

CHRTC 350
Science & Religion

CLASS NOTES

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Class Notes Page
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Abbreviations:

H: Class Handouts

SQ: Supplementary Quotes

INTRODUCTION

Slide 2

I. THE PROBLEM: SCIENCE & RELIGION WARFARE

S3

MAGNIFIES:

S4

in the second half of the 19th century

Thomas Henry Huxley (aka “Darwin’s Bulldog”)

Review of Darwin’s *Origin of Species* (1859):

1. “Extinguished theologians lie about the cradle of every science as the strangled snakes beside that of Hercules; and history records that whenever **science** and **orthodoxy** [religion] have been fairly opposed, the latter has been forced to retire from the lists, bleeding and crushed if not annihilated; scotched, if not slain.”

T.H. Huxley, “*Origin of Species*” *Westminster Review* 17 (1860), 556 S7

PRODUCES:

S8 Handouts 1

Science vs. Religion Dichotomy

Dichotomy Greek *dicha*: in two *temnō*: to cut

DEF: division of an issue into only TWO simple positions

thinking about issues in ‘black-and-white’ & ‘either/or’ terms

Problem:

- ☛ forces people into choosing between one of two positions

Therefore:

you cannot be both a scientist & a religious believer

DEVELOPS:

S9 H1

into the *Evolution vs. Creation Debate* (aka “Origins Dichotomy”)

Problem:

- ☛ forces people into choosing between only TWO positions:

EITHER (1) “Evolution”

OR (2) “Creation”

Therefore:

you cannot be both an evolutionist & a believer in a Creator

1. Common Understanding of “Science” & “Evolution”

S10

Julian Huxley

S11

leading evolutionary biologist

Centennial celebration of Darwin’s *Origin of Species* in 1959:

2. “In the evolutionary pattern of thought there is no longer either need or room for the supernatural. **The earth was not created; it evolved.** So did all the animals and plants that inhabit it, including our human selves, mind and soul as well as brain and body.

So did religion ...

S13

Evolutionary man can no longer take refuge from his loneliness in the arms of a S14

divinized father figure **whom he has himself created** [cf. Gen 1:26-27], nor escape S15

from the **responsibility of making decisions** by sheltering under the umbrella of Divine Authority ...

The evolutionary vision is enabling us to discern, however incompletely, the S16-17

lineaments of the **new religion** that we can be sure will arise to serve the needs of the coming era.”

J. Huxley, “The Evolutionary Vision” in Sol Tax and Charles Callender, eds. *Evolution after Darwin: The University of Chicago Centennial* (Chicago, IL: University Press, 1960), 252-253, 260

COMMENTS:

- evolution vs. creation dichotomy
- COMMON understanding of “science” → “Godless”
“evolution” → “Godless”

S2

S3 H1

Major Theme of this course:

Challenge COMMON terms/definitions & replace with ACADEMIC terminology

More accurately, Huxley’s position is:

S4-5 H1

Scientism

DEF: conflation of (1) science (2) secular [non-religious] philosophy (3) humanist ethics

Conflation Latin *con*: together *flare*: to blow

DEF: careless collapsing & co-mingling of distinct ideas into ONE undifferentiated concept

Humanist Ethics

DEF: ethical position in which humans ALONE determine morals & values, not God as traditionally believed

- ethics often tied to debates about origins

2. Common Understanding of “Religion” & “Creation”

S6

Henry Morris

S7

creation scientist & founder of the Institute for Creation Research (aka Young Earth Creation)

Creation Science: claims that creation in 6 days 6000 yrs ago can be proven scientifically

3. “After all, there are only **two** basic worldviews—the God-centred worldview and the man-centred worldview, **creation** or **evolution** ...” S8

There is **no evidence** whatever [for the] evolution of one kind of organism into a more complex organism ... There are **no proven scientific evidences** that the earth is old ... Divine revelation from the Creator of the world [states] that He did it all in six days several thousand years ago ... S9

The Bible is a book of science! ... The Bible does contain all the basic principles upon which **true** science [i.e., Creation Science] is built. S10

If there is really a great personal Creator behind the origin and meaning of all things, then we urgently need to know Him and to **order our lives** according to His will, as revealed in His inspired Word ... S11

Satan himself is the originator of the concept of evolution.” S12

H. Morris, “Foreword” in John D. Morris, *The Young Earth* (Colorado Springs, CO: Creation-Life Pub, 1994), 4-5; *Many Infallible Proofs* (San Diego, CA: C-LP, 1980), 229; *Troubled Waters of Evolution* (San Diego, CA: C-LP, 1982), 75

COMMENTS:

S13 H1

- evolution vs. creation dichotomy
- COMMON understanding of “religion” → Bible reveals science & origins
“creation” → God created in 6 days 6000 yrs ago

More accurately, using ACADEMIC terms/definitions, Morris’ position is:

S14 H1

Fundamentalism

DEF: conflation of (1) Christianity (2) origins in 6 days (3) biblical ethics

Biblical Ethics

DEF: only God determines morals & values, and these are revealed in the Bible

QUESTIONS:

- Is the relationship between science & religion this simple?
- Are we forced to choose between only TWO positions:
EITHER (1) “science” & “evolution”
OR (2) “religion” & “creation”

II. LAMOUREUX’S POSITION

S3

First, I am a thoroughly committed & unapologetic evangelical theologian trained to the PhD level S4

I am a **born-again Christian**

I believe the Bible is the Holy Spirit inspired **Word of God**

I believe in **miracles** & I have experienced them

I believe in **Intelligent Design** (traditionally defined)

Second, I am a thoroughly committed & unapologetic evolutionary biologist trained to the PhD level S5

I find that the evidence for biological evolution is **OVERWHELMING**

I have yet to see evidence that **falsifies** the theory of evolution

I recognize the **explanatory power** of evolutionary theory

- ☛ Biology **makes sense** in the light of evolution S6

III. TOWARD A SOLUTION: THE NEW SCIENCE-RELIGION DIALOGUE

S7

scholarship that arose during the 1990s

1. Scientific Community

S8

- Religious Beliefs of Scientists S9
repeated James Leuba’s 1916 survey

4. “I believe in a God in intellectual and affective communication with humankind, S10-11
i.e. a God to whom one may pray in expectation of receiving an answer. By “answer”
I mean more than the subjective psychological effect of prayer.”

Edward Larson & Larry Witham, “Scientists Are Still Keeping the Faith”
386 *Nature* (3 Apr 1997), 436

Results: **39%** believe in miracles → personal God S12

1916 Survey: **42%** S13

Leuba predicted 20th century secularization would destroy belief in God

COMMENTS: S14

is this **proof** for God’s existence? NO

- ☛ but this is serious data because these scientists are serious thinkers

1st Class Survey → Do you believe in miracles?

- Contribution to Science-Religion Dialogue S15-16

5. “Both the **National Academy of Sciences** and the **American Association for the** S17

Advancement of Science have launched projects to promote a dialogue between science and religion. New institutions aimed at bridging the gap have been formed, including the Chicago Center for Religion and Science, and the Center for Theology and Natural Sciences in Berkeley, California. Universities such as Cambridge and Princeton also have established professorships or lectureships on the **reconciliation** of the two camps.”

Gregg Easterbrook, “Science and God: A Warming Trend?”
277 *Science* (15 Aug 1997), 890

COMMENTS: S18-19 H1

NAS & AAAS → two of the most important scientific organizations in the world
add to the list of professorships:

Oxford, Harvard, Toronto ... St Joseph’s College University of Alberta!

