

As the centuries pass, the evidence is accumulating that, measured by his effect on history, Jesus is the most influential life ever lived on this planet. That influence appears to be mounting

– Kenneth Scott Latourette

If Shakespeare should come into this room, we would all rise; but if Jesus Christ should come in, we would all kneel – Charles Lamb

The Bible is for the government of the people, by the people, and for the people.

– John Wycliffe in the preface to his Christian Bible

### **Christ's Impact on History**

While there are numerous writings about Alexander the Great, Julius Caesar, Napoleon, Aristotle, and Plato, the amount of historical material and analysis about the teachings of Jesus far exceeds the attention given to any other individual in the history of man. The Bible is the most quoted book in the world and is the bestselling book of all time. Its teaching and principles are the wisest of all literature and form the basis for many government systems of the world.

Consider the text of the following well-known poem known as 'One Solitary Life': 78

He was born in an obscure village, the child of a peasant woman. He grew up in another obscure village, where he worked in a carpenter shop until he was thirty. Then for three years he was an itinerant preacher. He never had a family or owned a home. He never set foot inside a big city. He never traveled two hundred miles from the place he was born. He never wrote a book, or held an office. He did none of the things that usually accompany greatness. While he was still a young man, the tide of popular opinion turned against him. His friends deserted him. He was turned over to his enemies, and went through the mockery of a trial.

He was nailed to a cross between two thieves. While he was dying, his executioners gambled for the only piece of property he had --- his coat. When he was dead, he was taken down and laid in a borrowed grave.

Nineteen centuries have come and gone, and today he is the central figure for much of the human race. All the armies that ever marched, and all the navies that ever sailed, and all the parliaments that ever sat, and all the kings that ever reigned, put together, have not affected the life of man upon this earth as powerfully as this One Solitary Life.

On the face of it, Jesus Christ was indeed nobody. He held no earthly position of power; he was poor and born of an insignificant family. He didn't do anything in his life other than teach, yet he has impacted human history more than all of the kings that have ever lived. Today, more than 2.2 billion people call him Lord of their lives. Why? How can this be? The answer is simply Jesus Christ was more than a teacher, prophet or good man. Jesus Christ represents God's intervention into human history by taking the form of a human being living among us. This is the simple truth of the Gospel message.

As this message has spread around the world, it has not only transformed individual lives (as seen in the previous chapter), but it has transformed societies. Christianity is more than just a belief in a person – it is the belief in the teachings of that person which, when taken to heart, has transformed society more than any other force in history. Granted, some Christians fall far short of reflecting the wisdom of the Bible and some Christians have misused the Bible to justify their foolish prejudices and conduct. The problem, though, is not with the Bible or Christianity but with the people who have misused the faith to justify their behavior.

In the previous chapter, we looked at Christianity's impact on Rome, which led to numerous changes including the closing of workshops on Sundays, the ending of the practice of branding slaves and criminals on the face, the abolition of the crucifixion of slaves, the prohibition against gladiator games, the ending of the killing of unwanted babies, and the criminalization of sexual immorality in order to strengthen the institution of marriage. In this chapter, we'll look at several examples of how the message of Christ has transformed not only lives, but societies as a whole.

## Christianity's Impact on England<sup>79,80</sup>

In the early 1700s, before the Evangelical Revival led by John and Charles Wesley, England was a moral abyss. In his 1738 book *Discourse Addressed to Magistrates and Men in Authority*, Bishop George Berkeley wrote that the level of public morality and religion had collapsed in Britain "to a degree that has never been known in any Christian country...Our prospect is very terrible and the symptoms grow worse from day to day." Many writers including Daniel Defoe, Alexander Pope, and Samuel Johnson confirm that England was on the point of moral collapse in the early 1700s. In the previous century, the official state sponsored Church of England had severely suppressed true Christians through strict laws (such as the Act of Conformity), which forbid noncomformist ministers (independent pastors who were not endorsed by the Church of England) from teaching or preaching.

The Great Plague of 1665 killed one in every five people in London. Everyone who could flee London, including most of the ministers and bishops of the official Church of England and the government, did. The apostate government of England then passed the infamous Five Mile Act, which prohibited any of the expelled clergy from preaching within five miles of their former church, in an attempt to prevent people from hearing the Gospel message. Many noncomformist ministers ignored the law and over four thousand pastors were thrown into prison. In 1714, the Schism Act prohibited anyone from preaching anywhere without a special license. The result of the suppression of the preaching of the Gospel was the descent of England into a morass of immorality, perversion, and widespread moral collapse. To deal with the rising crime rate, tougher and tougher laws were passed to the point where both adults and children were subject to 160 capital criminal laws that resulted in hanging. If anyone shoplifted more than one

shilling, stole a sheep, harmed a tree, gathered fruit from someone's property, or caught a rabbit on someone's estate, they were hanged. Public drunkenness was so widespread that many young adults and children died as alcoholics.

Then, John and Charles Wesley began to preach about Jesus. In 1769 John Wesley started the Sunday School movement, which ultimately flourished throughout England. The preaching by the Wesley brothers, John Milton, John Bunyan and fellow ministers of the Gospel produced a spiritual revival. This evangelical revival transformed all aspects of English society. As Christ transformed individual sinners, these reformed men and women took up the task of reforming their society. The imprisonment of debtors and children was made illegal. Schools were opened in every parish in the nation to any child who wanted to learn. Harsh penal laws and child labor in mines and factories were eliminated as a result of new laws passed by Christian parliamentarians based on the teaching of Jesus. Universal free schools, charities, and free hospitals were formed by Christians who found their motivation following Jesus.

Perhaps the most significant reformation was the abolition of the slave trade led by William Wilberforce (1759–1833). Wilberforce was a British politician, and a leader of the movement to abolish the slave trade. In 1785 he underwent a conversion experience and became an evangelical Christian, resulting in major changes to his lifestyle and a lifelong concern for reform. In 1787 he came into contact with Thomas Clarkson and a group of anti-slave-trade activists. They persuaded Wilberforce to take on the cause of abolition, and he soon became one of the leading English abolitionists. He headed the parliamentary campaign against the British slave trade until the eventual passage of the Slave Trade Act 1807. Wilberforce was convinced of the importance of religion, morality, and education. He championed causes and campaigns such as the Society for Suppression of Vice, British missionary work in India, the creation of a free colony in Sierra Leone, the foundation of the Church Mission Society and the Society for the Prevention of Cruelty to Animals. In later years, Wilberforce supported the campaign for the complete abolition of slavery, and continued his involvement after 1826, when he resigned from Parliament because of his failing health. That campaign led to the Slavery Abolition Act 1833, which abolished slavery in most of the British Empire; Wilberforce died just three days after hearing that the passage of the Act through Parliament was assured.

As a result of these reformations, England was quickly restored to greatness and became the leading country in the world at the time and the most significant force for missionary work up until that time.

#### **Example: Mutiny on the Bounty**

The mutiny on the Bounty was a true story of a mutiny aboard a Royal Navy ship on April 28, 1789 which has been made famous by several books, films, and other media such as songs. The mutiny was led by Fletcher Christian against the captain, William Bligh. Bligh was then cast adrift in a small open boat with 18 loyal men. The mutineers sailed for the island of Tubuai, where they tried to settle. After three months of being terrorized by the cannibalistic natives, however, they returned to Tahiti hoping to escape the vengeance of the British navy.

One part of the story that deserves retelling was the transformation wrought by one book. Nine mutineers with six native men and twelve native (Tahitian) women put ashore on Pitcairn Island in 1790. One sailor soon began distilling alcohol. And the little colony was plunged into debauchery and vice. Ten years later, only one white man survived, surrounded by native women and mixed-race children. In an old chest from the Bounty, this sailor one day found a Bible. He began to read it and then to teach it to the others. The result was that his own life and ultimately the lives of all those in the colony were changed. Discovered in 1808 by the USS Topas, Pitcairn had become a prosperous community with "no jail, no whisky, no crime, and no laziness."81

Such is the transformational power of the Gospel message.

## Christianity's Impact on Science<sup>82</sup>

The four individuals who did the most to pioneer modern science were pious men whose belief in God was integral to their view of science:

- Nicolaus Copernicus (1473-1543) showed that the movement of the planets was more elegantly
  explained mathematically on the assumption that they moved around the sun rather than around
  the Earth. He established that the principle of scientific knowledge should be rooted in
  mathematical analysis. He was a Catholic cleric.
- **Galileo Galilei** (1564-1642) used a telescope to discover the moons of Jupiter and the phases of Venus. He proved that not all heavenly bodies moved around the same center and established the principle that science must be based on empirical observation and not dogmatic assumptions. He was a devout Catholic and wrote astute works defending his views in light of the Bible.
- **Johannes Kepler** (1571-1630) showed that the planets move around the sun in ellipses rather than circles. He established the principle that nature's regularity cannot be assumed to conform to Greek notions of perfection. Kepler was a Lutheran and did original, ground-breaking work in biblical scholarship. He was the first scientist to offer credible arguments refuting such beliefs as astrology and omens.
- **Isaac Newton** (1642-1727) formulated the laws of motion and gravity. He established the principle that the movements of heavenly bodies and of the Earth itself are governed by the same laws that govern the movements of objects here on Earth. He devoted much of his research and writing to the study of the Bible.

There were many, many others. Spend some time reviewing the list of scientists contained in Appendix C. Roger Bacon, William Ockham, Leonardo Da Vinci, Sir Francis Bacon, Blaise Pascal, William Harvey, Robert Boyle, Sir William Herschel, Samuel Morse, Charles Babbage, Michael Faraday, Lord Kelvin, Gregor Mendel, Louis Pasteur, George Washington Carver, Werner von Braun, and many more. It is hard to get around the fact that the most significant scientific discoveries of all time were made not by atheists, but by Christians who believed and God and saw science as a means to discover more about God and the nature of his creation.

## Christianity's Impact on the Development of Freedom<sup>83</sup>

Throughout history, people have believed in many gods. This led to a natural belief that some people were closer to gods than were others. It is not surprising then, that many ancient cultures viewed their king as divine. From the Pharaohs of Egypt to the early Roman emperors, rulers often cemented their hold on power by claiming to be gods. Such arrogant claims, backed up with military power, were the common pretext for oppression.

In contrast, consider the view of the founding fathers of the United States, who started the "greatest experiment" ever known – democracy – and consider the impact that has had on the world. The founding fathers shared a commitment to the principle of natural freedom and equality. The United States Constitution, adopted in 1788, provided for an elected government and protected civil rights and liberties.

Although democracy had its roots in ancient Greece, it has never before been implemented absent an emperor like the United States has. Since its introduction in the "New World", Democracy has been called the "last form of government" and has spread considerably across the globe as it has brought freedom to country after country.

What drove the founding fathers of the United States to frame the Constitution the way they did? Consider the following quotes:

We have staked the whole future of American civilization, not upon the power of government, far from it. We have staked the future of all of our political institutions upon the capacity of mankind of self-government; upon the capacity of each and all of us to govern ourselves, to control ourselves, to sustain ourselves according to the Ten Commandments of God. – James Madison

God who gave us life gave us liberty. Can the liberties of a nation be thought secure when we have removed their only firm basis, a conviction in the minds of the people that these liberties are the gift of God? – Thomas Jefferson

We have been assured, Sir, in the Sacred Writings, that 'except the Lord build the House, they labor in vain that build it.' I firmly believe this; and I also believe that without his concurring aid we shall succeed in this political building no better than the builders of Babel. – Benjamin Franklin, Constitutional Convention, 1787

If we abide by the principles taught in the Bible, our country will go on prospering and to prosper; but if we and our posterity neglect its instructions and authority, no man can tell how sudden a catastrophe may overwhelm us and bury all our glory in profound obscurity. — Daniel Webster

I believe the Bible is the best gift God has ever given to man. All the good from the Savior of the world is communicated to us through this book. – Abraham Lincoln

The Bible is the sweet anchor of our liberties. - Ulysses S. Grant

It is the duty of all nations to acknowledge the Providence of Almighty God, to obey his will, to be grateful for his benefits, and to humbly implore his protection and favor. – George Washington

Suppose a nation in some distant region should take the Bible for their only Law Book, and every member should regulate his conduct by the precepts there exhibited...What a paradise would this region be! – John Adams

There is no question that the founding fathers of the United States were strong believers in Christianity, and the unparalleled freedoms enjoyed by citizens of America were the result of the founder's deeply held beliefs based on Christian principles. Specifically, "that all men are created equal, that they are endowed by their Creator with certain unalienable rights, that among these are Life, Liberty and the pursuit of Happiness." All were *created* equal, *endowed by their Creator*, and had *unalienable rights* not because a king or tyrant said they had them – but because they were part of God's design as described in the Christian Bible. The fact that the United States has become the most prosperous and powerful nation the world has ever known is due in large part, to the founding of our country and the Christian foundation it was built on. This is yet one more evidence of the truth of the Gospel message.

## Christianity's Impact on the Development of Equality<sup>84</sup>

The first chapter of Genesis says that "male and female" were created in God's image. Imagine if the Bible had spoken of women as inferior and unworthy. But it doesn't – rather, it shows a relationship and equality that has taken society thousands of years to catch up with.

Likewise, the Bible is completely silent on the differences between people of different skin colors. It says nothing about the origins of the races. From the Bible's point of view – it doesn't matter at all. Instead, what the Bible does say is God "made from one man every nation of mankind to live on all the face of the earth" (Acts 17:26 NASB). This doctrine goes back to Adam and Noah where all mankind were descended from. The last book of the Bible, the Book of Revelation, instead includes a moving vision of

people singing before God's throne – people who come from "every tribe and tongue and people and nation" (Revelation 5:9, 7:9 and 14:6).

The Bible harshly condemns economic injustice and warns against nations that do not correct such injustice. Amos, for example, warned Israel that the rich who "impose heavy rent on the poor and extract a tribute of grain from them" will find themselves without homes or property if they do not change their ways (Amos 5:11 NASB). Paul, encouraged slaves to obtain their freedom if they could – a clear signal to their Christian masters to accommodate such efforts (1 Corinthians 7:21-23). The Biblical ideal is the brotherhood of all human beings.

So, in teaching about men and women, about people of different ethnicity and color, and about people of different economic status or position, the Bible shows itself to be far more enlightened, not only beyond the culture of the day, but also in comparison to most civilizations since it was written. We're still working to realize Paul's vision: "there is neither Jew nor Greek, there is neither slave nor free, there is neither male nor female; for you are all one in Christ Jesus" (Galatians 3:28).

In the centuries prior to Jesus, the status of women was very restricted in comparison to that of men. Widespread ancient attitude tended to minimize the role of women, but Jesus surrounded himself with women disciples who were often the first to recognize him as their Messiah and respond to his message about the need for personal repentance. In this way, Jesus elevated forever the role and status of women by treating them as equal in spiritual and social value. Likewise, Christ surrounded himself with young children and declared that "such is the kingdom of God". In doing so, he forever changed the way adults look at children. This was a revolutionary change from ancient attitude that held children to be of little value.

These views on the equal treatment of women, people of different colors, economic injustice and children have formed the bedrock foundation of movements such as women's suffrage, civil rights, charitable work and right to life issues and argue powerfully for the truth of the Gospel message and the power the Bible can have on society.

#### **Discussion Questions**

- Other than Jesus Christ, name the person you think has had the largest impact on world history. What was this person's contribution? Compare and contrast that contribution to that of Christ.
- Why do you think Christianity had such an impact on England in the 1700s? Why do you think Christian principles were so instrumental in the reformation of morality?
- Think about the contribution that has been made in the field of science by Christians. Why have Christian believers outpaced all other religions in the contribution toward the advancement of science? Do you believe this is just cultural or something more?
- Do you believe Christianity has been essential to the advancement of democracy, women's suffrage, civil rights, charitable work and right to life issues? How do you think these movement would have been impacted without the Christian foundation?

# **Epilogue**

# **CHAPTER 23**

# COMPARING THE RELIGIONS<sup>1</sup>

There have been great teachers and leaders of souls...but none of them claimed to do or did what Jesus has done. Through Moses came a law to be obeyed; Muhammad was a prophet of a truth about God; Guatama [Buddha] offered men the secret of salvation which must be secured by their own efforts. Christ brings us to God and God to us in an immediacy of relation, in an intimacy of communion, in a sufficiency and efficacy of divine grace through human faith which is a new creation in our inmost, highest life...This cannot, of course, be demonstrated by intellectual arguments to those who have not had the experience of what Christ has done; but for those who have had that experience, there need be no other evidence.

-- A.E. Garvie, Anthology of Jesus

In evaluating the four core questions outlined in the introductory chapter of this book which leads one down the path to Christianity, it is worthwhile to consider the alternatives that exist. Do all religions lead to God? If not, how does Christianity differ from other religions?

This chapter will attempt to answer these questions. First, we will look at the basic alternatives. Then, we will look at the three world religions that are on the rise in the West: Hinduism, Buddhism and Islam, and then touch briefly on five others. Second, we will look at two aggressive cults that parade under the banner of Christianity but deny its central truth claims - the Mormons and the Jehovah's Witnesses - and then comment briefly on Christian Science, the Moonies and the Church of Scientology. Last, we will look at the popular, growing New Age movement.

#### Hinduism: The World's Oldest Religion

Many people throughout the world are fascinated with Eastern religions. Millions are involved in some form of Eastern mysticism, and according to a 1990 CNN poll, 35 percent of adult Americans believe in reincarnation. The essential differences between Eastern religions and Christianity are set out below:

- Christians believe in a God who has made himself known (in Jesus Christ), rather than a God who is impersonal and not knowable.
- Christians believe in humankind's innate sinfulness and separation from God (there is no sense of original or in dwelt sin in Eastern religion).
- Christians believe in the forgiveness of sins so that we may be "at one" with God, rather than having to endure endless reincarnations.
- Salvation comes from above (God's grace), rather than from below (liberating oneself from the wheel of birth, death and rebirth).

Hinduism claims to be the oldest religion in the world, dating back to the second millennium B.C. As a developed belief system, however, it followed rather than preceded Judaism (early Hinduism, as expressed in Brahmanism, dates back to 1200 B.C., shortly after the Exodus.) Hinduism is the religion of India - 85 percent of all Indians are Hindus - and is more concentrated geographically than Christianity, which has spread throughout the world. The number of Hindus is estimated to be 900 million, making Hinduism, after Christianity and Islam, the third largest religion in the world.

The principal Hindu scriptures are the Vedas ("wise sayings") and the Upanishads ("sitting near" one's teacher). A later book, the Bhagavad Gita (the "Song of the Lord"), composed around A.D. 100, a popular book among Hindus, has been called "Hinduism's favorite bible." Hinduism, in contrast to most other religions, had no "founding father." It has temples but no established corporate worship, no institutional form and no "Sabbath" (Hindus believe the most important place of worship is in the home, not a temple). It also claims to have great tolerance for other faiths, but this is not true, especially in India.

Something that is confusing to many people is India's caste system, a hereditary system of social stratification that dates back to the 1500s B.C. when the Aryans (Indo-Europeans) invaded India. Hindus believe the caste system is part of the cosmic law of cause and effect, part of the "ladder of life," part of the explanation as to why things are the way they are. There are four primary castes and thousands of sub castes, which are hereditary and for life - one cannot move from one caste to another-and determine a person's social status and vocation. The principal castes are:

- The priests, scholars and teachers (the Brahmins)
- The nobles, rulers and soldiers
- The artisans, merchants and farmers (Gandhi's caste);
- The peasants, servants and manual laborers.

One who is not born into a caste is called an "outcast" or an "un-touchable," of which there are some 100 million in India today. The occupational barriers of the caste system are breaking down due to economic pressures - "untouchability" was declared illegal in 1949 - but the social dimensions still persist and are important in the villages and in such areas of life as table fellowship and marriage.

Another thing that is little understood in Hinduism is the sanctity of the cow, which cannot be killed and consumes grain needed to feed India's masses. The veneration of the cow comes from Vedic literature and from the Hindu belief that the cow is the living symbol of Mother Earth and of the divine blessings she bestows upon humankind. Reverence for the cow symbolizes reverence for all animals, which is one reason why Hindus are vegetarians; another reason is the belief that animals contain reincarnated souls.

#### Brahman, Atman and Reincarnation

Hindus believe that the human soul, called *atman*, is eternal and that it is linked with the universal soul or spirit, called *Brahman*, which sustains the universe. Hindus believe that one's state in life is the result of one's *karma* (from a Sankrit word meaning "actions" or "deeds"). Bad actions lead to the reincarnation of the atman into lower orders (animals, plants and insects) and good actions into higher orders (higher castes). This process is called *samsara* and may occur many, many times. The goal or purpose of life is to release one's atman or soul from the endless repetition of rebirths and merge with Brahman, like a drop of water falling into an ocean. The absorption of the atman into Brahman is called *moksha*, at which point the soul enters into a state of supreme blessedness.

The paths to enlightenment or moksha are:

- Knowledge which comes from studying with gurus or teachers and reading sacred scriptures.
- Contemplation disciplines and psychophysical exercises that concentrate one's attention on the atman.
- **Devotion** singing hymns of praise, offering sacrifices and making pilgrimages to sacred places such as Varanasi, Hinduisrn's holiest city, located in north central India on the banks of the sacred Ganges River (Hindus bathe in "Mother Ganges" to wash away bad karma).
- Works the acting out of one's duties to society.

Hindus believe that there are many gods, each of which has a different function. The three principal deities - the Hindu "trinity"- are *Brahma*, the Creator; *Vishnu*, the Preserver; and *Shiva*, the Destroyer. In Hindu mythology, gods have descended to earth as *avatars* (divine "manifestations"). The most important avatars are those of Vishnu, the most popular being Rama and Krishna. Modern Hinduism believes that avatars have also manifested themselves in humans, such as Ramakrishna, a highly esteemed nineteenth-century Hindu mystic.

#### The Hare Krishna Movement

Hare Krishna - *Hare* meaning "Lord" and *Krishna* being the avatar of Vishnu - is a form of Hinduism found in the United States, Europe and Latin America. The official name for the community is The International Society for Krishna Consciousness (ISKCON). (One attains Krishna "consciousness" by chanting the Hare Krishna mantra and meditating on "Lord" Krishna.)

The movement was founded in the United States in 1965 by Swami Prabhupada, who claimed to be a "representative" of Krishna (Prabhupada died in 1977). ISKCON follows Hinduism in most respects - its primary scriptures are the *Bhagavad Gita* and it believes in both karma and reincarnation - but it does not believe in a pluralism or pantheon of gods or in the caste system. It has temples and communes in many cities and its followers distribute evangelistic literature on street corners and elsewhere.

Many Hare Krishnas live in structured communities, with rules regarding food and drink (no meat, fish, eggs or alcohol), dress, devotions (devotees chant mantras on a string of 108 prayer beads sixteen times each day) and celibacy (married couples are allowed to have sex only once a month). Adherents hope that their devotion to Lord Krishna will one day enable them to escape the wheel of death and rebirth.

#### Hinduism versus Christianity

Three important differences exist between Christianity and Hinduism:

- Christianity believes in a single, sovereign, personal God; Hinduism believes in a universal soul and in many "gods."
- Christianity believes that salvation comes by grace through faith; Hinduism believes that salvation (from *samsara*, the wheel of rebirths) comes through knowledge, devotion and good works.
- Christianity believes that Christ's saving death is offered to everyone, no matter what caste he or she is born into, and that it is offered now - in this life and with assurance - rather than in a future reincarnated life.

## **Buddhism: The Middle Way**

Buddhism began as a reform movement within Hinduism. It was successful in various parts of India for hundreds of years, and then died out. Buddhism is beginning to grow outside the Orient as immigrants from Vietnam, Cambodia and other Southeast Asian countries come in increasing numbers to the West.

Buddhism was founded by Siddhartha Gautama, who was born in what is now Nepal in 566 B.C. His father was the ruler of a small kingdom who shielded Gautama from the cruelties and sufferings of life. According to legend, when Gautama finally ventured out into the world, the only happy man he saw was a serene and peaceful hermit. At the age of twenty nine he left his wife and child (the Great Renunciation) and embarked on a quest for peace and serenity. This came to him six years later while sitting under the famous *bodhi* tree (the tree of knowledge or enlightenment), probably a fig tree, in north central India.

According to Gautama, the cause of suffering is desiring or craving things that are worldly and temporal. The way to peace and serenity is the Middle Way - the way or path of moderation between pleasure and denial, between self-indulgence and asceticism.

Gautama became known as *Buddha*, a Sanskrit word meaning one who has found or attained enlightenment. He gathered disciples around him, founded monasteries and went about preaching and teaching his newfound enlightenment until his death in - 186 B.C. at the age of eighty. After his death, his followers wrote down his teachings. Over time he came to be highly venerated (as a deity by some) and statues and temples were built in his honor.

Like many religions, Buddhism has different traditions. *Theravada*, the Doctrine of the Elders, is very conservative. It teaches that to find enlightenment, one must devote his or her life to the way of Buddha, the highest form of which is monasticism. *Mahayana*, the Great Vehicle, believes that enlightenment is possible with the help of bodhisattvas, saintly personages who postpone final enlightenment in order to help others. Mahayana Buddhists practice love and compassion and devote themselves to the teachings of Buddha. Mahayana is more liberal and popular and the larger of the two traditions.

Today there are an estimated 400 million Buddhists, principally in countries like Myanmar (Burma), Thailand, Laos, Cambodia, Vietnam, China and Japan, making Buddhism the fourth largest religion in the world.

#### The Eightfold Path

There are several major differences between Buddhism and Hinduism. For instance, Buddhism does not believe in a universal being or spirit, or that men and women have souls, or in the caste system, and it believes that there is something one can do to escape the misery and suffering of this life, rather than waiting for a future life.

What can one do to escape misery and suffering in this life? Adopt wisdom, morality and meditation as the essence of life and follow the Noble Eightfold Path of right views, right aspirations, right behavior, right speech, right livelihood, right effort, right mindfulness and right contemplation. The Eightfold Path leads to *nirvana* - from a Sanskrit word meaning "to blowout" the flame of desire, the cause of sufferingand to the absorption of the self into the infinite.

#### Zen Buddhism

A popular form of Buddhism in the West is Zen Buddhism. In the United States there are some one hundred Zen temples and centers and nearly one million adherents. The word *Zen* comes from a Sanskrit word meaning "meditation." Zen Buddhism developed in China in the 500s A.D.; it later expanded to Japan, where it was highly esteemed as a path to self-discipline.

Zen adherents practice meditation according to strict rules in order to achieve enlightenment (called *satori*) more quickly than through traditional Buddhism, thus escaping the wheel of reincarnation. Zen Buddhism expresses itself in a variety of ways - judo, calligraphy, poetry, the *ikebana* art of flower arrangement and the seemingly formless sand and rock garden-each of which has religious significance.

#### **Buddhism versus Christianity**

Three distinguishing differences exist between Christianity and Buddhism and are as follows:

- Christianity believes in a God who created the world and who revealed himself in Jesus of Nazareth; Buddhism does not believe in a Creator God or higher being.
- The center of Christianity is the two "love commandments" (God and neighbor); the center of Buddhism is the eightfold path (right aspirations, behavior, speech, livelihood, efforts, etc.).
- Christians look forward to a resurrected life with the triune God and all other believers; Buddhists look forward to escaping the bondage of samsara (rebirths) and to the absorption of the finite (self) into the infinite, like a passing cloud that dissolves and disappears.

## Islam: Christianity's Greatest Competitor

The third great monotheistic religion (along with Judaism and Christianity) is Islam, an Arabic word meaning "submission" to the will of *Allah*, the Islamic name for God, derived from Arabic words *al* (the) and *ilah* (deity). Islam is not a small Middle Eastern religion, as some think, but a large (1.4 billion adherents), worldwide, rapidly growing, well-financed faith. There are an estimated 6-7 million Muslims in the United States, making Islam larger than most Protestant denominations.

Also, we often think of Muslims as Arabs (those who speak and write Arabic), but the countries with the largest Muslim populations are not Arabic. Indonesia is the largest Muslim country, followed by Pakistan, India, Bangladesh, Turkey (the largest Islamic country in Europe), Iran (which is Persian, not Arab), Egypt (the only Arabic country in the top ten), Afghanistan, Nigeria and China.

Islam is a faith without priests or sacraments. Muslims worship in *mosques* ("place of prostration"), which are not churches but buildings where the faithful - usually only men, at least in the main hall - gather to pray as a group. The prayers are led by an *imam* ("he who stands before"), a person with religious training who, on Friday, Islam's day of formal worship, delivers a sermon.

Most mosques have a minaret, a tower from which the faithful are called to prayer; a fountain for washing one's hands, face, mouth and feet; a niche in the wall indicating the direction of Mecca, which Muslims face when they pray (Muslims in the United States face east when they pray); and if a mosque is large enough, education rooms for teaching Arabic, the Koran and Islamic law.

The founder of Islam was Ubu'l-Kassim, who became known as Muhammad (the "Praised One"). He was born in A.D. 570 in Mecca, an ancient city in present-day Saudi Arabia. He was orphaned at the age of six and raised first by his grandfather, and then by an uncle. When he was twenty-five he married a wealthy widow (Khadija), some fifteen years his senior, who bore him three sons (who died in infancy) and four daughters, the youngest of whom, and his favorite, was Fatima.

When Muhammad was forty years of age (in 610), he claims to have had a vision of the angel Gabriel while meditating in a cave on Mount Hira, north of Mecca. Gabriel told Muhammad that he was to be Allah's "messenger," and he promised to dictate to him the word of God. Many in Mecca strongly opposed Muhammad's monotheism (Arabia was polytheistic) and his preaching against the worship of idols.

In the year 622, Muhammad fled to Medina (250 miles north of Mecca) - the *Hijra* ("going forth") or *flight* - which marks year one in the Islamic calendar. In Medina, Muhammad established himself as a religious and political leader. The city of Medina became the City of the Prophet (Muhammad is buried in Medina). Its inhabitants included both Christians and Jews, who undoubtedly influenced Muhammad's thought and theology.

In the year 630, Muhammad and his followers fought against and took control of Mecca, which became their holy city. Muhammad died in 632 at the age of sixty-one. He did not consider himself to be divine but, rather, the one chosen by God to be his final prophet-the "seal" of the prophets. (The six great prophets of Islam are Adam, Noah, Abraham, Moses, Jesus and Muhammad.) During his lifetime, Muhammad welded an independent, polytheistic, nomadic people into a united, monotheistic nation whose military zeal carried Islam from the Arabian peninsula to the Atlantic Ocean (Morocco) within one hundred years of his death.

#### Some Islamic Beliefs

In Islamic theology, God did not reveal himself in the form of a person, Jesus, but in words, which are recorded in the *Qtr'an* or *Koran* (the "recitation"). According to Islam, the contents of the Koran were revealed to Muhammad over a period of twenty-two years (from 610 to 632) in Mecca and Medina in manageable segments so that each "revelation" could be memorized exactly as received. Muslims believe that Muhammad passed on these revelations to his secretary, Zaid, who wrote them down after his death. Others believe that Muhammad wrote, edited and arranged the revelations while in Medina. After his death, the revelations were combined into a book with 114 *suras* or chapters, arranged, after the first chapter, in order of descending length rather than chronologically as "received." The Koran is slightly smaller than the New Testament.

Most Christians know very little about Islam. The following are some similarities and important differences:

- Abraham and Jerusalem. Judaism, Christianity and Islam are all historical, monotheistic religions that look back to Abraham as their founding father but Islam believes that Ishmael was the "promised son" of Abraham, not Isaac. All three religions revere Jerusalem as a holy city Islam because it is the place from which Muhammad made his famous "night journey" into heaven (in 620) on a winged horse, accompanied by the angel Gabriel, in which he claims to have come into the presence of God. Some Muslims understand this to be a vision, others as an actual journey. The Dome of the Rock (from which Muhammad ascended), built on the site of Solomon's Temple in 691, memorializes Muhammad's flight.
- Scriptures. Jews, Christians and Muslims are "People of the Book," though Islam's Old Testament contains only the Torah (the Book of Moses) and the Psalms (the Book of David) and its New Testament only the Gospels. Islam teaches that God dictated the words of the Koran through Gabriel to Muhammad, rather than transmitting them through inspired prophets and apostles, and it believes that Christianity has corrupted the Old and New Testaments through its many translations. Muslims believe that there is an exact copy of the Koran in Arabic in heaven.
- Jesus. Islam reveres Jesus Isa in Arabic as a great prophet, second only to Muhammad. (In Islam, Jesus was the herald or forerunner of Muhammad.) It believes in Jesus' virgin birth and his miracles and that before he died he was "assumed" into heaven and now resides with God. But Islam does not consider Jesus to be divine because it would be unfitting for the sovereign, transcendent God of the universe to become incarnate in a human being. Muslims say that calling Jesus the Son of God implies that God had sexual relations with Mary. (In Islam, Jesus is called the Son of Mary rather than the Son of God.) Also, Islam does not believe that Jesus was crucified, because God would not allow one of his prophets to die such a disgraceful, humiliating death. According to the Koran, someone who resembled Jesus, possibly Judas Iscariot or Simon of Cyrene, was killed in his place.
- **Sin**. Islam teaches that men and women are fundamentally good, not fallen. (Some Muslims believe that Muhammad, though human, was sinless.) The fall in the Garden of Eden was caused by Satan, after which Adam repented and was pardoned by God. (In the Koran, Satan tempted Adam rather than Eve.) Thus there is no concept of innate or indwelt sin in Islam.
- Good Works. Islam is a salvation-by-works religion. It teaches that on the last day the Day of Reckoning - every person will appear before God (not Jesus) to be judged by his or her good and bad deeds and works. Those faithful to the Shari'a ("path to follow"), Islam's sacred law, go to an oasis - like paradise, the Koranic word for heaven; sinners go to a hell of eternal and indescribable punishment.

#### Islam versus Christianity

There are several important differences between Islam and Christianity:

- In Islam God (Allah) is transcendent and removed; in Christianity he is transcendent but he is also immanent and personal, and it is possible, through Jesus, to have a relationship with God.
- Christianity believes in a triune Godhead; Islam, like Judaism, does not believe that the second and third persons of the Trinity are divine.
- Christianity believes that the human race is innately sinful and in need of salvation; Islam believes that humankind is weak and in need of guidance, but not fallen.
- Christianity believes in salvation by grace through faith in Jesus Christ (Eph. 2:8-10); Islam has no concept of "saving grace" or of a "savior."
- Christians can be assured in this life of their salvation (Rom. 10:9-10); Muslims have to wait until
  the final Day of Reckoning.

- Islam believes Jesus to be a prophet like, but less than, Muhammad; Christianity believes Jesus to be the incarnate, resurrected, still-living Son of God.
- Another difference between Islam and Christianity is that Islam is all-encompassing, covering, in
  addition to religious ritual, at least in some Muslim countries (Islam is the majority religion in some
  sixty countries), such matters as family life, civil and criminal law, gambling, abstinence from pork
  and alcohol, and *purdah*, the veiling of women (for modesty purposes), which has been
  abandoned in many parts of the world. There is no theological distinction in Islamic countries
  between sacred and secular: the law of Islam is the law of the land.

#### The Five Pillars of Islam

The "pillars" that undergird Islamic religious life for observant Muslims are laid down in the *Hadith*, a collection of sayings that was assembled after Muhammad's death. The pillars are as follows:

- The profession that "There is no God but Allah, and Muhammad is his prophet." Allah is not the God of Christianity: Allah is mysterious, not knowable, not personal or approachable, is never described as a God of love, and is not trinitarian.
- Prayer to Allah five times a day upon rising, midday, mid-afternoon, sunset and upon retiring
  (the afternoon and sunset prayers are often combined in non-Muslim countries). When Muslims
  pray, they often prostrate themselves in a position of humility with their foreheads on the ground.
  In public prayers, the words of the prayers come from the first chapter of the Koran and follow
  established formulas.
- Almsgiving, the sharing of one's wealth (out of gratitude for God's favor) to support the sick and
  the needy. The amount of giving varies, but the practice is one-fortieth (2.5 percent) of a person's
  income. Almsgiving is strictly enforced in some Muslim countries (as a tax) and completely
  voluntary in others.
- Fasting from food and drink, for those old enough and in good health, from sunup to sundown during the month of Ramadan (the ninth month in Islam's lunar calendar), the month it is claimed that Gabriel first appeared to Muhammad.
- A pilgrimage (hajj) to Mecca during one's lifetime, if possible, to worship at the Great Mosque, visit the Ka'ba ("cube") and kiss the famous Black Stone, the most venerated object in Islam.
   Muslims believe that the stone was carried to earth by the angel Gabriel, and that it was originally white but humankind's evil turned it black.
- Many Muslims believe in a sixth pillar, Jihad, a word meaning "spiritual struggle" (though often translated "holy war"), which requires obedience to God and the furtherance of the cause of Islam. The Koran promises that those who die a martyr's death fighting for God are assured of a place in paradise.