2. Religious Community S2

• Roman Catholic: Pope John Paul II S3

6. “New knowledge leads to the recognition of the theory of **evolution as more than a hypothesis** ... Sacred scripture wishes simply to declare that the world was created by God, and in order to teach this truth it expresses itself in the terms of **the cosmology [science] in use at the time of the writer** ... ‘The Bible does not wish to teach how heaven was made, but how one goes to heaven’” [aphorism inspired by Galileo].” S5

Pope John Paul II, “Message to Pontifical Academy of Sciences on Evolution,” *Origins: CNS Documentary Service* 26 (Nov 1996),415; “Scripture and Science: The Path of Scientific Discovery,” *Origins* 11 (15 Oct 1981), 279

COMMENTS: S6

- NO problem with evolution
- Bible is NOT a book of science
- Bible uses the science-of-the-day

☛ ANCIENT SCIENCE

Major Theme of this course

• Evangelical Protestant: Billy Graham S7

7. “I don’t think that there’s any conflict at all between science today and the Scriptures. I think **we have misinterpreted the Scriptures** many times and we’ve tried to make the Scriptures say things that they **weren’t meant to say**, and I think we have made a **mistake** by thinking the Bible is a scientific book. **The Bible is not a book of science.** The Bible is a book of redemption ... S8
- And of course, I accept the Creation story. I believe that God did create the universe. I believe He created man, and **whether** it came by an evolutionary process and at a certain point He took this person or being and made him a living soul **or not**, does not change the fact that **God did create man** ... Whichever way God did it makes no difference as to what man is and man’s **relationship** to God.” S10

David Frost, *Billy Graham: Personal Thoughts of a Public Man. 30 Years of Conversations with David Frost* (Colorado Springs, CO: Chariot Victor, 1997), 73-74

COMMENTS: S12-13

- Bible is NOT a book of science
- Openness to evolution is not often heard in evangelical protestant churches
 - ☛ but this is slowly starting to change More anon

3. Summary S14-15 H1

Science & Religion Warfare is being challenged by prominent leaders within both the scientific community & the religious community

IV. CRITICISM OF THE NEW SCIENCE-RELIGION DIALOGUE S16

Richard Dawkins S17

Most important atheist in the world today

8. “Are science and religion converging? No ... Convergence? Only when it suits. To an **honest** judge, the alleged marriage between religion and science is a shallow, empty, spin-doctored sham.”

R. Dawkins, “Snake Oil & Holy Water: Illogical Thinking Is the Only Thing Joining Science & Religion Together” *Forbes ASAP* (4 Oct 1999), 235, 237

COMMENTS:

Note the subtitle:

“**Illogical Thinking** is the Only Thing Joining Science & Religion Together”
 ☛ as you proceed through this course, ask yourself, “Is this true?”

V. CONCLUSION

S3

The central question in this course: How do YOU relate Science & Religion?

S4

SOME POSSIBLE RELATIONSHIPS:**1. Scientism:** Science Dictates to Religion

S5

EG Julian Huxley

evolution explains away religion & God

2. Fundamentalism: Religion Dictates to Science

S6

EG Henry Morris

Bible reveals “**true science**” → the world was created in 6 days 6000 years ago

3. Compartmentalization: Science & Religion Do Not Communicate

S7

EG common in academic circles prior to 1990s

☛ many students entering this course

4. The Two Divine Books Relationship: Science & Religion Complement Each Other

S8

EG Pope John Paul II & Billy Graham

Sir Francis Bacon

S9

a founding member of modern science in the early 17th century

9. “To conclude, therefore, let no man out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far or be too well studied in the **Book of God’s Words**, or in the **Book of God’s Works**; divinity [ie, theology] or [natural] philosophy [ie, science]; but rather let men endeavour an endless progress or proficiency in both.”

Advancement of Learning (1605) 1.1.3

COMMENTS:

S10

- classic time-honoured relationship between Science & Religion:

(1) Book of God’s Words

Bible → Religion → studied by theologians

(2) Book of God’s Works

Nature → Science → studied by scientists

- Bible & Nature are GIFTS from God → they enhance & enrich each other
use both Books to construct YOUR personal worldview

S11

- Bible & Nature are used for loving God with our mind

S12

Jesus

10. “Love the Lord your God with all your heart and with all your soul and **with all your mind**. This is the first and greatest commandment.”

Matt 22:37-38

☛ many students at the end of this course

- NOT just a one-way street from professor to students!
students have impacted me profoundly in this class

S13

I dedicated my book *Evolutionary Creation* (2008) to my Science & Religion students between 1997 & 2007:

“They taught me the meaning of loving God
faithfully & fearlessly with our mind”

CATEGORIES & PRINCIPLES

S2

I. KEY THOUGHTS

S3

WARNING: Your head is going to swim!!!

1. Science & Religion Warfare

S4

Cartoons are commentaries on our culture

S5

EG Non Sequitur

Common messages:

- Forced to choose between only TWO positions: EITHER Science
OR Religion
- Science explains away Religion

2. PROBLEM behind Science & Religion Warfare

S6

Categories

DEF: the foundational concepts that direct the way we:

1. look at the world
2. think about the world

Note the two verbs. Categories are like:

1. Glasses → give a **view of the world**
2. Software → process information through a program or **worldview**

Common Categories (general public & churches)

S7

trap the mind & force people to think in:

Dichotomies

DEF: division of an issue into only two simple positions
thinking in 'black-and-white' & 'either/or'

EG: science vs. religion

☛ But this is a **False Dichotomy**

Conflations

S8

DEF: careless collapsing & co-mingling of distinct ideas into ONE undifferentiated
concept

EG: science & all-encompassing capital "T" Truth
science & atheism

religion & strict literal reading of the biblical creation accounts

S9

religion & anti-evolutionism

NOTE:

we all begin our intellectual voyage in dichotomies & conflations

3. SOLUTION toward a Peaceful Relationship between Science & Religion

S10

Introduce Academic Categories

Major Theme of this course:

challenge common categories & replace with academic categories

4. RESULT

S11

- Offer YOU a wide spectrum of possible relationships between Science & Religion

- Allow YOU to make informed decisions & develop:

YOUR worldview

YOUR personal beliefs

S12

II. THEOLOGY: GENERAL CATEGORIES

Etymology of the word “Theology”

Greek: θεος (*theos*): God λογος (*logos*): word

If theology is the study of God’s Words, then we need to be aware of the languages in the Word of God (Bible)

GREEK ALPHABET (see supplementary episode)

Why bother with languages?

sometimes ideas are “lost in the translation”

☛ YOUR ownership of the original meaning of words and concepts

COMMENTS:

- always be cautious with the term “God”

has a very wide range of meanings & nuances:

from a personal spiritual being (Jews, Christians, Muslims)

to only beauty & harmony in physical world (Einstein)

- ALL the definitions given below are the MOST BASIC & CENTRIST

Theism Greek θεος (*theos*): God

DEF: BELIEF in a personal God

Supreme Being who is all-loving, all-powerful, and all-knowing

EG:

God of Jews, Christians, Muslims

40% of US scientists are theists

Deism Latin *Deus*: God

DEF: BELIEF in an impersonal God

Supreme Being who creates the world and then has nothing to do with it

began in the 18th century (1700s) during the Enlightenment

aka “God-of-the-philosophers”

this God winds the clock of the universe & leaves it run down on its own

EG:

God of Charles Darwin for most of his adult life

Atheism Greek α (*a*): a prefix that negates (called ‘alpha privative’)

DEF: BELIEF that God does not exist.

EG:

Richard Dawkins

1. “The universe we observe has precisely the properties we should expect if

there is, at bottom, no design, no purpose, no evil and no good, **nothing but**

blind, pitiless indifference.”

Richard Dawkins, *River Out of Eden: A Darwinian View of Life*
(New York, NY: Basic Books, 1995), 133.

KEY WORDS:

“nothing but” → often used by atheists

Agnosticism Greek α (*a*): prefix of negation γνωσις (*gnōsis*): knowledge

DEF: BELIEF that there is no knowledge regarding the existence or non-existence of God

coined by Thomas Henry Huxley in 1869

EG:

Charles Darwin late in life

III. CHRISTIANITY: GENERAL CATEGORIES

Christianity

- defined by HISTORY & 3 main branches (divisions): S2
S3
S4 H1
 1. Roman Catholicism (325)
 2. Eastern Orthodoxy (1054)
 3. Protestantism (1517)

- defined by CREEDS (major statements of belief): S5
 2. **Apostles' Creed** (150 AD/CE)

I BELIEVE in God, the Father almighty, Creator of heaven and earth.

I BELIEVE in Jesus Christ, his only Son, our Lord, S6

He was conceived by the power of the Holy Spirit and born of the Virgin Mary.

He suffered under Pontius Pilate, was crucified, died, and was buried.

He descended to the dead.

On the third day he rose again. He ascended into heaven, and is seated at the right hand of the Father.

He will come again to judge the living and the dead.

I BELIEVE in the Holy Spirit, S7

the holy catholic Church, the communion of saints, the forgiveness of sins,

the resurrection of the body, and the life everlasting. Amen.

Catechism of the Catholic Church (Ottawa, ON: Canadian Bishops Publication, 1994), 50.