#### Sunnis and Shi'ites

Islam is divided into two major groups, the Sunnis and the Shi'ites.

The Sunnis, with 85 percent of Islam's adherents, are the "mainstream," but the Shi'ites - the visible, vocal fundamentalists - are the more conspicuous. The groups differ over the question of the true or rightful line of Muhammadan succession, because Muhammad did not leave or appoint a successor.

The Sunnis follow the *Sunna* ("way" or "custom") of Muhammad, as recorded in the *Hadith*, and appoint as their leaders *caliphs* ("successors" or "representatives") from the Kuraish tribe, to which Muhammad belonged. The Shi'ites ("party" or "partisans") are followers of Ali, Muhammad's cousin and son-in-law (Ali married Muhammad's daughter, Fatima). They believe that Ali represents the true line of succession, which continues today in spiritual leaders like the *ayatollahs* ("sign of God") in Iran. The Shi'ites follow the Koran and the teachings of their imams. The Sunnis observe other writings as well, and also the oral tradition.

#### Black Muslims

The Nation of Islam (NOI) is an American phenomenon. It was founded by Wallace Fard in 1931 in Detroit. Fard claimed to be the reincarnation of Allah. He was succeeded by Elijah Muhammad, who claimed to be Fard's "messenger." From 1934 until his death in 1975, Muhammad ruled over and built the NOI into a large, nationwide black religious movement.

During the 1950s and early 1960s, the NOI's principal spokesperson and evangelist was Malcolm X, the son of a radical Baptist minister in Omaha, Nebraska, whose surname was Little. The letter X, the mathematical symbol for something unknown, meant that Malcolm did not know his African surname. Malcolm X joined the NOI in 1952 and became the "St. Paul" of the movement until he split with Elijah Muhammad in 1963. Two years later, in 1965, Malcolm was shot and killed in a public auditorium in New York City.

Following Elijah Muhammad's death in 1975, the NOI split into two groups. The minority, under the charismatic and controversial Louis Farrakhan, who had been a disciple of Malcolm X, continued the NOI's black nationalism and black separatism. The majority followed Elijah Muhammad's son, W. Deen Muhammad, who founded the American Muslim Mission, which is far more Islamic (Sunni), and also interracial.

There are an estimated two million Black Muslims in the United States. The vast majority are in organizations like the American Muslim Mission and its successor, the World Community of Al-Islam in the West. One reason for the popularity of the non-NOI Muslim groups is their less rigid, fundamentalist lifestyle. Another reason is that Malcolm X, after he split with Elijah Muhammad, visited Mecca, where he saw Arabs, Africans and Caucasians worshiping together, and he embraced and espoused orthodox Islam.

The NOI had its greatest impact during the Malcolm X years. Malcolm was a culture hero who preached black consciousness (he gave birth to the change from Negro to Black), black pride and black power. During this period, the NOI became known as the Black Muslims. Malcolm and the NOI preached that Christianity was a white religion, whereas Islam was the black person's natural religion - some of the slaves who came from Africa were Muslims - though their focus often had more to do with "blackness" than with religion. The NOI had little connection with worldwide Islam, and its Bible was the Christian Bible, on which its members had been raised, rather than the Koran.

#### **Christian Cults**

A strong challenge to the Christian church over the last 150 years has been the emergence of religious movements that parade under the banner of Christianity and refer to God, Jesus and the Bible but deny the central truth claims of the Christian faith. These groups are hereafter referred to as "Christian cults," two examples being the Mormons and the Jehovah's Witnesses. Those who make no pretense to being Christian are referred to as "non-Christian cults," which includes the Church of Scientology.

Before looking at Christian and non-Christian cults, we need to define the word *cult*. Some find the term "cult" offensive, preferring, instead, to call non-Christian and fringe-Christian groups "alternative religions" or "new religious movements." The term cult is a descriptive term, not a pejorative one. Christian cults are groups that claim to be Christian but do not believe in the dogmas and doctrines of Christianity. Historian Ruth Tucker, in her book *Another Gospel*, defines a cult as a religious group whose prophet/founder claims to have received a special revelation from God - often set forth in his or her "inspired" writings - to proclaim a message not found in the Bible. Tucker says that most cults have authoritarian leadership structures, are legalistic in lifestyle, are exclusivistic in outlook and have a persecution mentality. Tucker's definition fits, for the most part, the eight cults highlighted in this section.

Those who have studied cults and who have "deprogrammed" people who have come out of cults claim that people join them because they have become disillusioned with, or have needs that are not being met by, traditional churches. These needs include the need for love, often due to family breakups; the need of some to commit their lives to a charismatic leader, such as Jim Jones (the Peoples' Temple), David

Koresh (the Branch Davidians) and Marshall Applewhite (Heaven's Gate); and the need of some, with low self-esteem, to be dominated. Witnessing to members of cults is difficult because they are convinced of the "truth" of their cult and because they are usually well grounded in their cult's beliefs.

The following are some common cult beliefs concerning truth claims that Christians hold dear (for more information, see *Dictionary of Cults, Sects, Religions and the Occult* by Mather and Nichols).

- **Scripture**. Most Christian cults deny the Bible's authority in matters of faith and life, claiming it to be faulty, incomplete and written for another era. To correct this, the founders wrote their own books, among them Joseph Smith's *The Book: of Mormon*, Mary Baker Eddy's *Science and Health*, Charles Russell's *Studies in Scripture* and Sun Myung Moon's *The Divine Principle*.
- **God**. Christian cults worship a god other than the biblical or Christian God and each denies the Trinity (Christian cults are unitarian rather than trinitarian).
- Jesus. Christian cults deny the divinity of Jesus, regarding him as only human, and none regard him as a "savior."
- **Salvation**. Christian cults do not believe in justification by faith. They believe, instead, in salvation by "works," especially works on behalf of their cult, such as evangelism.

Cults are found in every culture. We will look at two cults that most Christians are familiar with - the Mormons and the Jehovah's Witnesses - which are worldwide and aggressively evangelize both non-Christians and nominal Christians. We will also look at Christian Science, the Unification Church and the Church of Scientology.

## The Church of Jesus Christ of Latter-day Saints

The Church of Jesus Christ of Latter-day Saints (LDS) has been called the most successful and distinctive religion ever born on American soil. It claims to be the restoration of the true church by Joseph Smith Jr., the fourth of ten children born to Joseph and Lucy Smith in Sharon, Vermont, in 1805.

The LDS is the largest Christian cult, with an estimated 11 million members in some one hundred countries, and 5 million in the United States, making the Mormons (a nickname for those belonging to LDS churches) the fifth largest church body in the U.S., behind the Catholics, Baptists, Methodists and Lutherans. And it is the most "evangelistic" of the Christian groups, with some fifty thousand missionaries in the United States and overseas. (Mormon missionaries are college-age males who give two years of their lives to missionary work. Their goal is six converts per year.)

Despite its strange beliefs, the LDS espouses many wonderful qualities: the priority of the family, abstinence from tobacco and alcohol, the importance of education and hard work, patriotism (the LDS believes that the U.S. Constitution was divinely inspired) and free enterprise.

#### Joseph Smith

Mormonism stands or falls on Joseph Smith, so we need to start with his story. According to Smith's *Book of Mormon*, members of the tribe of Manasseh, one of the twelve tribes of Israel, sailed to America during the Diaspora (c. 600 B.C.) and formed two separate nations: the Nephites, to whom Jesus preached the gospel following his resurrection, and the Lamanites, the ancestors of the American Indians. The two nations fought a catastrophic war in upstate New York in A.D. 385 in which 2 million people were said to have been killed, though archaeological research has unearthed no artifacts to support this claim.

A Nephite prophet named Mormon wrote the history of his people, *The Book of Mormon*, on golden plates and buried them in a hill in Palmyra, New York (near Rochester). In 1823 the angel Moroni, Mormon's son and the last Nephite survivor, visited Joseph Smith when he was seventeen and told him of the plates. Four years later, in 1827, Smith said that he translated the plates from Egyptian into English with the aid of spectacles made of Urim and Thummim (Ex. 28:30), after which the plates were

taken to "heaven" by Moroni, never to be seen again. The LDS considers The Book of Mormon to be the final word of God and the equal of the Bible; although the book ends with the year 421, it contains hundreds of verbatim quotations from the King James Bible, which was translated twelve hundred years later.

According to Mormon teaching, John the Baptist returned in May 1829 and ordained Smith to the Aaronic priesthood, and a month later Peter, James and John conferred upon him the Melchizedekian priesthood. In 1830 Smith founded the Church of Jesus Christ of Latter-day Saints (Latter-day refers to the time before Jesus returns; saints are members of LDS churches or "wards," as they are called) at Fayette, New York.

The Mormons were persecuted for their beliefs and moved west to Ohio, then to Missouri, and finally to Commerce (renamed Nauvoo), Illinois, on the Mississippi River, where they received a charter (in 1840) to establish their own community. Smith became the mayor of Nauvoo and the head of the local militia. In 1843 Smith had a vision that it would be desirable to have more than one wife in order to produce saints for the church, and he took to himself some forty additional "wives." (Mormon polygamy was abandoned in 1890 when it became clear that its continued practice would prevent Utah's entry into the Union).

In February 1844, Smith sought to give public voice to his views and announced his candidacy for the presidency of the United States. In June of that year he was arrested for smashing the printing presses of a local newspaper that was writing articles denouncing Mormon polygamy. Before he could be brought to trial, he was killed by an angry mob (at the age of thirty-nine).

After Smith's death, the Mormon Church divided. Some followed his first wife to Independence, Missouri, to establish the Reorganized Church of Jesus Christ of Latter-day Saints. The majority followed Brigham Young - the St. Paul of Mormonism - to the Salt Lake Basin in Utah, the new "promised land," arriving there in July 1847.

#### Mormon Beliefs

Mormon beliefs are based on three writings - *The Book of Mormon, Doctrine and Covenants* and *The Pearl of Great Price* – the teachings of Joseph Smith and Brigham Young.

- God. Mormons believe that God was a personage who lived on the planet Kolob somewhere in the universe. He died and went to the celestial heaven, after which he became God of our earth. Mormons believe that God was once a man, with flesh and bones, and is now a tangible being (not a spirit); that there are many gods (polytheism), the "Christian" God being the deity who rules over our earth; that God is not eternal but had a father ("a father must have been someone else's son"); and that God was married and had several wives (thus a polygamist), because to call God "father" implies a "mother."
- **Jesus**. Mormons believe that Jesus is "firstborn" in terms of status as the eldest son of God. Brigham Young taught that Jesus was the child of the God-man of the planet earth who sexually impregnated Mary (the only person to be "physically" fathered by God). Some Mormons believe that Jesus was married at the wedding in Cana and had several wives, among whom were the sisters Mary and Martha, and had children.
- Men and Women. Mormons do not believe in original sin or that men and women are fallen. They believe, rather, that men and women can become gods ("As man is, God once was; as God is, so man can become").
- Other Beliefs. Mormons believe that Adam had many wives; that Adam and Eve committed no original sin; that the Garden of Eden was located in Missouri; that Abraham, Isaac and Jacob are now "gods"; that Zion is North America, not Israel, and that the Ten Lost Tribes of Israel will be ingathered and restored in America.

#### Jehovah's Witnesses

Jehovah's Witnesses is the second largest made-in-America religion, with 10 million members, 25 percent of whom live in the United States (the Witnesses' headquarters are in Brooklyn). Jehovah's Witnesses, like Mormons, are very authoritarian. They meet in modest buildings called Kingdom Halls (Mormons meet in temples); are millennarian in theology (waiting for the end of the world); publish two magazines, *Awake!* and *Watchtower*, and have a number of strange beliefs regarding government and holidays. Similar to Mormons, Witnesses read Acts 20:20 as requiring its members to do door-to-door evangelism (to be a member in good standing, Witnesses must devote ten hours each month to evangelism).

Jehovah's Witnesses was founded by Charles Taze Russell, who was born in Allegheny, Pennsylvania, in 1852 and raised a Presbyterian. In 1872, at the age of twenty, he established a Bible study; he later wrote *Studies in Scripture*, the authority underlying Jehovah's Witnesses' theology and doctrine. In 1879 Russell published the forerunner of the *Watchtower*. In 1884 he formed the Zion Watchtower Tract Society, which in 1931 became Jehovah's Witnesses, the name coming from Isaiah 43:10.

Russell believed in the imminent end of the world and predicted that the final Battle of Armageddon would take place in 1914. Russell was succeeded by "Judge" J. F. Rutherford in 1916, who predicted the world would end in 1925. (The last Witnesses' date for the end of the world was 1975.)

Jehovah's Witnesses' theology is based on its own in-house version of the Bible, the *New World Translation* (1961), and on its very literal interpretation of the Bible. The following are some Jehovah's Witnesses beliefs:

- **God**. Witnesses do not believe that God is triune, and they do not believe the name "God" is biblical, preferring, instead, the name Jehovah.
- Jesus. Witnesses believe that Jesus was Michael the archangel, a "spirit-person" who laid down his
  spirit-nature when he became a man. Witnesses believe that Jesus was crucified on a stake rather
  than on a cross; that his death was a ransom paid to Satan rather than "for us" and that it does not
  bring salvation to those who believe or accept it as such; and that his resurrection was spiritual rather
  than physical.
- Other Beliefs. Witnesses believe that the world was created in 46,000 B.C. (7,000 years for each of the six days of creation plus 4,000 years from the time of Abraham to the present); that only 144,000 people will go to heaven (Rev. 7:4 and 14: 1-5); that the Antichrist is the Christian clergy; that the Beast referred to in the book of Revelation is the United Nations; and that Satan controls both Catholic and Protestant churches.

Witnesses oppose "earthly kingdoms" and do not participate in government (they do not even vote), serve in the armed forces or salute or pledge allegiance to the flag or sing the national anthem, nor do they celebrate Christmas or Easter ("pagan holidays") or their own or anyone else's birthday.

#### **Christian Science**

Another made-in-America religion is Christian Science. It was founded by Mary Baker (maiden name) Eddy (her third husband). Mary was born in Bow, New Hampshire, in 1821, and raised a Congregationalist; she lived to be ninety years old.

In 1866 Eddy fell on an icy sidewalk and injured her back. Bedridden, she read the account of Jesus healing the paralytic in Matthew 9:1-8. She got up from her bed and claimed that she was healed. In 1875 Eddy published *Science and Health*, the "textbook" of Christian Science, which underlies Christian Science theology. (It is not at all clear what is scientific about Christian Science.) The early appeal of Eddy's mind-over-matter theology was to people who felt that nineteenth-century medical science had no answers for their illnesses and diseases. In 1879 "Mother Mary," as she was known by her followers, founded the First Church of Christ, Scientist, in Boston; all other churches are branches of the Mother Church in Boston.

Christian Science does not believe in the Trinity or the Virgin Birth or original sin or heaven or hell. It is a philosophical system that believes that God is the divine mind or principle of the universe and in the superiority of spirit over matter. Because everything is spiritual, according to Christian Science, evil, sickness and even death are illusory and unreal because they are physical, that is, "material."

Jesus was the one who revealed God as a spiritual principle - the "Way-shower" - but he did not die for the world's sins because death is an illusion. Christian Science is in decline, with an aging membership and only two thousand or so churches in the U. S. and around the world, each of which is expected to provide a Reading Room for evangelism purposes. Christian Science's highly respected newspaper, *The Christian Science Monitor*, was begun by Mary Baker Eddy in 1908.

#### **Recent Religious Movements**

The second half of the twentieth century saw the rise of a number of new religious movements. In this section, we will look at just two of these - Sun Myung Moon's Unification Church and L. Ron Hubbard's Church of Scientology.

#### **Unification Church**

The Unification Church was founded by Sun Myung Moon in 1954. It is one of the most aggressive cults formed after World War II. The Moonie's greatest success in the U.S. has been on college campuses among youth separated from their families. The Moonies claim to have 2 million members; their actual membership is believed to be one or two hundred thousand (the vast majority live in Korea).

Moon was born in what is now North Korea in 1920 and raised in a Presbyterian family. He claims that on Easter Sunday in 1936, when he was sixteen years old, he had a vision in which Jesus told him to complete the mission he had begun some two thousand years earlier. He also claims to have been visited by Abraham, Moses, John the Baptist, Paul, Buddha, Confucius and Muhammad.

In 1954 Moon founded the Holy Spirit Association for the Unification of World Christianity, more commonly known as the Unification Church. In 1972, Moon came to the United States; he now lives in Tarrytown, New York. The Unification Church's world headquarters are in Washington, D.C.

According to Moon, the archangel Lucifer (Satan) resented God's love for Adam and Eve, with whom God wanted to form a "trinity" to build his kingdom on earth. Lucifer seduced Eve (thus Cain was the son of Lucifer and Eve), who received certain "elements" from him. Eve in turn seduced Adam and these elements were passed down from generation to generation.

God sought to redeem humankind through Noah, Abraham, Moses and others, but all failed. Finally, he chose Jesus, the son of Zechariah and Mary, to begin a new, pure, sinless race (the second Adam). But Jesus was murdered by evil forces before he could marry the second Eve and begin the process. (Moon regards the Cross as a symbol of the defeat of Christianity.)

Moon is now the third Adam, and he and his fourth wife and their twelve children, each of whom was born "sinless" (recent scandals among Moon's children have been very embarrassing), are to be the forerunners of the new perfect race - God's kingdom of heaven on earth. The primary sacrament of the Unification Church is the "holy wedding," the marriage of suitable mates, which is arranged and blessed by Father Moon.

#### Church of Scientology

The Church of Scientology was founded in the 1950s by L. Ron Hubbard (1911-1986), a science-fiction writer and journalist who, in 1949, boasted, "If a man wants to make a million dollars, the best way would be to start his own religion."

Scientology, the religion invented by Hubbard, is based on his book *Dianetics: The Modern Science of Mental Health*. According to Hubbard, humans are imprisoned by painful past memories and experiences, called *engrams*, which need to come to the surface so that they can be released and

"cleared." How is this accomplished? Through Dianetics and with the help of Scientology counselors (or "auditors"). When the engrams have been cleared, individuals can realize their inborn divine potential.