COMMENT: S8

Father, Son, and Holy Spirit = Holy Trinity. One God in Three Persons

Conservative Christianity S9

CONSERVES the beliefs of the Apostles' Creed

- Jesus = fully God & fully human
- Resurrection of Jesus' physical body
- Bible Inspired (capital "I" inspired) by Holy Spirit

Liberal Christianity S10

REJECTS the beliefs of the Apostles' Creed

- Jesus = merely an enlightened man
- Resurrection of Jesus' teaching only
- Bible inspiring (small "i") literature written by humans only

S11 H1

NOTE: Science a contributing factor in development of Liberal Christianity in the 19th century

It arose after the birth of:

modern science in the 17th century (Galileo, *Dialogue* 1632)

evolutionary science in the 19th century (Darwin, *Origin of Species*, 1859)

☛ **SCIENCE IMPACTS RELIGION!!!**

Fundamentalism S12

reaction to Liberal Christianity

modern science viewed as an enemy of religion

appears during the 1920s in North America, especially the United States S13 H1

- strict biblical literalism
- anti-evolutionism
- Science & Religion Warfare

Catholic & Evangelical

S2 H1

TIP: distinguish the adjectives from the nouns

Cat/holic:

Greek *κατα* (*kata*): with respect to *όλος* (*holos*): whole

Ev/angelical:

Greek *ευ* (*eu*): good *αγγελος* (*angelos*): messenger

S3 H1

LAMOUREUX’S RELIGIOUS BELIEFS:

S4

- Pre-Protestant Reformation Christian

Catholic → I embrace the whole church

Evangelical → I focus on Good News, the Gospel

- Theological Education: Masters at Regent College (Evangelical Protestant)

S5

PhD at U of St. Michael’s College (Roman Catholic)

WARNING ON PARADIGMS:

S6

paradigms are teaching tools to help organize information

Divine Revelation

S7

DEF: BELIEF that God communicates with humanity

(1) Special Revelation

S8

DEF: BELIEF that God communicates **SPECIFIC** information to humanity

- **Incarnation** Latin *in*: in *carnis*: flesh

S9 H2

God became a man and revealed himself through Jesus

“The Word [Jesus] was God . . . and became flesh” Jn 1:1-3, 14

Greatest act of revelation: God in the Flesh → Jesus

- **Biblical Revelation**

S10 H2

God inspired the writers of the Bible to reveal himself

“All Scripture is God-breathed” 2 Tim 3:16

The Old Testament has the “very words of God” Rom 3:2

- **Personal Revelation**

S11 H2

answered prayer, dreams, visions, signs & wonders

EG 40% of US scientists believe God answers prayer

(2) General Revelation

S12

DEF: BELIEF that God communicates **GENERAL** information to all of humanity

- **Natural Revelation**

S13 H2

nature reflects God & some of his general attributes

“The heavens declare the Glory of God and the skies proclaim the work of his hands”

Ps 19:1

“God’s invisible qualities ... clearly seen and understood from what has been made”

Rom 1:19-20

☛ Intelligent Design → HUGE topic in Science & Religion

S14 H2

- **Moral Revelation**

S15 H2

human conscience & sense of morality

“The law written on the human heart” Rom 2:14-15

aka “moral compass” within us

Supplementary Quotes 1-6 S16 H2

The Two Divine Books

S2

DEF: BELIEF that God communicates (reveals) to humanity through two “books”

- ☛ time-honoured way for relating Science & Religion
EG Sir Francis Bacon

(1) Book of God’s Words Bible S3 H2

VERBAL Latin *verbum*: word
uses words → offers specific information

(2) Book of God’s Works Nature S4 H2

NON-VERBAL
does **NOT** use words → offers only general information
EG it is like music. A symphony does not use words, but certainly communicates

Summary S5-6

The Bible

S7

- it’s like an ANTHOLOGY
written by roughly 50 authors over roughly 1500 years
has different types of literature (ie literary genres)
 - gives the impression of being a historical record S8 H3
some events align with archeological evidence & ancient historical records
 - CENTRAL QUESTION in Science-Religion dialogue: S9 H3
What is the literary genre of Genesis 1-11?
History? Allegory? Fairy Tale?
- SUGGESTION: read Genesis 1-11 & outline your provisional interpretation

Divine Action

S10

DEF: BELIEF that God acts in the world

Two Basic Concepts:

S11

(1) CONTEXT of Divine Action

- Personal
DEF: divine acts with **people**
- Cosmological Greek *κοσμος* (*kosmos*): cosmos, entire universe
DEF: divine acts in **nature** (i) origins
(ii) operations

(2) MODE of Divine Action

S12

- Interventionism
DEF: **dramatic** divine acts
God breaks into the regular routines of people or nature
- Providentialism
DEF: **subtle** divine acts
God works through the regular routines of people or nature

Six Basic Categories of Divine Action:

For examples of each category see H3

1. Personal Interventionism S13 H3
2. Personal Providentialism S14 H3
3. Cosmological Interventionism in Origins S15 H3
4. Cosmological Interventionism in Operations S16-17 H3
5. Cosmological Providentialism in Origins S18 H3
6. Cosmological Providentialism in Operations S19 H3

How to Determine the Category of Divine Action: S2

1st determine CONTEXT

Does it deal with people **OR** is it with the origins/operations in the cosmos?

2nd determine MODE

Is it dramatic (interventionism) **OR** is it subtle (providentialism)?

TIP: Personal Trumps Cosmological S3
EG

3. Joshua & the miracle of the sun stopping S4

Joshua said to the Lord in the presence of Israel: 'O sun, stand still' ...

The sun stopped in the middle of the sky and delayed going down

about a full day. Josh 10:12-13

QUESTION: What category of divine action?

Sin S5

DEF: BELIEF that certain acts are wrong/evil because they break God's intention for **joyous** and **peaceful** human living.

☛ God is NOT a cosmic kill-joy!!!

• Conservative Christian Position on Sin: S6

real & humans are accountable before God

determined by God → 10 Commandments S7 H4

2 Great Commandments of Jesus S8-9 H4

• Secular (at times Liberal Christian) Position on Sin: S10

ONLY a cultural artifact, social convention & ultimately relative

ONLY determined by humans

LAMOUREUX'S POSITION ON SIN: S11

- Biblical: from the opening pages to last pages
- Historical: major doctrine throughout Church history
- Experiential (life experience): have a look around the planet!
look inside YOURSELF

Was the Holocaust **nothing but** the clash of relative socio-cultural conventions?

OR

Was the Holocaust truly wrong, truly evil, and truly sinful? YOU decide.

IV. PHILOSOPHY: GENERAL CATEGORIES S12

Term "Philosophy" is made up of:

Greek φιλος (*philos*): beloved, friend

σοφια (*sophia*): wisdom, understanding

Worldview (Personal Philosophy) S13

DEF: BELIEFS concerning: (1) ULTIMATE character of the world

(2) our place in the world

(3) how to live in the world

☛ everyone has a worldview or personal philosophy

A goal of this course:

to become aware of YOUR worldview and to develop it further

Metaphysics

S2

Greek **μετα** (*meta*): behind, beyond, after

φύσις (*phusis*): nature → etymology of English words “physics” & “physical”

DEF: Ultimate Beliefs

- beliefs about the Ultimate Reality behind and beyond nature
- religious & philosophical beliefs
- ☛ *everyone has a metaphysics*

Intelligent Design

S3

DEF: BELIEF that the beauty, complexity, and functionality in nature reflect rationality and the creative work of an Intelligent Designer

Teleology Greek **τελος** (*telos*): plan, purpose, goal, final end

S4

DEF: BELIEF that the universe & life have an ultimate plan and ultimate purpose and that the world is moving toward an ultimate goal or final end

- teleology is based in some Ultimate Being or Power
- Intelligent Design → REAL

Dysteleology German: *dysteleologie* *dys*: to lack *teleologie*: teleology

S5

DEF: BELIEF that the universe & life have **NO** ultimate plan, **NO** ultimate purpose, **NO** ultimate goal, and **NO** ultimate final end

- universe & life arose through **nothing but** blind chance
- Intelligent Design → ILLUSION

EG

Richard Dawkins

S6

4. “The universe we observe has precisely the properties we should expect if there is at bottom **no design, no purpose**, no evil and no good, **nothing but blind**, pitiless indifference.”

R Dawkins, *River Out of Eden* (NY: Basic Books, 1995), 133

5. “The complexity of living organisms is matched by the elegant efficiency of the **apparent design**.”

R Dawkins, *The Blind Watchmaker* (London: Penguin, 1986), xiii

METAPHYSICS-PHYSICS PRINCIPLE

S8

1st Major Principle in this course

foundational to Science-Religion scholarship

(1) STRUCTURE

S9 H5

- Upper Compartment of **METAPHYSICS** (Religion & Philosophy)
deals with Ultimate Beliefs
Scientific instruments do not work in the realm of metaphysical beliefs
EG cannot put God, sin, or teleology/dysteleology in a test tube

- Lower Compartment of **PHYSICS** (Science)

S10 H5

deals with Physical Facts
Scientific instruments work extremely well in the natural world
EG nature can be placed in a test tube

(2) COMPLEMENTARY RELATIONSHIP

S2 H5

- Latin *complere*: to fill, complete
In a complementary relationship, two parties add something that is lacking in the other so that they complete each other → enhance & enrich
- Two-way exchange between: Metaphysics (Religion & Philosophy) S3 H5
Physics (Science)
- Rooted in reciprocal STEPS OF FAITH (or intellectual leaps)
informed by Intuition & Reason
no mathematical formula to move between upper & lower compartments
☛ *everyone takes these Steps of Faith whether they are aware of it or not*

UPWARD STEP OF FAITH

S4 H5

Science offers PHYSICAL FACTS to Religion & Philosophy

EG: Facts of an average cell:

1/1000th inch

2 yards of DNA

Storage Capacity = 1.5GB (2 CDs) = 6500 Books (300 pages each)

S5 H5

QUESTION:

Does this scientific evidence reflect intelligent design?

DOWNWARD STEP OF FAITH

S6 H5

Religion & Philosophy offer metaphysical BELIEFS to Science

NB: this is often overlooked & rarely acknowledged

These beliefs function like a “**Metaphysical Filter**” through which we:

- (1) observe nature
- (2) interpret nature

QUESTIONS:

S7 H5

- Do atheists view nature through “Dysteleological Eyes?”
Does their Metaphysical Filter force them to believe design is an illusion?
- Do Christians view nature through “Teleological Eyes?” S8 H5
Does their Metaphysical Filter force them to believe design is real?

TIP: SEPARATE DON'T CONFLATE

S9 H5

Common error of atheists & agnostics is that they often conflate their Metaphysics & science, and they assume their worldview is purely scientific

☛ But atheists & agnostics have ULTIMATE BELIEFS!

PROVOCATIVE QUESTIONS:

S10 H5

- Is there a **Personal Factor** influencing the reciprocal Steps of Faith?
Does our relationship with God (or lack of a relationship) impact the intellectual leap?
- If so, could there be a Commandment #1 issue with those who reject intelligent design?
☛ **Does sin have an impact on our thinking?**

Leads to next section:

Epistemological Categories

the ‘mental machinery’ or ‘intellectual tools’ that direct our thinking and allow us to build our worldview

V. PHILOSOPHY: EPISTEMOLOGICAL CATEGORIES

S2

Epistemology Greek επιστημη (*epistēmē*): knowledge

S3

DEF: rules of knowing
theory of knowledge

STUDENTS CONFUSE THIS!!!

NOT knowledge itself. NOT information

BUT how we know we know → “Mental Tools”

“Mental Software” & “Mental Hardware” that allows us to know & understand

☛ *everyone has an epistemology*

FOUNDATIONAL EPISTEMOLOGICAL CATEGORIES

S4 H6

1. Correspondence

knowledge matches external reality

2. Coherence

knowledge internally consistent & without contradictions

3. Consilience

knowledge interconnects & fits tightly into one encompassing theory

YOU have these categories otherwise you would never have made it to university

RELIGIOUS EPISTEMOLOGICAL CATEGORIES

S5 H6

1. Divine Foundation of Knowledge

S6 H6

DEF: knowledge is ultimately rooted in God

6. The fear of the Lord is the beginning of knowledge. Prov 1:7

S7

COMMENT:

issue with word ‘fear.’ 17th English expression (KJV)

Fear Hebrew: *yare’*

be afraid → our definition

awe

marvel

revere

respect

Knowledge Hebrew: *da’at*

facts → our definition

practical skills

personal experience

wisdom, discernment

morals

Biblical Notion of Knowledge:

S8 H6

- rooted in God & relational to God
- personal
- wide & holistic
- NOT just facts

QUESTION:

S9 H6

What is the foundation of **YOUR** knowledge?

Is knowledge ultimately rooted in God (or some teleological factor)?

OR

A brain built for & shaped by a dysteleological evolutionary process?

S10 H6

A brain produced by **nothing but** 4Fs:

(1) _____ (2) _____

(3) _____ (4) _____

IMPLICATIONS: S2

IF we have a dysteleological brain that was produced by **nothing but** 4Fs:

Why should we trust our brains?

Why should we trust our knowledge?

NOTE: 4Fs argument in **Alvin Plantinga** "Is Naturalism Irrational?" *Warrant & Proper Function*
(Oxford, UK: University Press, 1993), 216-237.

2. Mystery S3

DEF: knowledge that is beyond the human ability to know
ideas that the human mind will **NEVER** grasp

EG Religious:

Where did God come from?

Secular:

Where did energy & matter come from?

Albert Einstein:

S4

7. "The eternal mystery of the world is its comprehensibility."

Albert Einstein, "Physics and Reality," *Journal of the Franklin Institute*,
translator Jean Piccard, 221:3 (March 1936), 351.

COMMENTS: S5

- not small 'm' mystery. EG medical mysteries
- but capital 'M' mystery → concepts humans will never understand
- reflects the (creaturely) limits of human mind
- word 'mystery' appears 30+ times in Bible

S6

8. Can you fathom the **mysteries** of God? Can you probe the **limits** of the Almighty?
Job 11:7

9. Now we see but a poor reflection; then we shall see face to face. Now I know in
part; then I shall know fully. 1 Cor 13:12

Other verses on mystery: **SQ 16-18**

3. Impact of Sin S7

DEF: knowledge is influenced by the spiritual state of a person

Does our relationship with God (**or lack of**) affect our ability to know?

EG: does being a God-hater affect a person's ability to think clearly & rationally?

See Richard Dawkins' view on God in **SQ 19**

S8

The Bible on Sin & Epistemology: S9

10. For although they knew God, they neither glorified him as God nor gave thanks
to him, but **their thinking became futile** and their **foolish** hearts were darkened.
Although they claimed to be wise, they became **fools** and exchanged the glory of
the immortal God for images made to look like mortal man and birds and animals
and reptiles. Rom 1:21-23

COMMENTS: S10

- in the Bible:
words 'fool' & 'foolish' do not mean intellectually stupid
a fool is someone missing out on the best part of life → GOD
- Reject Commandment #1 (God is #1), then break Com. #2 (Idolatry)

QUESTION: S11

IF there is a Commandment #1 Problem,
THEN is there also a Knowledge Problem?

Does Sin Impact OUR Epistemology?

☛ YOU DECIDE

EXAMPLE: S2

Alvin Plantinga, *Warranted Christian Belief* (Oxford University Press, 2000)

Chapter 7: Sin and Its Cognitive Consequences

IV. The Noetic Effects of Sin Greek $\nu\omicron\varsigma$ (*nous*): mind

B. Sin and Knowledge

SIN & METAPHYSICS-PHYSICS PRINCIPLE S3 H5

QUESTIONS:

(1) IF sin is real,

IF the greatest sin is breaking Commandment #1 (God is #1),

THEN will sin impact the Upward & Downward Steps of Faith?

(2) BUT IF someone believes in God,

THEN will this belief impact the Upward & Downward Steps of Faith?

S4 H5

BE AWARE:

Our Metaphysical Beliefs IMPACT Our Epistemological Tools

S5

Positivism

S6

DEF: a theory of knowledge that claims Truth is only determined by: (1) logic & (2) science

“MATH & TEST TUBE EPISTEMOLOGY”

- if you can't analyse it logically or put it in a test tube, then it is MEANINGLESS

Therefore → God & spiritual realm are “meaningless”

- reality can be REDUCED into “NOTHING BUT” molecules

Therefore → humans are “nothing but” a collection of molecules

LAMOUREUX'S VIEW ON POSITIVISM:

S7

I love logic & I love science BUT . . .

Problems:

- Epistemological Loading of the Dice

IF there is a spiritual realm, then positivists will never know it because **by definition**

their theory of knowledge rules it out

- Experientially Suspect (life experience)

S8

EG love is reduced to nothing but molecules in your brain

BUT

can you say to someone that you love:

“I love you, but realize that love is **nothing but** an illusion concocted by molecules in our brain, and it is ultimately & utterly **meaningless.**”

☛ Can you say this to your mom?