Hubbard established the Church of Scientology in Washington, D.C., in 1955; its headquarters are now in Los Angeles. Scientology believes that there are many gods (polytheism); that Jesus was a human whose mind was cleared; that there is no such thing as original sin or heaven or hell; and that salvation comes by clearing the mind so the soul can be released from the karmic cycle of reincarnation.

#### The New Age Movement: Blending East and West

The New Age movement (NAM) is difficult to define, but we have come full circle back to a form of Hinduism, because the New Age believes that God and humankind are actually one, a concept it calls *monism* (one-ism). Also, like Hinduism, it believes in the impersonal law of karma and in the transmigration of human souls or spirits.

In contrast to other religions, the New Age movement has no founder, has no scriptures or dogmas (the New Age is a patchwork of many different beliefs), has no organization and has no form of worship (there is no *one thing* to "worship"). The New Age is not a cult, nor is it satanic; it is a worldwide phenomenon whose adherents believe that the present age is coming to an end, soon to be replaced by a new age or era - the mythical Age of Aquarius, the age of new beginnings.

The underlying philosophy of the New Age is the belief in the oneness and interconnectedness of humanity, nature (Mother Earth) and the divine. Adherents embrace spirituality, ecology, women's rights and holistic healing, and they believe that yoga, meditation and channeling are ways of getting in touch with the divine.

The New Age was not well known until Hollywood actress Shirley MacLaine, the "prophetess" of the New Age, went public in the 1980s. It has come of age, with media publicity, books (even separate sections for them in bookstores), and talk-show coverage. Though loosely structured, the New Age movement has an estimated 12 million adherents.

The New Age believes that everything is of one "essence" - which has staggering implications: if *all* is God, and God *is* all, then men and women, who are part of the "all," are also God. (Christianity believes that we are created in God's image, not his essence.)

The goal of New Agers is to release their suppressed, hidden, higher selves so they can connect with the divine force or power of the universe. (The New Age "god" is not a personal God; it is a cosmic force or consciousness.) How is this possible? By altering one's consciousness through visualization techniques and hypnosis; by channeling-getting in touch with "spirit entities" to receive their "wisdom"-often aided by psychics and crystals; through yoga, meditation and other relaxation techniques; and by chanting mantras and listening to mood-altering music.

New Age thinking has been around for a long time (its roots go back to the Theosophical Society, founded in 1875). It came to the fore in the United States in the counterculture of the 1960s, a period when youth and others began to question and challenge societal norms and views.

Today's interest is coming from three different directions. First, there is a rebellion against the cold, detached, impersonal materialism of science and technology. Second, there is a hunger for something deeper, more meaningful, more spiritual that many claim is not being satisfied by organized religion. Third, there is a growing belief in monism and mysticism - the belief that the spirits of humans and the divine are one and that it is possible to experience the transcendent divine in a personal way.

#### The New Age versus Christianity

New Age thinking holds that all religions are the same and that Jesus, Buddha, Krishna, Muhammad and the founders of other religions all taught the same thing - how to be at one with God.

From a Christian point of view, the New Age movement is a great heresy: if all is *one*, then God is not the eternal, transcendent Creator of the universe; and if humans are "gods," then Jesus is not the only begotten Son of God; and if we are all "gods" or part of God, then Jesus' death on the cross accomplished nothing.

According to the New Age, there is no need for Jesus. What is needed, instead, is direction so that all may realize their unlimited potential by connecting with the supernatural soul of the universe-and repeated reincarnations may be required until this is achieved.

#### Do All Religions Lead to God?

In today's world of religious pluralism, Christians are in constant contact with people of different faiths. The question is often asked, do all religions lead to God? The answer is that other religions and beliefs may lead to "a" god but not to the triune, personal, knowable God of Christianity. Hinduism, Buddhism, Islam, Mormonism, Christian Science and the other religions and beliefs in this chapter all confess a god (or gods) different from the God of Christianity.

According to Bruce Winter, the director of Tyndale House (Cambridge, England), the difference between Christianity and all other religions is the difference between doing and done. In all other religions, salvation comes through "doing" something. In Christianity, everything necessary for salvation has already been "done" (by Jesus on the Cross); all we have to do is accept the done-ness.

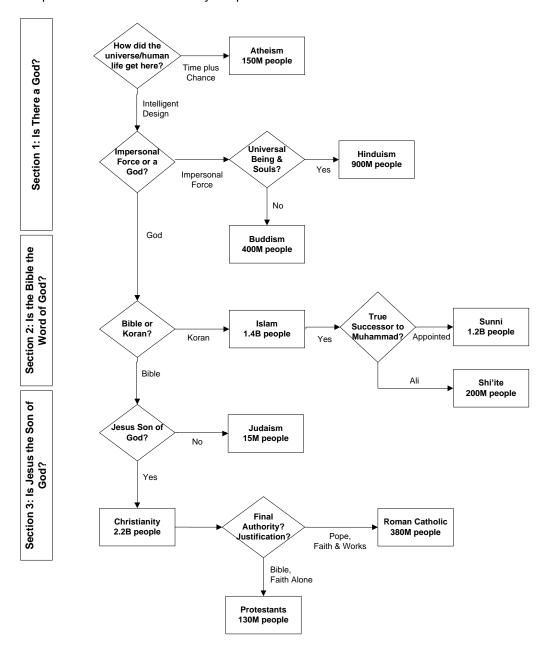
Some may say that all religions are equally valid, but that doesn't make it true. Although it's true many religions talk about God and offer paths for reaching him, the reality is you can't choose them all and it isn't wise to assume that any path will do. It's like saying that taking any road will get you to where you want to go – each road leads in a different direction.

#### **Discussion Questions**

- Have you had any experiences with religions other than Christianity? What were they? Did they make you more or less open to Christianity?
- What do you feel are the fundamental differences between the six major religions: Christianity, Hinduism, Buddhism, Islam, Judaism and Atheism?
- Do you believe there are multiple ways to heaven? If so, describe how this can be. If not, how
  do you explain the billions of people who do not believe in the "one true" religion?

# **CONCLUSION**

Obviously, looking at the previous chapter, there are many different religions in the world, each with their own belief systems, tenants and paths to God. So how does one choose the right religion? Let's revisit the flowchart presented in the introductory chapter of this book:



This flowchart was designed to help guide readers through the basic differences between the six major faith systems of the world: Christianity, Islam, Hinduism, Buddhism, Judaism and Atheism (all the major belief systems of the world that claim more than 100 million followers plus Judaism). Although there are other smaller religions not included in this flowchart, these smaller religions share core belief systems with one of these six.

As presented in the introduction, there are four key questions that need to be answered to guide one through the process of deciding between the major faith systems of the world:

- 1. How did the universe/human life get here?
- 2. Is intelligent design from an impersonal force or a personal God?
- 3. Is the Bible or the Koran the word of God?
- 4. Is Jesus the son of God?

The purpose of this book has been to help you answer these questions for yourself. In the first section of this book, we looked at the first question and the case for God, evaluating the evidence from the universe, physics, astronomy, biology, the fossil record, biochemistry, philosophy and the mind. Considering this evidence, most rational people (and, indeed, 98% of the world as a whole) will conclude that the universe and human life could not have happened by random chance or Darwinian evolution. The odds of this happening are beyond the realm of believability, and the design exhibited by biological machines, DNA, etc. clearly support an intelligent designer.

We then looked in the second section of this book at the second question and considered the nature of the creator. Is the intelligent design exhibited in the universe from an impersonal force or a personal God? We saw that the creator must be uncaused, beginningless, timeless, immaterial, personal, powerful, highly intelligent, active, precise, caring, creative, sentient, invisible, rational, emotional and view creation in a fatherly manner based on the evidence we evaluated. In short, this is not a picture of the god of abstract deism, who supposedly formed the universe and then abandoned it. Rather, it is the picture of a personal God.

In the third section of this book, we looked at the third question and the case for the Bible as the inspired word of God. Based on the evidence presented and looking at prophecy and the documentary evidence for the Old and New Testaments, most rational people will conclude that the Bible is the true word of God.

Finally, in the forth section of this book, we looked at the fourth question and evaluated the evidence for Jesus and his claim to be the son of God based on the evidence of his resurrection, archeology, prophecy, his miracles, his followers and the impact Jesus Christ has had on history.

It is this author's hope that this book has helped you decide that Christianity is the most credible belief system and most clearly matches the evidence we observe across all the major subject areas we evaluated. If you are already a Christian, it is my hope that this book has helped you more firmly establish the evidence for why you believe.

#### Pascal's Wager

If you are not a Christian, and despite the evidence presented in this book, are struggling with the question of faith in Jesus Christ, there is perhaps no better argument for a skeptic than Pascal's Wager. Blaise Pascal was a French mathematician, physicist, and religious philosopher. He was a child prodigy who made important contributions to the construction of mechanical calculators, the study of fluids, and clarified the concepts of pressure and vacuums. Pascal also wrote in defense of the scientific method. Most of all, Pascal was a mathematician of the first order.

Pascal's Wager is an attempt to justify belief in God not with an appeal to evidence for his existence but rather with an appeal to self-interest. It is in our interests to believe in the God of Christianity, the argument suggests, and it is therefore rational for us to do so.

Pascal's Wager seeks to justify Christian faith by considering the various possible consequences of belief and disbelief in the God of Christianity. If we believe in the Christian God, the argument runs, then if he exists then we will receive an infinitely great reward in heaven while if he does not then we will have lost little or nothing. If we do not believe in the Christian God, the argument continues, then if he exists then we will receive an infinitely great punishment in hell while if he does not then we will have gained little or nothing. The possible outcomes of belief in the Christian God, then, are on balance better than the possible outcomes of disbelief in the Christian God. It is better to either receive an infinitely great reward in heaven or lose little or nothing than it is to either receive an infinitely great punishment in hell or gain little or nothing.

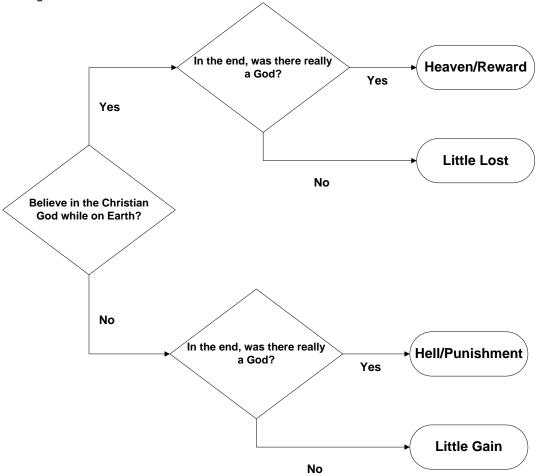


Figure 26: Pascal's Wager

The conclusion that Pascal's Wager draws from this is that belief in the Christian God is the rational course of action, even if there is no evidence that he exists. If the Christian God does not exist then it is of little importance whether we believe or disbelieve in him. If the Christian God does exist then it is of great importance that we do believe in him. In order to cover ourselves in all circumstances, therefore, we ought to believe that the Christian God exists. A formal statement of this argument might be constructed as follows:

#### Pascal's Wager

- 1. It is possible that the Christian God exists and it is possible that the Christian God does not exist.
- 2. If one believes in the Christian God then if he exists then one receives an infinitely great reward and if he does not exist then one loses little or nothing.
- 3. If one does not believe in the Christian God then if he exists then one receives an infinitely great punishment and if he does not exist then one gains little or nothing.
- 4. It is better to either receive an infinitely great reward or lose little or nothing than it is to either receive an infinitely great punishment or gain little or nothing.

#### Therefore:

- 1. It is better to believe in the Christian God than it is not to believe in the Christian God.
- 2. If one course of action is better than another then it is rational to follow that course of action and irrational to follow the other.

#### Therefore:

It is rational to believe in the Christian God and irrational not to believe in the Christian God.

#### **Accepting Christ**

If God is real and Jesus Christ was indeed the son of God, then we must accept the teachings of Christ. One of the topics that that Christ spoke most about during his ministry on earth was heaven and hell, which he described as very real places. Jesus was trying to communicate not only the importance of being aware of heaven and hell, but also the consequences for those who would fail to take heed of his message. People who reject Christ face the prospect of eternal punishment in the Lake of Fire. Although most people don't like to believe there is a hell, the Bible describes it as a literal place – a place of isolation from God and torment for those who rejected him. The English philosopher John Locke once said "Hell is truth seen too late". Unfortunately, all too many people will discover that this is the case.

Why must there be a hell? Why would such a loving God allow humans to end up in such a place? The answer lies in the nature of hell itself. Although most people think of hell as a place of punishment, it really isn't. Hell is not God's way of 'getting back' at people who didn't believe in him. Rather, it is a place where people who rejected him will ultimately get their way – they will spend eternity separated from God separated from the blessings he bestows upon those who trust in him. If heaven is the ultimate uniting of God with his people, then hell is the ultimate separation of God from those who rejected him. It is for this reason that the message of the Bible must be spread, and why the decisions a person makes on earth are so critical – and eternal in nature.

How can one come to know Jesus and be saved from the Lake of Fire? Jesus said:

I am the way and the truth and the life. No one comes to the Father except through me. (John 14:6).

Jesus was making a very narrow and exclusive statement – that no one can be saved except through him. He was proclaiming that he is the one and only way to salvation. This is what sets Christianity apart from all other world's religions. Namely, that salvation is based on *faith in what Jesus did* and not on faith in *what we can do*. This is different than the Old Testament days where salvation was accomplished through blood sacrifices of animals. When Christ came, God's plan for salvation changed. Christ became the ultimate sacrifice. Now, man can be saved simply by accepting the pardon for sin that Christ provided through his death. All people on the earth have already been pardoned – the issue is whether or not a person will accept Christ's pardon.

The obvious question then, is what must a person do to be saved? The Bible is clear – a person must simply accept the free gift of Christ's sacrifice on the Cross. Salvation is a gift, and all one needs to do is

reach out and accept it. The Bible says: "For the wages of sin is death, but the free gift of God is eternal life in Christ Jesus our Lord." (Romans 6:23). Everyone has sinned. Being 'good' is not enough in God's eyes. The Bible says: "all have sinned and fall short of the glory of God". (Romans 3:23)

How can one come to know God? The Bible says:

For God so loved the world, that he gave his one and only son, that whoever believes in him shall not perish but have eternal life. For God did not send his Son into the world to condemn the world, but to save the world through him. Whoever believes in him is not condemned, but whoever does not believe stands condemned already because he has not believed in the name of God's one and only Son. (John 3:16-18)

If you confess with your mouth, 'Jesus is Lord,' and believe in your heart that God raised him from the dead, you will be saved. For it is with your heart that you believe and are justified, and it is with your mouth that you confess and are saved. (Romans 10:9-10)

Everyone who acknowledges that he or she is a sinner, believes in Jesus Christ and his sacrifice on the Cross, and puts his or her trust in him will be saved. It's that simple. By then seeking to establish a relationship with him through prayer, Bible study and fellowship in a local Church, one can grow in his or her relationship with Christ and further develop as a Christian.

It is my hope in writing this book that all readers will either come to a personal relationship with Christ, or deepen their existing relationship with Christ by better understanding the rational basis for the Christian faith.

Bryan P. Mistele

# **Appendix**

# **APPENDIX A**

# IS THE CREATION ACCOUNT REAL?1

Over the past century, as "science" has come in conflict with "Christianity" as a result of Darwinism, some Christians have sought to discount the creation account as told in Genesis 1-11. In an attempt to reconcile macro evolution with the Bible, various people have suggested that the creation account must be symbolic, or figurative, rather than an actual historical telling of how the earth was created.

As we have seen in this book, there is absolutely no reason to set Genesis 1-11 off from the rest of Genesis, the rest of the Old Testament, and the rest of the Bible as a special, indeed dubious, kind of writing. Genesis 1-11 is either myth or history. That section of Scripture is not, and cannot be, a third thing: mythical history, or historical myth. Why? The gospel itself is at stake. If one believes that Genesis 1-11 is myth, then the divinity of Scripture being "God-breathed," as II Timothy 3:16 puts it is denied, and thus Scripture's loses its authority, reliability, clarity, sufficiency, and unity.

There is no doubt that Christ and his apostles regarded the persons and events recorded in Genesis 1-11 as historical, and taught the New Testament church so to regard them, in Matthew 19:3-9; John 8:44; Matthew 24:37-41; Romans 5:12-21; I Corinthians 11:7-12; I Timothy 2:12-15; II Peter 3:5, 6; Acts 17:26, and other places. In addition, Hebrews 11:3 testifies to the historicity of the account of creation. Matthew 19:3 testifies to the historicity of the entire account of Adam and Eve. Romans 5:12 testifies to the historicity of the record of the fall. I Peter 3:20 testifies to the historicity of the Genesis flood. Acts 17:26 testifies to the historicity of the account of Babel.

If Genesis 1-11 is myth, the message of Scripture is abandoned, because Genesis 1-11 is the foundation of many core Christian doctrines. Genesis 1-11 sets forth the origin of all things: the universe, including time and space; man; marriage and the family; the basic ordering of man's life in a week of six days of work and one day of rest; sin; the curse and death, not only for the human race, but also for the brute creation; the gospel and the Savior who is promised by the gospel; the antithesis between godly and ungodly; and the nations. In addition, this passage is also the foundation of all Christian doctrines and ethics. It is the foundation of all the great doctrines of the faith: creation, fall, and redemption; man as the image of God; original sin and total depravity; atonement and, thus, the satisfying of the justice of a righteous God; and salvation by a substitute.

Specifically, Genesis 1-11 is the basis of:

- The doctrine of justification by faith alone. Martin Luther is our teacher here. Of the early chapters of Genesis, he said: "certainly the foundation of the whole of Scripture."
- The doctrine of man's sin and need for salvation. If mankind didn't fall according to Genesis 3, then there is no need for a redeemer.
- The doctrine of marriage between a man and a woman. If Genesis 2 is not a factual account of a historical institution of marriage by the Creator, then one is not bound by any law of faithfulness in marriage. One may live just as I please in marriage, or outside of marriage. At the beginning of the 21st century in a depraved Western society, it is even necessary to point out that Genesis 1-11 is the foundation of the calling to marry someone of the opposite sex.

- Upon Genesis 1-11 depends the doctrine of an eschatological destruction of the world, out of which will come a new world of righteousness.
- Upon Genesis 1-11 depends our knowledge of God as Creator, as covenant Friend, as Judge, and as Savior. "In the beginning, God!" To transform Genesis 1-11 into myth is to make atheists out of us all. If Genesis 1-11 is myth, atheism is warranted.