Scientism

S9

DEF: conflation of science & secular worldview

common understanding of science

Secular worldview features: positivism

dysteleology

humanist ethics → humans decide morals & values, not God

Modernity (1600-1950)

S2

DEF: a period in intellectual history marked by the eventual emergence of positivism as the dominant epistemology

HISTORY:

- Begins with birth of Modern Science (1600s) → Theism
- Develops during the Enlightenment (1700s) → Deism
- Culminates with Scientism (1900s) → Agnosticism & Atheism

Post-Modernity (1950+)

S3

DEF: a period in intellectual history marked by an epistemological crisis & breakdown of Modernity

Features:

- truth is more than math & test tubes → challenges Positivism
- “humanization” of knowing. It is more: (1) Personal
(2) Social

Good News:

S4

- opens the door for religious people & other teleologists:
 - truth is not limited to just math & test-tubes
- removes the attitude that “Science is King” & “Science Rules”

Bad News:

S5

- no such thing as Truth (capital “T”)
- all sorts & lots of “truths” (small “t”)
- everyone has a “truth”
- leads to excessive relativism

VI. HERMENEUTICAL CATEGORIES

S6

Hermeneutics

S7

DEF: rules of interpretation for reading a book

- *everyone has hermeneutics*

DRAWING EXERCISE:

S8-10

- 11.** In the beginning God created the heavens and the earth. Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters. Gen 1:1-2

NB: The Bible has a **3 Tier Universe**

S11 H6

- The best example appears in the Kenotic Hymn (Phil 2:6-11) S12
- Greek *κενωω* (*kenoō*): “to empty, pour out”
- One of the most important passages in Bible
- God emptied himself & became man in the person of Jesus → Incarnation
- Written by the Apostle Paul

- 12.** ¹⁰At the name of Jesus every knee should bow, S13

- [1] in heaven and,
- [2] on earth and,
- [3] UNDER THE EARTH,

¹¹and every tongue confess that Jesus Christ is Lord,
to the glory of God the Father. Phil 2:10-11

COMMENTS: S2

- English translation “UNDER THE EARTH” is not the actual Greek word!

καταχθονιων (*katachthoniōn*):

κατα = down

χθονιος = subterranean world, chthonic realm, underworld

- More accurate translation reveals that Paul believed in a **3 Tier Universe**

[1] in heaven and, S3 H6

[2] on earth and,

[3] in the **UNDERWORLD**

Eisegesis Greek εις (*eis*): in, into ηγεομαι (*ēgeomai*): to guide S4

DEF: reading our views or agenda **INTO** a book

common error in reading of ancient texts like the Bible

EG: Reading OUR 21st century science (spherical earth) into the Bible

Exegesis Greek εκ (*ek*): out, out of ηγεομαι (*ēgeomai*): to guide S5

DEF: reading a book’s views or agenda **OUT** of it.

goal of reading any book, including the Bible

Hermeneutical Horizons S6

DEF: the conceptual worlds of the (1) Bible and (2) Modern Reader

EG flat earth & spherical earth

S7 H7

HUMAN REPRODUCTIVE BIOLOGY

S8 H7

GREEK σπερμα (*sperma*): 1. seed that farmers sow in fields

S9 H7

2. seed that **ONLY** males release during sex

One “Seed” Theory (Preformatism) S10 H7

ancient reproductive biology

ONLY males have reproductive seed & females **DO NOT** have reproductive seed

assumed an entire miniature person inside the male “seed”

Miraculous Birth of Isaac (Gen 17 & 21) S11

Abraham (100 yrs old) & Sarah (90 yrs old), but God promises a child

13. By faith Abraham, even though he was past age—and Sarah herself was barren—

was **enabled to become a father** [σπερμα + καταβαλλω] because he

considered him [God] faithful who had made the promise. Heb 11:11

COMMENTS: S12

καταβαλλω: to thrown down

κατα (*kata*): down βαλλω (*ballō*): to throw

σπερμα + καταβαλλω technical term = to ejaculate (only males)

HEBREW זְרָא noun (*zera* ‘): 1. seed that farmers sow in fields S13

2. seed that **ONLY** males release during sex

“flow of seed [*zera* ‘]” = ejaculation of semen Lev 15:32

HEBREW זָרָא verb (*zāra* ‘): 1. to sow seed in fields S14-15 H7

2. to be made pregnant

“a woman shall be seeded [*zāra* ‘] with seed [*zera* ‘]”

Num 5:28

HEBREW ALPHABET (see supplementary episode) S16 H62

Hermeneutical Gaps

- DEF: conceptual differences between the Bible & Modern Reader S2
 - Historical S3
 - Egypt a world super power in 1500 BC/E
 - Cultural
 - Jesus washing the feet of his disciples before dinner John 13:3-17
 - Linguistic
 - word σπερμα in the context of human reproduction Heb 11:11
 - Philosophical S4
 - sin as an epistemological factor Rom 1:21-23
 - Scientific
 - shape of the earth in the Bible Phil 2:10-11
 - CHALLENGE: S5
 - Gaps WIDEN with time
 - Older the text, the stranger it will read
 - 21st century people steeped in 21st century science will find statements about nature in the Bible quite unusual and even bizarre
 - GOAL: S6
 - Bridge or close the gap
- ☛ THINK LIKE AN ANCIENT PERSON**

Biblical Inerrancy

- DEF: BELIEF the Bible is absolutely true & without error → it was inspired by God (Holy Spirit) S7
- Inerrancy based on the Bible S8
 - Old Testament:
 - 14. Every word of God proves true. Prov 30:5
 - 15. All your [God's] words are true; all your righteous laws are eternal. Ps 119:160
 - New Testament:
 - 16. The Jews have been entrusted with the very words of God. Rom 3:2
 - 17. All Scripture is God-breathed. 2 Tim 3:16-17
- Inerrancy rooted in God's character → God of Truth → **God does NOT lie!** S9
 - 18. God, who does not lie. Titus 1:2
 - 19. It is impossible for God to lie. Heb 6:18

BUT

S10

At the name of Jesus every knee should bow,
 [1] in heaven and,
 [2] on earth and,
 [3] in the UNDERWORLD,
 and every tongue confess that Jesus Christ is Lord,
 to the glory of God the Father. Phil 2:10-11

COMMENTS:

- IF the Christian God is the Creator of the world and the Author of the Bible, S11
 THEN it is reasonable to expect an alignment between the Two Divine Books
- Did God make an error or mistake when he inspired the biblical author Paul?
- **DID GOD LIE IN THE BIBLE?**

Categories of Biblical Statements

All you need to know: 3 categories
2 relationships
1 date

S2-3

S4 H8

All the Bible verses in H8 **SQ 21-34**

THREE CATEGORIES

(1) Spiritual Statements S5 H8

DEF: God & spiritual reality

(2) Historical Statements S6-9 H8

DEF: human activities in the past

ONE DATE:

1st archeological evidence for the existence of Israel → 1200 BC/E (Merneptah Stele)

Israel appears **LATE** in the Ancient Near East (ANE)

☛ the writing of the Bible (Gen 1-11) is **LATE**

(3) Scientific Statements S10 H8

DEF: structure, operation & origin of the physical world

RELATIONSHIP #1

S11 H8

The Problem between Biblical Inerrancy & Biblical Scientific Statements:

- God does NOT lie, BUT statements about nature (scientific) in the Bible DO NOT align with physical reality (EG Phil 2 & 3 Tier Universe)

- How do we deal with conflicts between the Bible & science? S12 H8

Different Approaches:

Ignore

Reject:

modern science (many Bible-believing Christians who reject evolution)

the Bible (many scientists & evolutionists who reject Christianity)

Respond:

1. common hermeneutics

2. academic hermeneutics

1. Common Hermeneutical Responses

S13

Poetic Language Argument

Statements about nature in the Bible are often in poetic passages, and they use figurative language.

They have no basis in physical reality and are simply fanciful figures of speech.

☛ *Therefore, do not take these statements literally.*

COMMENT: a little too simplistic

Common Definition of Poetry:

S14

poetry = figurative language & fanciful ideas

EG

Phil 2:10-11 is a in hymn & poetic

Therefore, write-off the 3-tier universe as “poetic” & not literal

BUT Phil 2:6-11 also affirms the Incarnation

Therefore, write-off the Incarnation as “poetic” & not literal

does any Christian want to do that?

Academic Definition of Poetry:

S15

poetry = structured writing

includes figurative & fanciful language

BUT it can also refer to physical reality

CATEGORIES OF POETIC LANGUAGE

- Fanciful Figures of Speech S2
 “All the trees of the field will clap their hands.” Is 55:12
 do trees have hands?
- References to Physical Reality S3
 “God established the **sun** and **moon**, he set all the boundaries of the **earth**.” Ps 74:16-17
 write-off the reality of the sun, moon & earth because these appear in poetry?
- Scientific Metaphors to Depict Physical Reality S4
 “God stretches out the heavens like a **canopy** & spreads them out like a **tent** to live in.”
 a tent depicts the ancient science of a 3-tier universe: Is 40: 22
 domed canopy (heaven) & flat floor (earth) S5 H6
 use of metaphors is part of science → EG magnetic field

CONCLUSION: S6
 determine the type of poetic language being used by the author

Phenomenological Perspective Argument Greek φαινόμενον (*phainōmenon*): appearance S7
Statements about nature in the Bible are from the perspective of what they look like to the natural senses (eg. naked eye). They are only phenomenological and merely visual effects. For example, check any newspaper today and you will find the times for “sunrise” and “sunset.” But everyone knows that the sun does not literally rise or set.
 • Therefore, do not take these statements literally.

COMMENT:
 a bit more sophisticated & closer to the truth

CRITICAL QUESTION: S8
 when ancient people used the words ‘sunrise’ or ‘sunset,’ did they use these in the same way that we do today?

ANSWER:
 NO
 Proof → Galileo Affair
 up to 1600s people believed: (1) sun literally moved across sky every day
 (2) earth literally did not move

CATEGORIES OF PHENOMENOLOGICAL PERSPECTIVE S9

Ancient Phenomenological Perspective
 what ancient people saw, they believed was ACTUAL
 sun actually moves across the sky
 earth actually did not move

Modern Phenomenological Perspective S10
 what we see, we understand to be only an APPEARANCE
 so-called “movement” of sun an appearance → earth’s rotation
 so-called “immovability” of earth an appearance → gravity

CONCLUSION: S11
 IF you write-off statements in the Bible like the sun “rising/setting” as merely an appearance,
 THEN you are reading YOUR modern phenomenological perspective INTO the Bible
 • that is EISEGESIS

INSTEAD:
 when reading an ancient text → **THINK LIKE AN ANCIENT PERSON**

2. Academic Hermeneutical Response S2

Categories of Biblical Concordism & Correspondence S3

DEF: alignment between the Bible and reality

(1) Spiritual Correspondence S4

DEF: spiritual statements in Bible align with spiritual reality

(2) Historical Concordism

DEF: historical statements in Bible align with human history

(3) Scientific Concordism

DEF: scientific statements in Bible align with physical reality

NB: term “concordism” is not use in the context of spirituality

RELATIONSHIP #2 S5 H8

The Overlap Problem S6 H9

human origins deals with all the categories of correspondence & concordism

THE MOST CHALLENGING VERSE IN SCI-REL: S7

20. 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. Gen 2:7

Is this verse: S8 H9

Spiritual Statement?

reveals the actual method that God used to create the first human

Historical Statement?

reveals the actual beginning of human history

Scientific Statement?

reveals the actual origin of humans → human evolution is false

LAMOUREUX’S POSITION ON CONCORDISM & CORRESPONDENCE: S9 H9

- Accept spiritual correspondence 1st and foremost throughout the Bible
- Accept historical concordism roughly from Gen 12 onward in the Bible
- Reject historical concordism in Gen 1-11
- Reject scientific concordism throughout the Bible

Scientific Concordism S10

DEF: common assumption that the Bible aligns (or is supposed to align) with modern science

NB often referred to as simply ‘Concordism’ in Sci-Rel literature

• Reasonable Expectation: S11

God inspired the Bible ✓

God created the world ✓

Therefore → God’s Two Books should align

• Church History:

scientific concordism was part of academic hermeneutics up to the 20th century

common view today held by most evangelicals & fundamentalists

QUESTION: S12

Is scientific concordism true?

MY ANSWER:

NO

MY REASON:

Bible is NOT a book of science (EG, Pope John Paul II & Billy Graham)

☛ Bible uses the **science-of-the-day** → **ANCIENT SCIENCE** S13

Major Theme in this course

MESSAGE-INCIDENT PRINCIPLE

S2

The 2nd Major Principle in this course

foundational to the relationship between the Bible & science

NOTE: this principle is limited to statements about the natural world in the Bible

(1) STRUCTURE

S3 H5

- Upper Compartment: **The MESSAGE**

Spiritual Truths

INERRANT → absolutely true & without error

- Lower Compartment: **The INCIDENT**

S4 H5

Ancient Science

Science-of-the-day

Ancient Phenomenological Perspective of the natural world

(2) INCIDENTAL RELATIONSHIP

S5 H5

- DEF of Incidental:

to occur in connection with something important

that which helps

- Incidental ancient science is a vessel that helps deliver the more important Spiritual Truths

☛ though ancient science is incidental, it is essential in transporting the Message

S6

- During the process of inspiring the Bible, God accommodated & allowed the ancient authors to use the science-of-the-day

S7 H5

APPLICATION: Phil 2:10-11

S8 H5

Message: Jesus is Lord of the entire universe

Incident: 3-tiered universe

TIP: SEPARATE DON'T CONFLATE

S9 H5

common error of Christians is that they often conflate the Message & the ancient science

VII. ORIGINS DEBATE: GENERAL CATEGORIES

S10

In this debate, the distinction clearly emerges between:

1. Common (Church & Public) Categories
2. Academic Categories

“Evolution” vs. “Creation” Debate

S11

DEF: common view of the origins debate BOTH inside & outside the church leads to Science & Religion warfare

☛ But a **False Dichotomy**

Creation

DEF (Common): origin of universe & life in six 24-hour days 6000 yrs ago

S12

based on a strict literal reading of Gen 1

CONFLATION:

Christianity & literal interpretation of Gen 1

DEF (Academic): RELIGIOUS BELIEF the world (creation) was made by a Creator

☛ **Physical How?** questions are not part of theology

Evolution

S2

DEF (Common): a natural process of molecules-to-humans through blind chance only

CONFLATION:
atheism & evolution

DEF (Academic): SCIENTIFIC THEORY that describes the natural processes that produced the heavens, the earth, and all living organisms, including humans

ANIMALS:

molecules → single cells → soft-bodied marine → animals → marine animals
with skeletons → jawless fishes → jawed fishes → amphibians → reptiles →
mammals → primates → pre-humans → humans

PLANTS:

molecules → single cells → marine plants → land plants → seed bearing plants →
flowering plants

☛ **Metaphysical Why?** questions are not part of science

Darwinism

S3

DEF (Common): atheistic evolution

CONFLATION:
atheism & Darwin

NOTE:

S4

• Darwin never was an atheist!!!

21. “I have **never been an atheist** in the sense of denying
the existence of a God.”

Darwin to Fordyce (7 May 1879)
Life & Letters of Darwin, I:304

• Term “Darwinism” is not often used in biology
computer search of biological abstracts (BIOSIS) between 2011-2015:
Evolution (93,696) Darwinism (151) → 620 to 1

S5

SUGGESTION:

don’t use the term ‘Darwinism’
it misrepresents Charles Darwin & it only causes confusion

Re-Categorizing Origins

S6-9 H5&9

QUESTIONS:

Is evolution teleological or dysteleological?

Is it possible to be both a creationist & an evolutionist?

TIP: **Embryology-Evolution Analogy** → God uses natural processes

VIII. ORIGINS DEBATE: SPECIFIC CATEGORIES

S10

Evolutionary Sciences

S11

Cosmological Evolution

13.8 billion yrs ago there was a massive explosion (termed “The Big Bang”) from which emerged space, time, and matter, and eventually led to the evolution of stars, planets, moons, galaxies, etc.

Geological Evolution:

4.5 billion yrs ago planet earth formed. Natural processes such as erosion, volcanic activity, and the movement of continents have caused the earth to evolve and change over time.