If Genesis 1-11 is not history, all these doctrines are lost. Genesis 1-11 is the foundation of the Christian life. It is the foundation of the calling to love, fear, obey, and serve God our Creator and Savior. This is the primary duty of our life. And this is the primary cause of the attack on the doctrines of creation and the fall by the theory of evolution, which attack is accommodated by reducing the opening chapters of the Bible to myth. Darwinian evolution is not physical science, not even mistaken physical science. It is spiritual revolution against the sovereign Creator, before whom men and women must bow and to whom they are responsible.

Why then have Christians come to question the historicity of Genesis 1-11? This has been possible because the literal interpretation of Scripture has been challenged and questioned by many modern churches. There has been a desire among Christians to accommodate the church's thinking to the thinking of the world, the desire to make Christianity conform to the culture. One aspect of this is the conviction that to be respectable, to be attractive even, to educated modern man, the churches must adapt their thinking, their confession, and their Scriptures to the most recent scientific theory.

Zachary Hayes said "One cannot open up the possibility of holding some form of evolution without opening a Pandora's Box. Those who open that box must be willing to assume responsibility for dealing with the kinds of problems which emerge in many areas of theology."

# **APPENDIX B**

# **CREATION SCRIPTURES**<sup>2</sup>

Reference	Scripture
Genesis 1,2	"In the beginning God created the heavens and the earth"
Exodus 20:11	"For in six days the LORD made the heavens and the earth, the sea, and all that is
	in them,"
Exodus 31:17-18	"for in six days the LORD made the heavens and the earth, and on the seventh
	day he abstained from work and rested. When the LORD finished speaking to
	Moses on Mount Sinai, he gave him the two tablets of stone inscribed by the finger
	of God."
Deuteronomy 4:32	"Ask now about the former days, long before your time, from the day God created man on earth; "
Nehemiah 9:6	"You alone are the LORD. You made the heavens, even the highest heavens, and
	all the starry host, the earth and all that is on it, the seas and all that is in them.
	You give life to everything, and the multitudes of heaven worship you."
Job 38:4-5a	"Where were you when I laid the earth's foundation? Tell me if you understand.
	Who marked off its dimensions? Surely you know!"
Psalm 19:1	"The heavens declare the glory of God; the skies proclaim the work of his hands."
Psalm 33:6,9	"By the word of the LORD were the heavens made, their starry host by the breath
	of his mouth."
	"For he spoke, and it came to be; he commanded, and it stood firm."
Psalm 104: 5-8	"He set the earth on its foundations; it can never be moved. You covered it with the
	deep as with a garment; the waters stood above the mountains. But at your rebuke
	the waters fled, at the sound of your thunder they took to flight; they flowed over
	the mountains, they went down into the valleys, to the place you assigned for them."
Psalm 148:5	"Let them praise the name of the LORD, for he commanded and they were created."
Isaiah 40:25-26	"To whom will you compare me? Or who is my equal? says the Holy One. Lift your
	eyes and look to the heavens: Who created all these?"
Isaiah 42:5	"This is what God the LORD says - he who created the heavens and stretched
	them out, who spread out the earth and all that comes out of it, who gives breath to
	its people, and life to those who walk on it; "
Isaiah 43:7	"- everyone who is called by my name, whom I created for my glory, whom I
	formed and made."
Isaiah 45:8	"You heavens above, rain down righteousness; let the clouds shower it down. Let
	the earth open wide, let salvation spring up, let the righteousness grow with it; I,
	the LORD, have created it."
Isaiah 45:12	"It is I who made the earth and created mankind upon it. My own hands stretched
	out the heavens; I marshaled their starry hosts."
Isaiah 45:18	"For this is what the LORD says - he who created the heavens, he is God; he who
	fashioned and made the earth, he founded it; he did not create it to be empty, but
	formed it to be inhabited - he says: I am the LORD, and there is no other."

Jaramiah 20:47	"Ab Coversion LODD you have made the become and the centh business
Jeremiah 32:17	"Ah, Sovereign LORD, you have made the heavens and the earth by your great power and outstretched arm. Nothing is too hard for you."
Malachi 2:10	"Have we not all one Father? Did not one God create us?"
Matthew 19:4	"Haven't you read, he replied, that at the beginning the Creator made them male and female, "
Mark 13:19	"because those will be days of distress unequaled from the beginning, when God created the world,"
John 1:1-3	"In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made."
John 5:46-47	"If you believed Moses, you would believe me, for he wrote about me. But since you do not believe what he wrote, how are you going to believe what I say?"
Acts 4:24	"When they heard this, they raised their voices together in prayer to God; 'Sovereign Lord', they said, 'you made the heaven and the earth and the sea, and everything in them."
Acts 17:24-26	"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 hands. And he is not served by human hands, as if he needed anything, because he himself gives all men life and breath and everything else. From one man he made every nation of men, that they should inhabit the whole earth"
Romans 1:19-20,25	"Since what may be known about God is plain to them, because God has made it plain to them. For 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 men are without excuse."  "They exchanged the truth of God for a lie, and worshipped and served created things rather than the Creator - who is forever praised, Amen."
Romans 5:12	"Therefore, just as sin entered the world through one man, and death through sin, and in this way death to all men, because all sinned"
1 Corinthians 15:21	"For since death came through a man, the resurrection of the dead comes also through a man."
Ephesians 3:9	"and to make plain to everyone the administration of this mystery, which for ages past was kept hidden in God, who created all things."
Colossians 1:16-17	"For by him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers or authorities; all things were created by him and for him. He is before all things, and in him all things hold together."
Hebrews 11:3	"By faith we understand that the universe was formed at God's command, so that what is seen was not made out of what was visible."
2 Peter 3:3-6	"First of all, you must understand that in the last days scoffers will come, scoffing and following their own evil desires. They will say, Where is this coming he promised? Ever since our fathers died, everything goes on as it has since the beginning of creation.' But they deliberately forget that long ago by God's word the heavens existed and the earth was formed out of water and by water. By these waters also the world of that time was deluged and destroyed."
Revelations 4:11	"you are worthy, our Lord and God, to receive glory and honor and power, for you created all things, and by your will they were created and have their being."
Revelations 10:6	"And he swore by him who lives forever and ever, who created the heavens and all that is in them, the earth and all that is in it, and the sea and all that is in it."

# **APPENDIX C**

# **SCIENTISTS WHO BELIEVED THE BIBLE**<sup>3</sup>

The following is a partial list of notable scientists who believed in creation and the Bible:

Scientist	Contributions
Roger Bacon	(1214-1294) Mathematics and Philosophy of Science
Treger Basen	Wrote an encyclopedia of science
William of Ockham	(1288-1348) Mathematics and Logic
	Delineated rules of logic
Nicolas of Oresme	(1320-1382) Physics and Mathematics
The side of Greenie	Anticipated thermodynamics and mechanics
Robert Grosseteste	(1168-1253) Experimenter and reformer
	Founded Oxford school
	Explained the rainbow by scientific means
Leonardo Da Vinci	(1452-1519) Art, Engineering, Anatomy, and Geology
	Designer and inventor of futuristic devices
	Made detailed drawings of human anatomy
John Napier	(1550-1617) Logarithms and Trigonometry
.,	Invented logarithms, trig functions, and math formulas
	(Napier's Bones)
Sir Francis Bacon	(1561-1626) Philosophy of Science
	Credited for formulating the scientific method
	"There are two books laid before us to study, to prevent our falling into
	error: first, the volume of the Scriptures, which reveal the will of God; then
	the volume of the Creatures, which express his power." - Sir Francis
	Bacon
Johannes Kepler	(1571-1630) Physics and Mathematics
·	Kepler's three laws of planetary motion
	"Since we astronomers are priests of the highest God in regard to the book
	of nature, it befits us to be thoughtful, not of the glory of our minds, but
	rather, above all else, of the glory of God." - Johannes Kepler
Galileo Galilei	(1564-1642) Astronomy and Physics
	First to turn a telescope to the heavens
	Discovered Jupiter's moons, sun spots, lunar craters, and phases of
	Venus
Blaise Pascal	(1623-1662) Physics, Hydrodynamics, and Mathematics
	The first mechanical calculator
	Pascal's principle of fluid pressure
	Mathematics of conic sections and probability
	"We keep hold of him only by the ways taught in the Gospel. Renunciation,
	total and sweet. Total submission to Jesus Christ and to my director.
	Eternally in joy for a day's training on earth. 'I will not forget Thy words'
	(Psalm 119:16). Amen." - Blaise Pascal
William Harvey	(1578-1657) Medicine
	First to fully describe the circulatory system
	Elected president of College of Physicians

Robert Boyle	(1627-1691) Chemistry and Physics
	Father of modern chemistry
	Insisted on experimentation for scientific proof
	Boyle's Law relates gas pressure to volume
	Spent much of his time studying the Bible and invested his own money in
	Bible translation. He also sponsored a series of talks known as the "Boyle
	Lectures" that taught Christians about the facts for their faith.
Antonie Van	(1632-1723) Microscopy
Leeuwenhoek	Invented a 200x microscope
	Discovered bacteria and blood cells
Sir Isaac Newton	(1642-1727) Physics, Optics, Mechanics, Astronomy, and Mathematics
	Co-inventor of calculus
	Law of universal gravity
	Three laws of motion
	Reflecting telescope
	Wrote papers defending creation and the Bible. Believed that the
	worldwide flood accounted for most of earth's features. He also believed
	in the six-day creation account of Genesis.
	"I have a fundamental belief in the Bible as the Word of God, written by
	men who were inspired. I study the Bible daily." - Sir Isaac Newton
	"This most beautiful system of the sun, planets, and comets could only
	proceed from the counsel and dominion of an intelligent and powerful
	Being" - Sir Isaac Newton
John Woodward	(1665-1728) Paleontology
	Believed the fossil record showed great evidence for the worldwide flood.
Carolus Linnaeus	(1707-1778) Taxonomy, Botany, and Medicine
	Father of Taxonomy
	Originator of modern classification system for plants and animals
	, ,
Sir William Herschel	(1738-1822) Astronomy
	Discovered double stars and the planet Uranus
	Catalogued nebulae and stars by the thousands
	Constructed the largest telescopes of his day
John Herschel	(1792-1871) Astronomy and Chemistry
	Improved on his father's telescope
	Catalogued over 70,000 objects in the skies
Baron Georges Cuvier	(1769-1832) Comparative Anatomy and Vertebrate Paleontology
	Influential creationist just before Darwin
	Demonstrated the fact of extinction
Samuel F. B. Morse	(1791-1872) Art, Photography, and Electronics
	Inventor of the telegraph
	Designer of Morse Code
	"The nearer I approach to the end of my pilgrimage, the clearer is the
	evidence of the divine origin of the Bible, " -Samuel F, B. Morse
Charles Babbage	(1792-1871) Mathematics, Computer Science, Statistics
	First true general-purpose computer 100 years ahead of his time
	Inventor of the speedometer and skeleton key
Michael Faraday	(1791-1867) Physics, Electricity, Magnetism, and Chemistry
ĺ	His work formed the basis for the motor, generator, transformer, and
	electrolysis
James Prescott Joule	(1818-1889) Physics and Thermodynamics
	Proved the conservation of energy (First Law of Thermodynamics)
	Discovered the mechanical equivalent of heat
	Joule's Law of electricity (unit of energy, the <i>joule</i> , named in his honor)
<u> </u>	, , , , , , , , , , , , , , , , , , ,

	(4004 4070) PL 1 FL 4
James Clerk Maxwell	(1831-1879) Physics, Electromagnetics, and Statistical Thermodynamics
	Maxwell's equations of electromagnetism
	First color photograph
	Philosopher and poet against evolutionism
William Thomson, Lord	(1824-1907) Physics and Thermodynamics
Kelvin	Defined the concept of energy
	Formalized the First and Second Laws of Thermodynamics
	Determined "absolute zero" and Kelvin Scale
	Knighted and awarded 21 honorary doctorates
Gregor Mendel	(1822-1884) Genetics and Botany
	The father of genetics
	Performed 28,000 tedious cross-breeding experiments with peas
	Discovered dominant and recessive genes
	Published his work in 1866, seven years after Darwin's, but his work was
	ignored for 35 years
Louis Pasteur	(1822-1895) Medicine, Chemistry, Physics, Bacteriology, and Immunology
Louis i asteui	Contributed more to the saving of human lives than any other man
	Germ theory of disease
	Law of Biogenesis
	Pasteurization of food
	Developed many vaccines
	Opposed Darwinism
	"The more I study nature, the more I stand amazed at the work of the
	Creator." - Louis Pasteur
Joseph Lister	(1827-1912) Surgery, Medicine, and Hygiene
	Originated antiseptic surgery using chemical disinfectants
Rudolph Virchow	(1821-1902) Pathology and Medicine
	Father of Pathology
	Identified leukemia and other cellular diseases
	Strong opponent of the teachings of Darwin
Henrietta Swan Leavitt	(1868-1921) Astronomy
	Measured over 2000 Cepheid variable stars
	Discovered the Period-Luminosity relation
George Washington	(1864-1943) Agricultural Chemistry
Carver	Developed 325 products from peanuts and 188 from sweet potatoes
Werner von Braun	(1912-1977) Rocket Scientist
	Pioneer of space exploration
	Mastermind of the Apollo moon rocket
	Ushered in the era of planetary science
	Dedicated Christian
	"Manned space flight is an amazing achievement, but it has opened for
	mankind thus far only a tiny door for viewing the awesome reaches of
	space. An outlook through this peephole and the vast mysteries of the
	universe should only confirm our belief in the certainty of its Creator." –
	Werner von Braun
lomoo Irwin	
James Irwin	(1930-1991) Apollo 15 Astronaut and Biblical Archaeologist
	One of only 10 man who have walled at the control
	One of only 12 men who have walked on the moon Led search on Ararat for Noah's Ark

# **APPENDIX D**

# FINELY TUNED PARAMETERS OF THE UNIVERSE<sup>4</sup>

Parameter	Impact if Changed
Strong nuclear force	If larger: no hydrogen would form; atomic nuclei for most life-essential
constant	elements would be unstable; thus, no life chemistry
Constant	elements would be unstable, thus, no line chemistry
	If smaller: no elements heavier than hydrogen would form: again, no life
	chemistry
Weak nuclear force constant	If larger: too much hydrogen would convert to helium in big bang; hence, stars would convert too much matter into heavy elements making life chemistry impossible
	If smaller. too little helium would be produced from big bang; hence, stars would convert too little matter into heavy elements making life chemistry impossible
Gravitational force constant	If larger: stars would be too hot and would burn too rapidly and too unevenly for life chemistry
	If smaller: stars would be too cool to ignite nuclear fusion; thus, many of the
	elements needed for life chemistry would never form
Electromagnetic force	If greater: chemical bonding would be disrupted; elements more massive than
constant	boron would be unstable to fission
D :: (	If lesser: chemical bonding would be insufficient for life chemistry
Ratio of electromagnetic force	If larger: all stars would be at least 40% more massive than the sun; hence, stellar burning would be too brief and too uneven for life support
constant to gravitational	Stellar burning would be too brief and too unevertion life support
force constant	If smaller: all stars would be at least 20% less massive than the sun, thus
Toros soriotarit	incapable of producing heavy elements
Ratio of electron to	If larger: chemical bonding would be insufficient for life chemistry
proton mass	, ,
	If smaller: same as above
Ratio of number of	If larger: electromagnetism would dominate gravity, preventing galaxy, star,
protons to number of electrons	and planet formation
	If smaller: same as above
Expansion rate of the universe	If larger: no galaxies would form
	If smaller: universe would collapse, even before stars formed