Evolutionary Biology

3.8 billion yrs ago inert molecules self-assembled into living cells from which evolved plants and animals, including humans

Young Earth Creation	S2
DEF: God created the universe & life in six 24-hour days, 6000 yrs ago Gen 1: strict literal interpretation common view of a “creationist” & <u>THE</u> Christian position	
Progressive Creation	S3
DEF: God created life intermittently (progressively) at different points over billions of yrs Gen 1: Creation Days = Geological Periods millions of yrs long	
Evolutionary Creation	S4
DEF: <u>Personal God</u> created universe & life through evolution Gen 1: reveals Spiritual Truths, not modern scientific facts has an ancient science → ancient understanding of origins uses the academic definition of the term ‘creation’ ☛ <i>evolutionary creationists believe in a Creator & the world is his creation</i>	
Deistic Evolution	S5
DEF: <u>Impersonal God</u> created universe & life through evolution Gen 1: rejects Biblical Revelation NB: Darwin’s view of evolution through most of his adult life	
Theistic Evolution Be Careful with this Term!	S6
DEF (Common): <u>Impersonal God</u> created through evolution → deistic evolution DEF (Academic): <u>Personal God</u> created through evolution → evolutionary creation	
Evolution of Categories: Theistic Evolution & Evolutionary Creation	S7
the substantive (the noun) is the more important term in a category <u>Theistic Evolution:</u> “Evolution” is primary & “Theistic” (God) secondary older category → tends to be used today by Liberal Christians <u>Evolutionary Creation:</u> “Creation” is primary & “Evolutionary” secondary newer category → tends to used today by Conservative Christians	
Dysteleological Evolution	S8
DEF: universe & life evolved without any ultimate plan, purpose or final goal natural processes are run by nothing but blind chance Gen 1: rejects God & Biblical Revelation common view of an “evolutionist” & <u>THE</u> scientific position EG: Richard Dawkins	
Summary: Origins & Hermeneutics	S9 H9
Note the relationship between scientific concordism & the origins positions	S10 H9
☛ anti-evolutionism is connected to scientific concordism	
QUESTION:	S11 H9
IF the Bible has an ancient science of origins, THEN is anti-evolutionism based on poor hermeneutics (scientific concordism)?	

IX. PRACTICAL CONSIDERATIONS S2

Pedagogical Considerations Greek παιδιον (*paidion*): child S3

DEF: educational issues

QUESTION:

What view of origins do we teach in schools?

(1) Public Schools S4

22. The diversity of life on earth is the outcome of evolution: an **unsupervised**, impersonal, **unpredictable** and natural process of temporal descent with genetic modification that is affected by natural selection, **chance**, **historical contingencies** and changing environments.

National Association of Biology Teachers, "Statement on Teaching Biology," *American Biology Teacher* 58 (1995), p. 61

QUESTIONS:

- What type of metaphysics? S5
- Is this acceptable in **public** education in the US & Canada?

American Declaration of Independence (1776) S6

refers to a Divine Being 4 times:

"Nature's God"

"divine Providence"

"men are endowed by their Creator"

"Supreme Judge of the World"

Canadian Charter of Rights and Freedoms (1982) S7

begins with:

"Whereas Canada is founded upon principles that recognize the **supremacy of God** and the rule of law."

(2) Christian Schools & Sunday Schools (in Churches) S8

Most teach anti-evolutionary views → young earth creation & progressive creation

BUT IF God created through evolution,

THEN can you imagine the **STUMBLING BLOCK** anti-evolutionism has been to young people educated in Christian schools & Sunday Schools when they come to university and see the evidence for evolution firsthand?

23. Jesus: "It is inevitable that **stumbling blocks** should come, but woe to him S9
through whom they come! It would be better for him if a millstone were hung
around his neck and he were thrown into the sea, than that he should cause
one of these **little ones to stumble**. Lk 17:1-2

COMMENT: S10

will young people indoctrinated with anti-evolutionism lose their faith?

☛ I lost my faith in 1st year university after a course on evolution

I've seen this happen too many times

BUT evolution is not a reason to reject religion

Pastoral Considerations S2

DEF: practical aspects of the Christian faith. Spiritual practices & traditions in the church

QUESTION:

how should Christians deal with origins in the church?

Church Harmony S3

is origins a reason for a DIVISION between Christians?

OR

is origins only a DIFFERENCE between Christians?

Church & Evolution S4

should the church withhold communion & baptism from evolutionists?

should evolutionists be stopped from teaching in churches & theology schools?

does one have to reject evolution in order to become a Christian?

X. CONCLUSIONS S5

1. Categories are Absolutely Vital S6

- BE AWARE of conflations & false dichotomies S7

COMMON CATEGORIES

trap us & chain us

conflations → false dichotomies → false choices → missed choices

ACADEMIC CATEGORIES

free us & open our mind

spectrum of choices → allows informed choices → **OWNERSHIP of your worldview** S9

- CONTROL the categories → control the debate S10

I don't like the "C" word, but that's the reality

- BEWARE of the categories of your professors → includes Lamoureux! S11

did I miss some categories in this section?

am I loading the categories to promote my position?

IF so, not malice on my part, but pure INCOMPETENCE

☛ CHALLENGE ME & CORRECT ME

2. Categories & Critical Thinking

- There is no such thing as PURE OBJECTIVITY S12

our categories are historically & culturally conditioned

everyone (1) looks at the world and (2) thinks about it through a CATEGORICAL FILTER

EG 21st century AD/CE North Americans:

religion is filtered thru Christianity & science thru modern science

21st century B/CE Egyptians:

religion is filtered thru polytheism (many gods) & science thru ancient science

- However, through critical thinking we can become MORE OBJECTIVE S13

(1) **Identify** your categories

(2) **Decide** which categories you accept or reject

(3) **Construct** your categorical filter

☛ this way you will not be controlled by historically & culturally conditioned categories that you have inherited and force you to think in only one way

3. Define YOUR:

S2

EPISTEMOLOGY

- Do you feel the tug of **positivism**?
- But is there a WIDER category set?
an epistemology not limited ONLY to correspondence-coherence-consilience?
maybe includes religious epistemological categories?

HERMENEUTICS

S3

- Do you feel the tug of **scientific concordism**?
- But is there a WIDER category set?
a view of revelation in which God used ancient science in the Bible
a view of Biblical Inerrancy that does not include statements about nature in the Bible?

4. Consider the Two Foundational Principles for Science & Religion:

S4

METAPHYSICS-PHYSICS PRINCIPLE

S5 H5

a philosophical concept

Common Problem:

Atheists & Agnostics tend to conflate science & their metaphysics

TIP:**SEPARATE & DON'T CONFLATE**Atheism & Agnosticism are Ultimate Beliefs and not scienceMESSAGE-INCIDENT PRINCIPLE

S6 H5

a hermeneutical concept

Common Problem:

Christians tend to conflate the ancient science in the Bible & Message of Faith

TIP:**SEPARATE & DON'T CONFLATE**

Ancient science is not a Spiritual Truth

5. Post-Modernity & the Personal

S7

- Post-modernity is a 'brave new epistemological world' that is beyond modernity & positivism
knowledge is much more social & personal
40% of US Scientists → believe in a personal God
KEY WORD: Personal
- Don't be embarrassed for personal aspects in your worldview, because after all you are a person!!!

WHAT IS RELIGION?

I. KEY THOUGHTS

1. Religion is Difficult to Define

this is because there is such a **WIDE** range of beliefs

EG religion has something to do with:

God in heaven	Judaism, Christianity, Islam	Spiritual Being		
Nirvana	Buddhism	State of being	X	
Energy in Nature	New Age Religions	Cosmic Force	X	
Moral Duty	Moralism	Practice of good	X	S6
Ultimate Concern	All Belief Systems	Whatever! \$\$\$	X	

COMMENTS:

- NO Spiritual Being in many religions (X)
- Is viewing “\$\$\$” as a religion such an odd idea? S7
 1. Jesus: “No one can serve two masters. Either he will hate the one and love the other, or he will be devoted to the one and despise the other.
You cannot serve both **God & Money.**” Matt 6:24

2. Academic Definition of Religion is WIDE → Theme of this section

Religion ≅ Metaphysics (≅ approximately equal to)
EG some scholars view Marxism as a secular religion

3. Religious Ideas → Pervasive, Powerful & MOSTLY UNEXAMINED

2. “I find that **religious belief** is the **most influential** of all beliefs, and the most powerful force in the world. Religious belief has the most decisive influence on everyone’s understanding of the major issues of life across the entire spectrum of human experience. Moreover, it exercises this influence upon all people **independently of their conscious** acceptance or rejection of the religious traditions with which they are acquainted. The enormous influence of religious beliefs remains, however, **largely hidden** from casual view.”

Roy A. Clouser, *Myth of Religious Neutrality: An Essay on the Hidden Role of Religious Beliefs in Theories* (Notre Dame: U Press, 1991), 1.