Entropy level of the universe  If smaller, no proto-galaxies would form  Mass density of the universe  If smaller insufficient helium from big bang would cause stars to burn rapidly, too rapidly for life to form  If smaller: insufficient helium from big bang would result in a shortage of heavy elements  Velocity of light  If faster, stars would be too luminous for life support  If slower, stars would be insufficiently luminous for life support  If slower, stars would be insufficiently luminous for life support  Age of the universe  If older, no solar-type stars in a stable burning phase would exist in the right (for life) part of the galaxy  If younger, solar-type stars in a stable burning phase would not yet have formed  Initial uniformity of radiation  If less uniform: universe by now would be mostly black holes and empty space  Average distance between galaxies  If smaller, gravitational tug-of-wars would be mostly black holes and empty space  If smaller, gravitational tug-of-wars would destabilize the sun's orbit  If ess dense, star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If smaller, planetary orbits would be too sparse for rocky planets to form branchers and the stars are sund to be at least 30% less massive than the sun (Hesser all stars would be at least 30% less massive than the sun (Hesrer all stars would be at least 80% more massive than the sun (Herger universe would contain insufficient oxygen for life  If smaller, universe would contain insufficient carbon for life  If smaller, universe would contain insufficient carbon for life  If smaller, universe would contain insufficient carbon and oxygen for life  If smaller, universe would contain insufficient carbon and oxygen for life  If smaller, neutron decay would produce so many neutrons as to collapse all stars into neutron decay would produce so many neutrons as to collapse all stars into neutron stars or black holes		
## smaller. no proto-galaxies would form ## smaller: insufficient helium from big bang would cause stars to burn rapidly, too rapidly for life to form ## smaller: insufficient helium from big bang would result in a shortage of heavy elements  Velocity of light ## stars: stars would be too luminous for life support ## stars: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stower: stars would be insufficiently luminous for life support ## stars uniform: universe by now would be burning phase would not yet have formed ## stars uniform: universe by now would be mostly black holes and empty space ## stars uniform: universe by now would be mostly black holes and empty space ## stars universe would destabilize the sun's orbit ## smaller: gavitational tug-of-wars would destabilize the sun's orbit ## stars universe would be an enough in the history of the universe would be hampered by lack of material ## stars universe would be too unstable for life ## stars universe would be too unstable for life ## stars universe would be at least 30% less massive than the sun ## smaller: universe would contain insufficient oxygen for life ## smaller: universe would contain insufficient carbon for life ## smaller: universe would contain insufficient carbon and oxygen for life ## smaller: universe would contain insufficient carbon and oxygen for life ## smaller: unive	1	If larger. stars would not form within proto-galaxies
Mass density of the universe  If larger coverabundance of deuterium from big bang would cause stars to burn rapidly, too rapidly for life to form  If smaller: insufficient helium from big bang would result in a shortage of heavy elements  Velocity of light  If faster: stars would be too luminous for life support  If slower: stars would be insufficiently luminous for life support  If older: no solar-type stars in a stable burning phase would exist in the right (for life) part of the galaxy  If younger: solar-type stars in a stable burning phase would not yet have formed  Initial uniformity of radiation  If more uniform: stars, star clusters, and galaxies would not have formed radiation  If larger: star formation late enough in the history of the universe would be hampered by lack of material  If smaller: gravitational tug-of-wars would destabilize the sun's orbit  If eless dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If larger: heavy element density would be too sparse for rocky planets to form between stars  If larger: heavy element density would be too sparse for rocky planets to form from structure splitting of spectral lines)  If larger: all stars would be at least 30% less massive than the sun (describing the fine-structure splitting of spectral lines)  If greater: life would be exterminated by the release of radiation  If smaller: universe would contain insufficient matter for life  If larger: universe would contain insufficient carbon for life  If larger: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon for life  If silver: neavy element fusion would generate catastrophic explosions in all the stars  If larger: neiverse would contain insufficient carbon for life  If silver: neavy element fusion would generate catastrophic explosions in all the stars  If larger: neiverse would contain insufficie		If smaller, no proto-galaxies would form
elements   If faster. stars would be too luminous for life support	•	If larger: overabundance of deuterium from big bang would cause stars to burn
Age of the universe  If slower: stars would be insufficiently luminous for life support  If older: no solar-type stars in a stable burning phase would exist in the right (for life) part of the galaxy  If younger: solar-type stars in a stable burning phase would not yet have formed  Initial uniformity of radiation  If imore uniform: stars, star clusters, and galaxies would not have formed  If less uniform: universe by now would be mostly black holes and empty space  If larger: star formation late enough in the history of the universe would be hampered by lack of material  Density of galaxy cluster  If smaller: gravitational tug-of-wars would distabilize the sun's orbit  If elss dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If less dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If larger: heavy element density would be too sparse for rocky planets to form larger: planetary orbits would be too unstable for life  Fine structure constant (describing the fine-structure splitting of spectral lines)  If larger than 0.06: matter would be unstable in large magnetic fields  If larger than 0.06: matter would be unstable in large magnetic fields  If smaller: all stars would be at least 80% more massive than the sun  If smaller: universe would contain insufficient matter for life  If larger: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of ®Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If larger: no element heavier than beryllium would form; thus, no life chemistry  If lower: neutron decay would yield too few neutrons for the formation of many life-essential elements		
Age of the universe    If older. no solar-type stars in a stable burning phase would exist in the right (for life) part of the galaxy   If younger: solar-type stars in a stable burning phase would not yet have formed   Initial uniformity of radiation	Velocity of light	If faster. stars would be too luminous for life support
Initial uniformity of radiation   If younger: solar-type stars in a stable burning phase would not yet have formed   If more uniform: stars, star clusters, and galaxies would not have formed   If more uniform: universe by now would be mostly black holes and empty space   If larger: star formation late enough in the history of the universe would be hampered by lack of material   If smaller: gravitational tug-of-wars would destabilize the sun's orbit   If enser: galaxy collisions and mergers would disrupt the sun's orbit   If less dense: star formation late enough in the history of the universe would be hampered by lack of material   If larger: heavy element density would be too sparse for rocky planets to form   If larger: planetary orbits would be too sparse for rocky planets to form   If larger: planetary orbits would be unstable for life   If larger than 0.06: matter would be unstable in large magnetic fields   If smaller: all stars would be at least 30% less massive than the sun   If larger than 0.06: matter would be unstable in large magnetic fields   If smaller: all stars would be at least 80% more massive than the sun   If smaller: universe would contain insufficient matter for life   If larger: universe would contain insufficient carbon for life   If smaller: universe would contain insufficient carbon for life   If smaller: same as above   If slower: heavy element fusion would generate catastrophic explosions in all the stars   If sater: no element heavier than beryllium would form; thus, no life chemistry   If higher: neutron decay would produce so many neutrons as to collapse all		
Initial uniformity of radiation  If more uniform: stars, star clusters, and galaxies would not have formed radiation  If less uniform: universe by now would be mostly black holes and empty space  If larger. star formation late enough in the history of the universe would be hampered by lack of material  Density of galaxy cluster  If smaller: gravitational tug-of-wars would destabilize the sun's orbit  If less dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If larger: heavy element density would be too sparse for rocky planets to form between stars  If smaller: planetary orbits would be too unstable for life  Fine structure constant (describing the fine-structure splitting of spectral lines)  If larger all stars would be at least 30% less massive than the sun  If larger than 0.06: matter would be unstable in large magnetic fields  If smaller: all stars would be at least 80% more massive than the sun  Decay rate of protons  If greater: life would be exterminated by the release of radiation  If smaller: universe would contain insufficient matter for life  If larger: universe would contain insufficient carbon for life  If larger: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If solver: heavy element heavier than beryllium would form; thus, no life chemistry  If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  If lower: neutron decay would produce so many neutrons as to collapse all	Age of the universe	
Average distance between galaxies     If less uniform: universe by now would be mostly black holes and empty space   If larger: star formation late enough in the history of the universe would be hampered by lack of material   If smaller: gravitational tug-of-wars would destabilize the sun's orbit		formed
Average distance between galaxies  If larger: star formation late enough in the history of the universe would be hampered by lack of material  If smaller: gravitational tug-of-wars would destabilize the sun's orbit  If denser: galaxy collisions and mergers would disrupt the sun's orbit  If less dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If larger: heavy element density would be too sparse for rocky planets to form between stars  If smaller: planetary orbits would be too unstable for life  Fine structure constant (describing the fine-structure splitting of spectral lines)  If larger: all stars would be at least 30% less massive than the sun (describing the fine-structure splitting of spectral lines)  If greater: life would be exterminated by the release of radiation  If smaller: all stars would contain insufficient matter for life  If larger: universe would contain insufficient carbon for life  If larger: universe would contain insufficient carbon and oxygen for life  If smaller: universe would contain insufficient carbon and oxygen for life  If larger: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  If slower: neavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  If higher: neutron decay would produce so many neutrons as to collapse all		
hampered by lack of material  If smaller: gravitational tug-of-wars would destabilize the sun's orbit  Density of galaxy cluster  If denser: galaxy collisions and mergers would disrupt the sun's orbit  If less dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If smaller: planetary orbits would be too sparse for rocky planets to form between stars  If smaller: planetary orbits would be too unstable for life  Fine structure constant (describing the fine-structure splitting of spectral lines)  If larger than 0.06: matter would be unstable in large magnetic fields  If smaller: all stars would be at least 80% more massive than the sun  If greater: life would be exterminated by the release of radiation  If smaller: universe would contain insufficient matter for life  If larger: universe would contain insufficient oxygen for life  If smaller: universe would contain insufficient carbon for life  If larger: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  If higher: neutron decay would produce so many neutrons as to collapse all	Average distance	
Density of galaxy cluster  If denser. galaxy collisions and mergers would disrupt the sun's orbit  If less dense: star formation late enough in the history of the universe would be hampered by lack of material  Average distance between stars  If larger: heavy element density would be too sparse for rocky planets to form life structure constant (describing the fine-structure splitting of spectral lines)  If larger: all stars would be at least 30% less massive than the sun  If larger than 0.06: matter would be unstable in large magnetic fields  If smaller: all stars would be at least 80% more massive than the sun  If smaller: all stars would be exterminated by the release of radiation  If smaller: universe would contain insufficient matter for life  If larger: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon and oxygen for life  If smaller: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  If lower: neutron decay would produce so many neutrons as to collapse all		
Average distance between stars  If larger. heavy element density would be too sparse for rocky planets to form between stars  If smaller. planetary orbits would be too unstable for life  Fine structure constant (describing the fine- structure splitting of spectral lines)  If larger than 0.06: matter would be unstable in large magnetic fields  If smaller. all stars would be at least 80% more massive than the sun  If smaller. all stars would be exterminated by the release of radiation  If smaller universe would contain insufficient matter for life  If larger. universe would contain insufficient oxygen for life  If larger. universe would contain insufficient carbon for life  If larger. universe would contain insufficient carbon and oxygen for life  If larger. universe would contain insufficient carbon and oxygen for life  If smaller. same as above  Decay rate of Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  If higher: neutron decay would produce so many neutrons as to collapse all		If smaller: gravitational tug-of-wars would destabilize the sun's orbit
Average distance between stars  If larger: heavy element density would be too sparse for rocky planets to form between stars  If smaller: planetary orbits would be too unstable for life  Fine structure constant (describing the fine-structure splitting of spectral lines)  If larger than 0.06: matter would be unstable in large magnetic fields  If larger than 0.06: matter would be unstable in large magnetic fields  If smaller: all stars would be at least 80% more massive than the sun  If smaller: all stars would be at least 80% more massive than the sun  If smaller: universe would contain insufficient matter for life  If larger: universe would contain insufficient oxygen for life  If smaller: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  If higher: neutron decay would produce so many neutrons as to collapse all	, , ,	If denser: galaxy collisions and mergers would disrupt the sun's orbit
Fine structure constant (describing the fine-structure splitting of spectral lines)    If larger: all stars would be at least 30% less massive than the sun (describing the fine-structure splitting of spectral lines)    If larger: than 0.06: matter would be unstable in large magnetic fields		hampered by lack of material
Fine structure constant (describing the fine-structure splitting of spectral lines)  ### If larger all stars would be at least 30% less massive than the sun  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### If larger than 0.06: matter would be unstable in large magnetic fields  ### ### If larger magnetic fields  ### If larger universe would contain insufficient matter for life  ### If larger: universe would contain insufficient oxygen for life  ### If larger: universe would contain insufficient carbon for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon for life  ### If larger: universe would contain insufficient carbon for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon for life  ### If larger: universe would contain insufficient oxygen for life  ### If larger: universe would contain insufficient oxygen for life  ### If larger: universe would contain insufficient oxygen for life  ### If larger: universe would contain insufficient oxygen for life  ### If larger: universe would contain insufficient oxygen for life  ### If larger: un	_	
If larger than 0.06: matter would be unstable in large magnetic fields		
If smaller: all stars would be at least 80% more massive than the sun	(describing the fine-	
Decay rate of protons  If greater: life would be exterminated by the release of radiation  If smaller: universe would contain insufficient matter for life  12C to 16O nuclear energy level ratio  If larger: universe would contain insufficient oxygen for life  Ground state energy level for 4He  If larger: universe would contain insufficient carbon for life  If smaller: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of 8Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  Ratio of neutron mass to proton mass  If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  If lower: neutron decay would produce so many neutrons as to collapse all		
If smaller: universe would contain insufficient matter for life  12C to 16O nuclear energy level ratio  If smaller: universe would contain insufficient oxygen for life  Ground state energy level for 4He  If smaller: universe would contain insufficient carbon for life  If larger: universe would contain insufficient carbon and oxygen for life  If smaller: same as above  Decay rate of 8Be  If slower: heavy element fusion would generate catastrophic explosions in all the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  Ratio of neutron mass to proton mass  If higher: neutron decay would produce so many neutrons as to collapse all		If smaller: all stars would be at least 80% more massive than the sun
### 12C to 16O nuclear energy level ratio  ### If larger: universe would contain insufficient oxygen for life  ### If smaller: universe would contain insufficient carbon for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If smaller: same as above  ### Decay rate of *Be  ### If slower: heavy element fusion would generate catastrophic explosions in all the stars  ### If faster: no element heavier than beryllium would form; thus, no life chemistry  ### If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  #### If lower: neutron decay would produce so many neutrons as to collapse all	Decay rate of protons	If greater: life would be exterminated by the release of radiation
### 12C to 16O nuclear energy level ratio  ### If larger: universe would contain insufficient oxygen for life  ### If smaller: universe would contain insufficient carbon for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If larger: universe would contain insufficient carbon and oxygen for life  ### If smaller: same as above  ### Decay rate of *Be  ### If slower: heavy element fusion would generate catastrophic explosions in all the stars  ### If faster: no element heavier than beryllium would form; thus, no life chemistry  ### If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  #### If lower: neutron decay would produce so many neutrons as to collapse all		If smaller universe would contain insufficient matter for life
If smaller: universe would contain insufficient carbon for life   If larger: universe would contain insufficient carbon and oxygen for life   If smaller: same as above		
If larger: universe would contain insufficient carbon and oxygen for life   If smaller: same as above	,g,	If smaller: universe would contain insufficient carbon for life
Decay rate of <sup>8</sup> Be  ### If slower: heavy element fusion would generate catastrophic explosions in all the stars  #### If faster: no element heavier than beryllium would form; thus, no life chemistry  ### Ratio of neutron mass to proton mass  ### If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  #### If lower: neutron decay would produce so many neutrons as to collapse all		If larger: universe would contain insufficient carbon and oxygen for life
the stars  If faster: no element heavier than beryllium would form; thus, no life chemistry  Ratio of neutron mass to proton mass  If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  If lower: neutron decay would produce so many neutrons as to collapse all		If smaller: same as above
Ratio of neutron mass to proton mass  If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  If lower: neutron decay would produce so many neutrons as to collapse all	Decay rate of <sup>8</sup> Be	
Ratio of neutron mass to proton mass  If higher: neutron decay would yield too few neutrons for the formation of many life-essential elements  If lower: neutron decay would produce so many neutrons as to collapse all		If faster: no element heavier than beryllium would form; thus, no life chemistry
		If higher: neutron decay would yield too few neutrons for the formation of many

Initial excess of nucleons over anti-	If greater: radiation would prohibit planet formation
nucleons	If lesser: matter would be insufficient for galaxy or star formation
Polarity of the water molecule	If greater: heat of fusion and vaporization would be too high for life
	If smaller: heat of fusion and vaporization would be too low for life; liquid water would not work as a solvent for life chemistry; ice would not float, and a runaway freeze-up would result
Supernovae eruptions	If too close, too frequent, or too late: radiation would exterminate life on the planet
	If too distant, too infrequent, or too soon: heavy elements would be too sparse for rocky planets to form
White dwarf binaries	If too few: insufficient fluorine would exist for life chemistry
	If too many: planetary orbits would be too unstable for life
	If formed too soon: insufficient fluorine production
	If formed too late: fluorine would arrive too late for life chemistry
Ratio of exotic matter mass to ordinary matter	If larger: universe would collapse before solar-type stars could form
mass	If smaller: no galaxies would form
Number of effective dimensions in the early universe	If larger: quantum mechanics, gravity, and relativity could not coexist; thus, life would be impossible
	If smaller: same result
Number of effective dimensions in the	If smaller: electron, planet, and star orbits would become unstable
present universe	If larger: same result
Mass of the neutrino	If smaller: galaxy clusters, galaxies, and stars would not form
	If larger: galaxy clusters and galaxies would be too dense
Big bang ripples	If smaller: galaxies would not form; universe would expand too rapidly
	If larger: galaxies/galaxy clusters would be too dense for life; black holes would dominate; universe would collapse before life-site could form
Size of the relativistic dilation factor	If smaller: certain life-essential chemical reactions will not function properly
	If larger. same result
Uncertainty magnitude in the Heisenberg uncertainty principle	If smaller: oxygen transport to body cells would be too small and certain life- essential elements would be unstable
	If larger: oxygen transport to body cells would be too great and certain life- essential elements would be unstable
Cosmological constant	If larger: universe would expand too quickly to form solar-type stars

### APPENDIX E

### **DINOSAURS AND THE BIBLE**

### "Fitting" Dinosaurs with the Bible<sup>5</sup>

Dinosaurs are probably used more than anything else in an attempt to convince people that evolution is fact. So much so, that for many, the words 'dinosaur' and 'evolution' are almost synonymous. Over the years, many Christians have asked how dinosaurs 'fit with the Bible'. However, you don't 'fit' dinosaurs with the Bible. You see, what most people do is take man's fallible interpretations of the bones that are found and somehow try to fit these into the Bible. But the Bible is, among other things, a book of real history. God has revealed to us the major events of history from the beginning of time to enable us to build a way of thinking to understand the universe.

When one accepts the history time-line as outlined in Scripture, it is easy to explain dinosaurs. When one understands that land animals (including dinosaurs) were made on the sixth day of Creation - that there was no death (of animals or man) or disease (there are dinosaur bones that show evidence of diseases like cancer) before sin - that all the land animal kinds (including dinosaurs) were on the Ark - and that many animal groups (including dinosaurs) have died out since the Flood (because sin, the curse, and the Flood affected the world) - then it's easy to explain the history of dinosaurs. Also, there is a lot of evidence (such as carvings and paintings of dinosaur-like creatures) - and (unfossilized) dinosaur bone with red blood cells - that makes sense in the light of the Biblical account of history.

Did you know the word 'dinosaur' was first invented in 1841? Dinosaurs were probably called 'dragons' before that time. And the Hebrew word for 'dragon' is used a number of times in the Old Testament. There are also dragon legends prevalent in cultures around the world. It's possible these are accounts of encounters with beasts we today call dinosaurs.

The reason many Christians have been unable to give answers about dinosaurs is because they have tried to 'fit' them into the Bible - instead of using the Bible and its true account of history to explain them.

#### What were Dinosaurs Like?

We know from the fossil record the following:

- Some were 80 tons in weight
- Some were 100 feet long
- Some were 50 feet tall
- Some were the size of chickens
- · Some had horns and armor up to 6 inches thick
- Some flew
- Some swam in the ocean

#### Are Dinosaurs mentioned in the Bible?6

Yes, the Bible does seem to mention dinosaurs and state that dinosaurs walked the earth the same time as humans. There seems to be a reference to dinosaurs in the book of Job. Due to his great suffering, Job criticized the working of Jehovah in his life. Accordingly, the Lord, in a devastating examination of the patriarch, illustrated his own power and wisdom (and, by contrast, Job's pathetic ignorance) with a series of examples from nature (Job 38-41). In this connection, reference is made in chapter forty to a creature known as "behemoth" (vv. 15-24) and in chapter forty-one to a "leviathan" (vv. 13-22):

Look at the behemoth, which I made along with you and which feeds on grass like an ox. What strength he has in his loins, what power in the muscles of his belly! His tail sways like a cedar; the sinews of his thighs are close-knit. His bones are tubes of bronze, his limbs like rods of iron. (Job 40:15-18)

Who can strip off his outer coat? Who would approach him with a bridle? Who dares open the doors of his mouth, ringed about with his fearsome teeth? His back has rows of shields tightly sealed together; each is so close to the next that no air can pass between. They are joined fast to one another; they cling together and cannot be parted. His snorting throws out flashes of light; his eyes are like the rays of dawn. Firebrands stream from his mouth; sparks of fire shoot out. Smoke pours from his nostrils as from a boiling pot over a fire of reeds. His breath sets coals ablaze, and flames dart from his mouth. Strength resides in his neck; dismay goes before him. (Job 41:13-22)

Though the Hebrew terms can be used of "beasts" in general (cf. Deuteronomy 28:26), in Job 40 there is an obvious reference to a specific animal. The plural form of the noun, together with the fact that it is used with singular verbs and pronouns, indicates that a great beast is in view. Because the translators did not know what type of creature was under consideration in this context, they left the word untranslated, hence, the anglicized form "behemoth" appears in our common versions.

For lack of a better theory, most scholars have identified this animal with the hippopotamus. A careful analysis of the context, however, will reveal that the hippopotamus does not fit the description of behemoth as given by the Lord. Consider the following factors:

- It is believed by some scholars that behemoth is related to an Egyptian term, *peheme*, roughly rendered "ox of the water." That this did not denote a hippopotamus is evidenced by the fact that the Egyptians had other words for that creature.
- In Job's narrative behemoth is described as a grass-eater that is very strong, with great muscles (vv. 15-16). He moves his tail like a cedar tree (v. 17). Even Frances Anderson, who identifies this creature as a hippo, admits: "It is hard to see how his tail can be compared to a cedar, for the tail of the hippopotamus is small and short" (1976, 276). Behemoth's skeleton is like a massive framework of brass and iron (v. 18). He is "chief" (i.e., first in size, might) of the works (creatures) of God; so huge, in fact, that only his Maker dare approach him with the sword (v. 19).

Though the hippo weighs about four tons, some dinosaurs weighed thirty tons! Behemoth is so powerful that no man is able to capture him (v. 24). This descriptive can hardly apply to the hippopotamus for Egyptian monuments frequently picture warriors attacking the hippo single-handed. The vegetation of whole mountains is said to supply this behemoth's food, yet the hippopotamus eats only about two hundred pounds of herbage daily, and he stays near the water.

One is almost forced to conclude that no creature on earth today fits the detailed description of behemoth in Job 40.

### Conclusion 7

If one accepts the plain testimony of the Bible, with no compulsion to harmonize Scripture with evolutionary assertions, there is no doubt but that dinosaurs and humans were contemporary, as the following considerations indicate.

- All of the basic "kinds" of living creatures were brought into existence in the same initial creation week. Moses wrote: "In six days Jehovah made heaven and earth, the sea, and all that in them is" (Exodus 20:11). This would include the dinosaurs ("terrible lizards"), and man as well.
- Jesus affirmed that mankind has existed "from the beginning of the creation" (Mark 10:6); this
  certainly excludes the notion that dinosaurs became extinct millions of years before man
  appeared upon the planet.
- Humanity was given dominion over all the lower creatures of the earth (Genesis 1:26). There is no reason to exclude dinosaurs from the scope of this passage.

### **APPENDIX F**

### **EVIDENCE OF A WORLDWIDE FLOOD<sup>8</sup>**

### Scriptural Evidence for a Worldwide Flood

The Bible definitely gives a clear indication of a world-wide flood. However, many refuse to believe this and insist that the flood was only a local flood. To indicate that the flood was only locally based using the description given in Scripture is to bluntly ignore the laws of science and disregard the geological evidence. The following is a list of scriptural references to the flood, and the arguments for it being a world-wide phenomenon.

In the six hundredth year of Noah's life, on the seventeenth day of the second month -- on that day all the springs of the great deep burst forth, and the floodgates of the heavens were opened. And rain fell on the earth forty days and forty nights. (Genesis 7: 11-12)

For forty days the flood kept coming on the earth, and as the waters increased they lifted the ark high above the earth. The waters rose and increased greatly on the earth, and the ark floated on the surface of the water. They rose greatly on the earth, and all the high mountains under the entire heavens were covered. The waters rose and covered the mountains to a depth of more than twenty feet. Every living thing that moved on the earth perished -- birds, livestock, wild animals, all the creatures that swarm over the earth, and all mankind. Everything on dry land that had the breath of life in its nostrils died. Every living thing on the face of the earth was wiped out; men and animals and the creatures that move along the ground and the birds of the air were wiped from the earth. Only Noah was left and those with him in the ark. The waters flooded the earth for a hundred and fifty days. (Genesis 7: 17-24)

But God remembered Noah and all the wild animals and the livestock that were with him in the ark, and he sent a wind over the earth, and the waters receded. Now the springs of the deep and the floodgates of the heavens had been closed, and the rain had stopped falling from the sky. The water receded steadily from the earth. At the end of the hundred and fifty days the water had gone down, and on the seventeenth day of the seventh month the ark came to rest on the mountains of Ararat. The waters continued to recede until the tenth month, and on the first day of the tenth month the tops of the mountains became visible. (Genesis 8: 1-5)

Then God said to Noah and to his sons with him: "I now establish my covenant with you and with your descendants after you and with every living creature that was with you -- the birds, the livestock and all the wild animals, all those that came out of the ark with you -- every living creature on earth. I establish my covenant with you: Never again will all life be cut off by the waters of a flood; never again will there be a flood to destroy the earth." (Genesis 9: 8-11)

I will remember my covenant between me and you and all living creatures of every kind. Never again will the waters become a flood to destroy all life. (Genesis 9: 15) To me this is like the days of Noah, when I swore that the waters of Noah would never again cover the earth. (Isaiah 54:9a)

As it was in the days of Noah, so it will be at the coming of the Son of Man. For in the days before the flood, people were eating and drinking, marrying and giving in marriage, up to the day Noah entered the ark; and they knew nothing about what would happen until the flood came and took them all away. That is how it will be at the coming of the Son of Man. (Matthew 24: 37-39)

Just as it was in the days of Noah, so also will it be in the days of the Son of Man. People were eating, drinking, marrying and being given in marriage up to the day Noah entered the ark. Then the flood came and destroyed them all. (Luke 17: 26-27)

If he did not spare the ancient world when he brought the flood on its ungodly people, but protected Noah, a preacher of righteousness, and seven others. (2 Peter 2:5)

### The Fossil Record9

Fossils are not just bones found from animals that have died. When an animal dies, the remains are usually eaten by other animals or begin to decay which keep these bones from ever having a chance to become fossilized. What creates fossils is when mud and water combine to bury animals very quickly – before the bones have a chance to fossilize. If the mud and water mixture contains the right minerals, the minerals in the mixture then replace the minerals in the decaying bones. Eventually, only rocks, in the perfect shape of the bones will be left. This is what we refer to as a fossil.

The question is what do we observe in the fossil record? If evolution were true, we should expect to see fossils individually or in small groups due to localized disasters that would cause the mud and water mixtures necessary to create fossils. If a worldwide flood really happened as in the days of Noah, we would expect to find all around the glove evidence of massive destruction and gigantic fossil deposits.

This is indeed what we find throughout the world – massive dinosaur depositions containing thousands of dinosaurs buried quickly by a huge water catastrophe and fossilized into giant dinosaur graveyards. A good example is Ghost Ranch in northern New Mexico.

### The Force of Gravity

If only one high mountain was covered with water for only a week, it would have to reach a similar depth elsewhere on the planet because of the force of gravity. The Bible tells us that not even one peak remained above the surface. The water covered the highest mountain by at least 20 feet (15 cubits = 22 feet) and that the highest mountains were covered by at least this depth for 110 days.

It wasn't until 150 days after the flood started that the waters began to subside. 10 weeks later all that could be seen were other mountain peaks (Genesis 8:4¬5). Still 21 weeks more were required for the waters to subside enough for Noah to disembark.

How could a flood of such depth and duration have covered only a limited area? This question has never been satisfactorily answered.

Another key question we must ask is, "Why would Noah need an ark if the flood was only local?"

### **The Grand Canyon**

- The Grand Canyon is 5,000 feet deep in some places, almost 5 miles wide, and 100 miles long.
- We find vast amounts (millions) of plants and animals fossilized throughout the strata, yet we
  don't observe any fossilization occurring today. In order for this magnitude of fossilization to
  occur, organisms would have had to be covered rapidly.
- There is a lack of erosion between the layers.
- There is (according to evolutionary time scales) a 50 million time gap in the layers.

### **Mammoths**

Along the North Polar regions 4-5 million mammoths and other large animals have been found destroyed. Many of these animals were discovered frozen. Some were frozen instantly and were found with food undigested in their stomachs. One still had a butter cup in its mouth! The only explanation is that something catastrophic must have happened.

Along the same lines, we find trillions of tons of vegetation, much of it perfectly preserved, in all parts of the world (including Anarctica). The flood would provide a good explanation for this phenomenon.

# **APPENDIX G**

# **TIMELINE OF PROPHETIC EVENTS**

Date	Event
May-June, 605 BC	Egypt defeated at battle of Carchemish by Nebuchadnezzar. Judah loses its 'protection'.
June-August, 605 BC	First siege – Jehoiakim of Judah submits to Nebuchadnezzar. Numerous carried off to Babylon (including Daniel) as well as various Temple treasures.
December, 598 BC	Start of second siege after Jehoiachin rebels.
March 16, 597 BC	End of second siege. Jehoiachin, the king of Judah at the time, and many others (including the prophet Ezekiel) as well as various temple treasures were taken to Babylon in exile
January 15, 588 BC	Start of third siege after Zedekiah rebels
July 16, 586 BC	End of third siege. Zedekiah blinded and he with the remaining survivors (including the prophet Jeremiah) were carried off as slaves to Babylon along with various temple treasures.
August 13, 586 BC	Nebuchadnezzar destroys city of Jerusalem & Temple by fire.
October 12, 539 BC October 16, 539 BC	Babylon empire falls to Media-Persia
538 BC	Edict by Cyrus II to release Israel from captivity
July 23, 537 BC	Israel released from servitude
536 BC	First return of people (49,897) to Israel
September-October 536 BC	Alter rebuilt
Spring 535 BC	Foundation for second Temple laid
August 16, 518 BC	Completion of "desolations of Jerusalem"
March 12, 515 BC	Rebuilding of Temple completed
March 14, 445 BC	Decree issued by Artaxerxes to "restore and rebuild" city of Jerusalem
April 6, 32 AD	Christ makes triumphant entry into Jerusalem on Palm Sunday
May 14, 1948	Israel restored to being a sovereign nation
June 7, 1967	Jerusalem & temple mount re-captured

#### Sources:

- 'Bible Dictionary': New Bible Dictionary, Second Edition., Tyndale.
- 'Ryrie/Bible': Ryrie Study Bible, Expanded Edition. Charles Caldwell Ryrie, Moody Press.
- 'World History': Encyclopedia of World History, Peter N. Stearns, Houghton Mifflin.

### RECOMMENDED READING

#### **General References**

Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists. River Oak Publishing, 2002

Very similar in style and substance to this book, 20 Compelling Evidences, provides a good general overview of the evidences for (1) an intelligent designer, (2) the Bible's accuracy and reliability and (3) Jesus Christ. This book provides an overview of the latest evidence and arguments across a broad range of functional disciplines.

John Schwarz, *The Compact Guide to the Christian Faith*. Bethany House Publishers, 2001

This book provides a concise, yet comprehensive, overview of the Christian faith, including how we got our Bible, the content and structure of our Bible, the history of the Church and how Christianity compares to other faith systems. It is an excellent resource for anyone wanting to know more about the Christian faith.

### **Intelligent Design**

Lee Strobel. The Case for a Creator. Zondervan, 2004

In this book, former journalist Lee Strobel interviews numerous scientists across a range of disciplines including cosmology, physics, biochemistry, biology and psychology to assess the latest scientific evidence for an intelligent Creator. This is an excellent book. It presents an objective, compelling, and easy to understand case for Intelligent Design, and is a good summary for those seeking a deeper understanding of the issues discussed in the first section of this book.

Mike Riddle & Dr. Bob Compton, *The Origin of Life Equipping Course*. Training ETC, 2001

This is not a book, but rather a Student Manual designed as a training guide on issues related to intelligent design. It is designed for use in a classroom environment and is targeted at high-school age students and up. It would also serve as an excellent study guide for small group discussions.

### **Apologetics**

Grant R. Jeffrey, Jesus: The Great Debate. Frontier Research Publications, 1999

This book provides an excellent overview of apologetics, making a compelling case for the historical accuracy of scriptures, the life of Jesus, and his claims of divinity. Analyzing a range of evidence including archeology, historical documentation, the Shroud of Turin, prophecy and the Bible itself, Grant R. Jeffrey delves deeper than most writers to demonstrate that faith in Jesus is well founded.

Josh McDowell, More than a Carpenter. Living Books, 1960

First printed in 1960 and with more than 10,000,000 copies in print, this book is one of the first contemporary, and certainly the most widely read, book on apologetics. It is a short, excellent, general overview of apologetics and is the first book anyone should read seeking an

understanding of the evidence that exists for the divinity of Jesus Christ. It is also an excellent book to give to people who may be questioning faith in Jesus Christ.

Lee Strobel, The Case for Christ. Zondervan, 1998

Similar in style to *The Case for a Creator*, in this book former journalist Lee Strobel interviews various historical and archeological experts to assess the latest evidence for the historical reliability of the Bible, Christ and his resurrection. This book provides an excellent overview over the topics discussed in the second and third sections of this book. It presents an objective, compelling and easy to understand case for the life and divinity of Jesus Christ.

#### Other

dc Talk, *Jesus Freaks, Volumes 1 and 2.* Albury Publishing and Bethany House Publishers, 1999 and 2002.

These two books, written by a popular Christian rock band along with the Voice of Martyrs, a Christian organization focused on raising awareness for Christian persecution around the world, provide an excellent perspective on those that have died for their faith. Each book contains a variety of short stories about different martyrs – from those that died under the Roman Empire up through those being persecuted today under Communism, Islam and other hostile faith systems. These books are excellent and provide a solid and emotional perspective on what truth Christian faith is all about.

### **SOURCE NOTES**

#### Introduction

- <sup>1</sup> Source: Adherents.com
- <sup>2</sup> Questions based on Marvin Olasky, "Religions of pieces", World Magazine, April 28, 2007
- <sup>3</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 3
- <sup>4</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 3
- <sup>5</sup> U.S. Religious Landscape Survey, Pew Forum on Religion & Public Life, 2007
- <sup>6</sup> William Paul McKay & Ken Abraham, Billy.
- <sup>7</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, pp. 1-23,1-24
- <sup>8</sup> Grant R. Jeffrey, The Great Debate, 1999, pp. 34-35
- <sup>9</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, p. 22

#### Part 1: The Case for a Personal God

- <sup>1</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 4
- <sup>2</sup> Lee Strobel, The Case for a Creator, 2004, Ch. 5
- <sup>3</sup> Leader U. "Message from Professor Robert Jastrow"
- <sup>4</sup> Lee Strobel, *The Case for a Creator*, 2004, pp. 69-70
- <sup>5</sup> Lee Strobel, *The Case for a Creator*, 2004, pp. 97-112
- <sup>6</sup> Lee Strobel, *The Case for a Creator*, 2004, pp. 112-123
- <sup>7</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 63-67
- <sup>8</sup> Nancy R. Pearcey, "Our 'tailor-made' universe", World Magazine, September 20, 2000
- <sup>9</sup> Lee Strobel, The Case for a Creator, 2004, Ch. 6
- <sup>10</sup> Brad Lemley, "Why is there Life?", Discover Magazine, Vol. 21, No. 11, November 2000
- <sup>11</sup> Dr. Hugh Ross, *The Creator and the Cosmos*, p. 115
- <sup>12</sup> Bill Bryson, A Short History of Nearly Everything, p. 16
- <sup>13</sup> Lee Strobel, *The Case for a Creator*, 2004, pp. 142-143
- <sup>14</sup> Gregg Easterbrook, "The New Convergence", Wired Magazine, December 2002
- <sup>15</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, Ch. 3
- <sup>16</sup> Walter James ReMine, The Biotic Message, 1995, p. 54
- <sup>17</sup> Duane T. Gish (Ph.D. in biochemistry), Creation Scientists Answer their Critics, 1993, p. 194
- <sup>18</sup> Robert Gange, Origins and Destiny, 1986, p. 18
- <sup>19</sup> Robert Gange, Origins and Destiny, 1986, p. 17
- <sup>20</sup> Arthur Eddington, The Nature of the Physical World, 1928, p. 74
- <sup>21</sup> Isaac Asimov, Smithsonian Institute Journal, June 1970, p. 6
- <sup>22</sup> Lee Strobel, *The Case for a Creator*, 2004, Ch. 7
- <sup>23</sup> Carl Sagan, Pale Blue Dot, 1994, p. 7
- <sup>24</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 67-71
- <sup>25</sup> Lee Strobel, *The Case for a Creator*, 2004, Ch. 7
- <sup>26</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 67-71
- <sup>27</sup> Lee Strobel, The Case for a Creator, 2004, Ch. 7
- <sup>28</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 67-71
- <sup>29</sup> Lee Strobel, *The Case for a Creator*, 2004, Ch. 7
- 30 Lee Strobel, The Case for a Creator, 2004, Ch. 7

- <sup>31</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 71-73
- 32 Lee Strobel, The Case for a Creator, 2004, Ch. 7
- <sup>33</sup> Michael Denton, *Nature's Destiny*, 1998, pp. 88-89
- <sup>34</sup> John A. O'Keefe, "The Theological Impact of the New Cosmology" in Robert Jastrow, God and the Astronomers, p. 122
- <sup>35</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 73-74
- <sup>36</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 77
- <sup>37</sup> Stephen Grocott (Ph.D. Organometallic Chemistry), *In Six Days*, 2000, pp. 148
- 38 Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 6
- <sup>39</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 7
- <sup>40</sup> "Primer: Intelligent Design Theory in a Nutshell". Intelligent Design and Evolution Awareness Center, 2007
- <sup>41</sup> Louis Lavallee, "The Voyage of the Beagle In The Creator's Service", *Impact*, April 2003
- <sup>42</sup> Phillip E. Johnson, *Darwin on Trial*, 1993, pp. 126-127
- <sup>43</sup> Douglass Futuyma, *Evolutionary Biology*, 1997, p. 3
- <sup>44</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, Ch. 1
- <sup>45</sup> Neil Broom (Associate professor of Chemicals and Engineering at the University of Aukland), *How Blind is the Watchmaker*?, 2001, p. 141
- <sup>46</sup> Lee Strobel, *The Case for a Creator*, 2004, pp. 239-243
- <sup>47</sup> William Dembski, Mere Creation: Science, Faith & Intelligent Design, 1998, p. 22
- <sup>48</sup> Lee Spetner, Not by Chance, 1997, p. 131
- <sup>49</sup> Land Lester, The Natural Limits to Biological Change, 1989, p. 89
- <sup>50</sup> Frank Marsh, Variation and Fixity in Nature, 1976, pp. 56-57
- <sup>51</sup> Michael Denton, *Evolution: A Theory in Crisis*, 1985, p. 250
- <sup>52</sup> Mike Riddle & Dr. Bob Compton, *The Origin of Life Equipping Course*, 2001, Appendix C
- <sup>53</sup> Earnst Mayr, One Long Argument: Charles Darwin and the Genesis of Modern Evolutionary Thought, 1991, p. 86
- <sup>54</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 5
- <sup>55</sup> "Biogenesis", Wikipedia, Retrieved December 20, 2008
- <sup>56</sup> Leslie E Orgel, "The Origin of Life on Earth," Scientific American, Vol 271, October 1994, p. 78
- <sup>57</sup> Charles B. Thaxton, et al, *The Mystery of Life's Origin*, 1984, p. 66
- <sup>58</sup> Harry Clemmey, Nick Badham, "Oxygen in the Atmosphere: An Evaluation of the Geological Evidence", *Geology*, Vol 10, March 1982, p. 141
- <sup>59</sup> Thaxton, Bradley & Olsen, *The Mystery of Life's Origin*, 1992, p. 80
- 60 Nancy Pearcey, "Aren't they human embryos?", World Magazine, October 7, 2000
- 61 Lee Strobel, The Case for a Creator, 2004, Ch. 2
- 62 Charles Darwin, On the Origin of Species, 1859, pp. 279-280
- 63 Michael Denton, Evolution: A Theory in Crisis, 1985, p. 162
- 64 Lee Strobel, The Case for a Creator, 2004, pp. 239-243
- 65 John D. Morris, "Don't the Fossils Prove Evolution?", Back to Genesis, April 2003
- <sup>66</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, p. 80
- <sup>67</sup> Alan Feduccia, *The origin and Evolution of Birds*, 1999, p. 28
- 68 Ann Gibbons, "In Search of the First Hominids," Science, 295:1214-1219 (February 15, 2002)
- <sup>69</sup> Michael D. Lemonick and Andrea Dorfman, "Excavating Ardi: A New Piece for the Puzzle of Human Evolution," Time Magazine (October 1, 2009)
- <sup>70</sup> Ann Gibbons, "A New Kind of Ancestor: Ardipithecus Unveiled," Science, Vol. 326:36-40 (Oct. 2, 2009)
- <sup>71</sup> Jamie Shreeve, "Oldest Skeleton of Human Ancestor Found", National Geographic magazine (October 1, 2009) Move over, Lucy. And kiss the missing link goodbye.
- <sup>72</sup> Casey Luskin, "Bones of 'Ardi,' New Human Evolution Fossil, 'Crushed Nearly to Smithereens'", Posted on EvolutionNews.org, October 1, 2009.
- <sup>73</sup> Robert S. Boyd, "Oldest Human Ancestor Revealed", McClatchy Newspapers, October 2, 2009.
- <sup>74</sup> Ann Gibbons, "A New Kind of Ancestor: Ardipithecus Unveiled," Science, Vol. 326:36-40 (Oct. 2, 2009).
- <sup>75</sup> Robert S. Boyd, "Oldest Human Ancestor Revealed", McClatchy Newspapers, October 2, 2009.
- <sup>76</sup> Francis Darwin, *The Life and Letters of Charles Darwin*, 1887, p. 202
- <sup>77</sup> Lee Strobel, *The Case for a Creator*, 2004, Ch. 11
- <sup>78</sup> Jonathan Wells, *Icons of Evolution*, 2002, p. 5
- <sup>79</sup> Allan Sandage, "A Scientist Reflects on Religious Belief," *Truth: An Interdisciplinary Journal of Christian Thought*, Volume 1, 1985

- <sup>80</sup> Dr. Werner Gitt, Director of the German Federal Institute of Physics and Technology, *In the Beginning was Information*, 1997, p. 99
- 81 Lee Strobel, The Case for a Creator, 2004, pp. 193-196
- 82 Charles Darwin, The Origin of Species, 1859, p. 154
- 83 Lee Strobel, The Case for a Creator, 2004, Ch. 8
- 84 Michael Denton, Evolution: A Theory in Crisis, 1985, p. 338
- <sup>85</sup> Dr. John Ross, Chemical and Engineering News, Vol. 58, July 7, 1980, p.40
- 86 Ker C. Thomson, In Six Days, 2000, p. 219
- <sup>87</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, Appendix D
- 88 Sir Fred Hoyle and Chandra Wickramasinghe, Evolution from Space, 1984, p. 176
- 89 George Sim Johnson, "Did Darwin Get it Right?" The Wall Street Journal, October 15, 1999
- 90 Fred Hoyle, The Intelligent Universe, 1983, p. 23
- <sup>91</sup> Quoted in Stephen C. Meyer, "Word Games: DNA, Design and Intelligence," in William Dembski and James Kushiner, *Signs of Intelligence*, p. 102
- 92 Lee Strobel, The Case for a Creator, 2004, Ch. 9
- 93 Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, Ch. 4
- <sup>94</sup> Paul Davies, The 5<sup>th</sup> Miracle: The Search for the Origin and Meaning of Life, 1999, p. 19
- 95 John P. Marcus (Ph.D. Biochemistry), In Six Days, 2000, pp. 174-175
- <sup>96</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, pp. 4-16
- <sup>97</sup> John Baumgardner, *In Six Days*, 2000, p. 227
- 98 Lee Strobel, The Case for a Creator, 2004, Ch. 9
- 99 Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, Ch. 4
- 100 Michael Denton, Evolution: A Theory in Crisis, 1985, p. 351
- <sup>101</sup> Henry Margenau, Cosmos, Bios, Theos, 1992
- <sup>102</sup> Harold Urey, Christian Science Monitor, Jan 4, 1962
- <sup>103</sup> Andrew McIntosh, In Six Days, 2000, p. 160
- <sup>104</sup> Walter Bradley, "Design or Designed?", Mere Creation: Science, Faith & Intelligent Design, 1998, p. 41
- 105 Robert Gange, Origins and Destiny, 1986, p. 77
- <sup>106</sup> Levine & Miller, *Biology*, 1991, p. 415
- <sup>107</sup> Francis Crick, *Life Itself*, 1982, p. 88
- <sup>108</sup> Gene Edward Veith, "Flew the Coop," World Magazine, December 25, 2004
- <sup>109</sup> Lee Strobel, *The Case for a Creator*, 2004, Ch. 10
- <sup>110</sup> Sara Tippid, "Scientist Says Mind Continues After Brain Dies," Reuters, June 29, 2001
- <sup>111</sup> Lee Strobel, *The Case for a Creator*, 2004, Ch. 10
- <sup>112</sup> Laurence W. Wood, "Recent Brain Research and the Mind-Body Dilemma," *The Asbury Theological Journal*, vol. 41, no. 1
- <sup>1</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences That God Exists, 2002, p. 39
- <sup>2</sup> DC Talk, *Jesus Freaks II*, 2002, pp. 192-193
- <sup>3</sup> Mike Riddle & Dr. Bob Compton, *The Origin of Life Equipping Course*, 2001, pp. 68-70
- <sup>4</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, pp. 68-70
- <sup>5</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 8
- <sup>6</sup> Lee Strobel, The Case for a Creator, 2004, Ch. 4
- <sup>7</sup> Lee Strobel, *The Case for a Creator*, 2004, pp. 283-285

### Part 2: The Case for the Bible

- <sup>1</sup> Lee Strobel, The Case for a Creator, 2004, p. 216
- <sup>2</sup> Lee Strobel, The Case for a Creator, 2004, Ch. 4
- <sup>3</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001
- <sup>4</sup> Gene Edward Veith, "Science's New Heresy Trial", World Magazine, February 19, 2005
- <sup>5</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, Ch. 12
- <sup>6</sup> Gene Edward Veith, "Textbook Case", World Magazine, January 28, 2006
- <sup>7</sup> John Schwarz, Christian Faith, pp. 24-25
- <sup>8</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, pp. 30

- <sup>9</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 9
- <sup>10</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 9
- <sup>11</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 10
- 12 "The Admonitions of Ipuwer," Web page of "An Introduction to the History and Culture of Pharaonic Egypt," at http://nefertiti.iwebland.com/texts/ipuwer.htm
- <sup>13</sup> Grant R. Jeffrey, Jesus: The Great Debate, 1999, Ch. 3
- <sup>14</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, pp. 26-28
- <sup>15</sup> David Whitmer, An Address to All Believers in Christ, 1887, p. 31
- <sup>16</sup> Grant R. Jeffrey, Jesus: the Great Debate, 1999, Ch. 2
- <sup>17</sup> Lee Strobel, *The Case for Christ*, 1998, Ch. 2
- <sup>18</sup> Lee Strobel, *The Case for Christ*, 1998, Ch. 3
- <sup>19</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, p. 25
- <sup>20</sup> Grant R. Jeffrey, Jesus: the Great Debate, 1999, p. 12
- <sup>21</sup> Eusebius, Ecclesiastical History, Book 3, Chapter 39
- <sup>22</sup> Irenaeus, Against Heresies. 3.1.1
- <sup>23</sup> Robert E Van Voorst, *Jesus Outside the New Testament: An Introduction to the Ancient Evidence*, "Studying the Historical Jesus", p. 81-104

#### Part 3: The Case for Jesus

- <sup>1</sup> Napoleon Bonaparte, Bertrand's Memoirs, 1844
- <sup>2</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch 13
- <sup>3</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch 13
- <sup>4</sup> Lee Strobel, *The Case for Christ*, 1998, p. 133
- <sup>5</sup> C.S. Lewis, Mere Christianity, p. 56
- <sup>6</sup> Lee Strobel, *The Case for Christ*, 1998, p.147
- <sup>7</sup> Lee Strobel, *The Case for Christ*, 1998, Ch. 11
- <sup>8</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch 15
- <sup>9</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 17
- <sup>10</sup> Josh McDowell, More than a Carpenter, Ch. 8
- <sup>11</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 17
- <sup>12</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 17
- <sup>13</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 17
- <sup>14</sup> Justin in his *Digest* 49.16 lists 18 offenses for which a guard unit could be put to death. These included falling asleep or leaving one's position unguarded.
- <sup>15</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 17
- <sup>16</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch 16
- <sup>17</sup> Josh McDowell, *Decision Magazine*, March 2005
- <sup>18</sup> Based on Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch 17
- <sup>19</sup> Lee Strobel, *The Case for Christ*, 1998, Ch. 13
- <sup>20</sup> Josh McDowell, Evidence That Demands a Verdict, Vol. 1., 1992, p.224
- <sup>21</sup> Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, Ch. 17
- <sup>22</sup> Bill Bright, "The Uniqueness of Jesus", Booklet distributed by Campus Crusade for Christ
- <sup>23</sup> Lee Strobel. The Case for Christ, 1998. Ch. 4
- <sup>24</sup> Grant R. Jeffrey, Jesus: the Great Debate, 1999, Ch. 9
- <sup>25</sup> Josephus, *The Antiquities* 20.200. See also Edwin Yamauchi, "Josephus and the Scriptures," *Fides et Historia* 13 (1980), pp. 42-63
- <sup>26</sup> Josephus, *The Antiquities* 18.63-64
- <sup>27</sup> Tacitus, Annals 15.44
- <sup>28</sup> Suetonius, Lives of the First Twelve Caesars: Life of Claudius
- <sup>29</sup> Pliny the Younger, *Letters* 10.96
- <sup>30</sup> Lucian of Samosata, *The Passing Peregrinus*
- 31 Eusebus, Ecclesiastical History, 325 A.D.
- <sup>32</sup> Phlegon, Collection of the Olympiads and Chronicles

- <sup>33</sup> Paul L. Maier, *Pontius Pilate, 366, citing a fragment from Phlegon, Olympiades he Chronika 14, ed. Otto Keller, Rerum Naturalium Scriptores Graeci Minores, 1, 101.*
- <sup>34</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, p. 51
- <sup>35</sup> Lee Strobel, *The Case for Christ*, 1998, Ch. 5
- <sup>36</sup> Grant R. Jeffrey, Jesus: The Great Debate, 1999, pp. 40-43
- <sup>37</sup> Impact, Coral Ridge Ministries, April 2003
- <sup>38</sup> Grant R. Jeffrey, Jesus: The Great Debate, 1999, p. 72
- 39 Impact, Coral Ridge Ministries, April 2003
- 40 Impact, Coral Ridge Ministries, April 2003
- <sup>41</sup> F.F. Bruce, The New Testament Documents: Are They Reliable, 2003
- <sup>42</sup> Norman Geisler and Ron Brooks, When Skeptics Ask
- <sup>43</sup> Josh McDowell, *Evidence that Demands a Verdict*
- <sup>44</sup> John Ankerberg and John Weldon, *The Facts on the Mormon Church*, p. 30
- <sup>45</sup> Grant R. Jeffrey, Jesus: the Great Debate, 1999, Ch. 2
- <sup>46</sup> Sir William Ramsay, The Bearing of Recent Discovery on the Trustworthiness of the New Testament, p. 80
- <sup>47</sup> Grant R. Jeffrey, Jesus: The Great Debate, 1999, Ch. 3
- 48 Grant R. Jeffrey, Jesus: The Great Debate, 1999, Ch. 7
- <sup>49</sup> The Babylonian Talmud, Sanhedrin 98b
- <sup>50</sup> Dr. Alfred Edersheim, *The Life and Times of Jesus the Messiah*, 1863
- <sup>51</sup> Hal Lindsey, *The Late Great Planet Earth*, pp. 17-21
- <sup>52</sup> Grant R. Jeffrey, Jesus: the Great Debate, 1999, p. 198
- 53 Grant R. Jeffrey, Jesus: the Great Debate, 1999, p. 212
- <sup>54</sup> Flavius Josephus, Wars of the Jews, Book VI, 5.4.
- 55 Tacitus, History, V. 13.
- <sup>56</sup> Suetonius, *Life of Vespasian*, Lives of the Caesars
- <sup>57</sup> Grant R. Jeffrey, Jesus: the Great Debate, 1999, Ch. 11
- 58 Shane Womack & Mike Riddle, How to Win Atheists, Agnostics, and Evolutionists, 1996, p. 35
- <sup>59</sup> Lee Strobel, *The Case for Christ*, 1998, p. 182-185
- 60 Grant R. Jeffrey, Jesus: the Great Debate, 1999, p. 13-19
- 61 "How do you square Jesus' miracles with reality?", FaithFacts.com, Retrieved January 3, 2009
- <sup>62</sup> C.S. Lewis, "Modern Theology and Biblical Criticism"
- 63 "Miracles Attributed to Jesus", Wikipedia, Retrieved January 1, 2009
- 64 Lee Strobel, The Case for Christ, 1998, Ch. 14
- 65 Grant R. Jeffrey, Jesus: The Great Debate, 1999, pp. 173-175
- 66 Lee Strobel, The Case for Christ, 1998, Ch. 14
- 67 Lee Strobel, The Case for Christ, 1998, pp. 254-255
- <sup>68</sup> "History of Christianity in Rome", AllAboutReligion.org, Retrieved January 2, 2009
- <sup>69</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 18
- <sup>70</sup> Don Argue, President, Northwest College, "Who is this Jesus?" Overlake Christian Church, 1998
- <sup>71</sup> Dr. Bob Moorehead, "Now is the Time," Overlake Christian Church, 1998
- <sup>72</sup> Grant R. Jeffrey, Armageddon: Appointment with Destiny, 1990, p. 261
- <sup>73</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch. 18
- <sup>74</sup> David B. Barrett and Todd M. Johnson, *World Christian Trends A.D. 30 A.D. 2200: Interpreting the Annual Christian Megacensus*, table 4-5, page 230
- <sup>75</sup> Grant R. Jeffrey, Jesus: The Great Debate, 1999, pp. 257-258
- <sup>76</sup> Selected excerpts from DC Talk, Jesus Freaks Volumes 1 and 2, 1999 and 2002
- <sup>77</sup> Henry G. Bosch, *The Son of Man in Myth and History*, 1967
- <sup>78</sup> This essay was adapted from a sermon by Dr James Allan Francis in "The Real Jesus and Other Sermons", pp 123-124 titled "Arise Sir Knight!"
- <sup>79</sup> Grant R. Jeffrey, Jesus: The Great Debate, pp. 261-265
- 80 "William Wilberforce", Wikipedia, Retrieved January 2, 2009
- <sup>81</sup> Gospel Herald
- <sup>82</sup> Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, Ch 12
- 83 Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 179-187
- 84 Kenneth D. Boa & Robert M. Bowman Jr., 20 Compelling Evidences that God Exists, 2002, pp. 179-187

### **Epilogue**

<sup>1</sup> John Schwartz, The Compact Guide to the Christian Faith, 2001, Ch. 8

### **Appendix**

- <sup>1</sup> Based on David J. Engelsma, Genesis 1-11: Myth or History?, 2002
- <sup>2</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, pp. 23-24
- <sup>3</sup> Mike Riddle & Dr. Bob Compton, *The Origin of Life Equipping Course*, 2001, Appendix F
- <sup>4</sup> Dr. Hugh Ross, "Big Bang Refined by Fire", Reasons To Believe
- <sup>5</sup> "You Don't 'Fit' Dinosaurs With The Bible!", AnswersInGenesis.org, Retrieved January 3, 2009
- Wayne Jackson, "Dinosaurs and the Bible", ChristianCourier.com, Retrieved January 3, 2009
   Wayne Jackson, "Dinosaurs and the Bible", ChristianCourier.com, Retrieved January 3, 2009
- <sup>8</sup> Mike Riddle & Dr. Bob Compton, The Origin of Life Equipping Course, 2001, p. 82
- <sup>9</sup> Jonathan Park: Volume 1: The Adventure Begins Study Guide, p. 9