COMMENTS:

- **Tacit Categories** Latin *tacitus*: silent
DEF: silent categories that impact our thinking & that we are not aware of
- GOAL of education & this course:
to make you aware of YOUR silent religious/metaphysical categories
- How is Clouser defining the term “religion”? More anon

II. STATISTICS ON RELIGIOUS BELIEF

1. Global Population

PEW RESEARCH CENTER “GLOBAL RELIGIOUS LANDSCAPE” (2012)

based on 2500 censuses, surveys & population registers

- 32% Christianity
- 23% Islam
- 15% Hinduism
- 7% Buddhism
- 6% Folk Religions (eg, aboriginal religions)
- 1% Other Religions (eg, Judaism)
- 16% *No Religious Affiliation* (not categorized—agnostic, atheist, spiritual not religious, etc)

☛ **84% accept Traditional Religions**

2. American Population

S2

PEW RESEARCH CENTER "US RELIGIOUS LANDSCAPE" SURVEY (2015)

survey of 35,000 individuals

☛ **89% believe in "God or a universal spirit" → Teleology**

71% Christianity

S3

decrease from 78% in 2007 Pew Survey

6% Other Religions (eg, Judaism, Islam)

23% *No Religious Affiliation* → increase from 16% in 2007

16% "Nothing in Particular"

74% of 16% believe in "God or universal spirit" (12% overall)

4% agnostic

3% atheist

☛ **77% accept Traditional Religions**PEW RESEARCH CENTER "SCIENCE & RELIGION" SURVEY (2015)

S4

survey of 2000 individuals

59% believe science & religion are often in **CONFLICT**

cause of the conflict for 36% of these individuals → Origins

GALLUP POLL (2014)

S5

survey of 1000 American adults that has been conducted 12 times since 1982

50% accept human evolution

range: 46-52%

3. Canadian Population

S6

STATISTICS CANADA "NATIONAL HOUSEHOLD SURVEY" (2011)

based on 4.5 million households

67% Christianity

decrease from 77% in 2001 Census

8% Other Religions

24% *No Religious Affiliation* → increase from 16% in 2001

not categorized into agnostic, atheist, spiritual not religious, etc

probably similar to USA

☛ **75% accept Traditional Religions**

S7

ANGUS REID "BRITONS & CANADIANS MORE LIKELY TO ENDORSE EVOLUTION THAN AMERICANS"

based on 1500 Canadians

(2012)

61% accept human evolution

4. Conclusions

S8

- humans still quite religious in an age of science

roughly 75% of US & Canada accept Traditional Religions

Christianity decreasing in both countries & No Religious Affiliation increasing

roughly 90% of US (probably Canada too) believe in a God or Universal Spirit

Therefore, at least **90%** are **Teleologists**with 3% of US atheist → at best **5%** are **Dysteleologists**

- anti-evolutionism is significant in US & Canada

S9

roughly, only **50-60%** accept human evolution

III. OXFORD ENGLISH DICTIONARY S2

QUESTION: There is lots of it, but what is religion?

- Etymology doubtful & not helpful S3
 - relegere* (Latin): to read over again
 - religare*: to bind

- Definition S4
 - 3. (5a) recognition on the part of man of some higher unseen power as having control of his destiny, and as being entitled to obedience, reverence, and worship; the general acceptance of this feeling as a standard of spiritual and practical life.
- SQ 1 for the rest of this entry

Academic Schools: S5

- (1) Religious Studies
- (2) Psychology
- (3) Philosophy

IV. RELIGIOUS STUDIES DEFINITION OF RELIGION S6

Ninian Smart S7

“The Dean” of the modern study of religion
method used in Departments of Religion in public universities

Importance of the Study of Religion S8

- 4. “To understand human history and human life it is necessary to understand religion.”
Ninian Smart, *The Religious Experience of Mankind*
(NY: MacMillan, 1991 [4th ed.]), 3.

EG: US politics → state-church separation, stem cell, abortion
English literature → Biblical allusions

Phenomenological Method Greek φαίνωμενον (*phainōmenon*): appearance S9

- 5. “The intention is to **describe**, rather than to **pass judgment**, on the phenomena of religion.”

COMMENTS: Smart, 4
goal of Departments of Religious Studies S10
claim NOT to deal with truth or falsity of religion
often termed the “Scientific” study of religion
usually steeped in a positivistic epistemology

- ☛ **Theological Method** S10
theologians respectfully “pass judgment” on the truth or falsity of religion

Definition of Religion: “Six-Dimensional Organism” S11

- (1) RITUAL DIMENSION S12

DEF: 6. Ritual is “some form of outer behavior coordinated to an inner intention to make contact with, or to participate in, **the invisible world** ... however interpreted, whether as [1] God’s presence, as [2] nirvana, as [3] sacred energy pervading nature.” Smart, 6

COMMENTS: S13

- from elaborate (Catholic High Masses) to simple (closing eyes)
- “the invisible world”

WIDE range of beliefs: [1] God → Spiritual Being
[2] nirvana → state of being
[3] sacred energy → Cosmic Force

- (2) MYTHOLOGICAL DIMENSION S2
- PROBLEM with the term 'MYTH'
Common DEF: false & not true
- Appears in the Bible: S3
7. "For a time will come when men will not put up with sound doctrine ...
 They will turn their ears away from **the truth** and turn aside to **myths**."
 2 Tim 4:3-4
- HOWEVER, myth is an academic category in literature, theology & religious studies S4
- Academic DEF:** main message or ultimate (metaphysical) belief of a religion or philosophy
- EG
- Christian Myth → God became a human in the person of Jesus
 Myth of Dysteleological Evolution → Dawkins
- ☛ everyone has a myth!
- Evolution as a Myth & a Religion** S5
8. "Evolution is the **creation-myth** of our age. By telling us our origins it shapes our views of what we [ultimately] are. It influences not just our thoughts, but our feelings and actions too, in a way which goes far **beyond [μετα]** its official function as a biological [scientific] theory.
 In calling it a '**myth**,' I am **not** of course saying that it is a **false story**. I mean that it has great symbolic power, which is independent of its truth. Is the word **religion** appropriate to it? This will depend on the sense we give to that **very elastic word**."
- Mary Midgley, "**The Religion of Evolution**" in John Durant, ed.,
Darwinism and Divinity (Oxford: Basil Blackwell, 1985), 154
- COMMENTS: S6
- Academic definition of the term myth
 "not . . . a false story"
 "shapes our views of what we [ultimately] are" → our metaphysics
 - Reflects Metaphysics-Physics Principle S7 H5
 evolution "goes far **beyond [μετα]** its official function as a biological theory"
 Myth/Religion of Evolution: **Metaphysics**
 Biological/Scientific Theory of Evolution: **Physics**
 - Problem with defining "the word religion" S8
 a "very elastic word"
 Creation Myth of Evolution = RELIGION
WIDE Definition
- (3) DOCTRINAL DIMENSION S9
- DEF: systematic organization of the myth
 brings clarity & accessibility
 this is the task of theology
- (4) ETHICAL DIMENSION S10
- DEF: behaviour code of a religion
 NB: don't colour the term "ethics" with puritanical Christian nuances
 EG Epicurean Ethics → eat, drink & be merry
 their gods had little concern for humans

(5) SOCIAL DIMENSION S2

DEF: community aspects of a religion
 religions are not merely belief systems, but involve communities of religious people

Two Way Relationship: S3

1. Religion Impacts Society
 EG English Common Law based on the Bible
2. Society Impacts Religion
 EG modern science shaping Liberal Christianity
 - ☛ origin of this Science-Religion course
 - it arose in response to the impact of evolution on Christianity

(6) EXPERIENTIAL DIMENSION S4

DEF: **inner** experience of the **Invisible World**
 religion → internal & PERSONAL

CONCLUSION: Smart’s Religious Studies Definition of Religion S5

Last paragraph of his *The Religious Experience of Mankind*:

9. “Altogether the history of the religions of the human race has been multiple: often bitter, often noble, often sweet, at times cruel, sometimes beautiful, often ugly. It can teach us many lessons. Whether we feel ourselves [1] surrounded by a spiritual world, [2] or guided by the one God, [3] or striving toward nirvana, or [4] alone in an empty universe, **WE** [my capitals] **as religious people** asking **spiritual questions** have tried to see **beyond [μετα]** our senses. *Is it just imagination or is it a holy power that impels us?*”
Smart, 576.

COMMENTS: S6

- **WIDE** definition of religion
 religion includes belief in:
 - [1] spiritual world, or
 - [2] one God, or
 - [3] nirvana, or
 - [4] **alone in an empty universe!!!**

IMPLICATION: S7

Is a dysteleological worldview religious?
 Is everyone religious, including dysteleologists?
 ☛ YOU DECIDE

- Reflects Metaphysics-Physics Principle S8 H5
 “**WE** as religious people asking spiritual [metaphysical] questions have tried to see **beyond [μετα]** our [physical] senses.”

- Non-Judgment Method S9
 “Is it just imagination or is it a holy power that impels us?”
 consistent with the Phenomenological Method
 Smart doesn’t give an answer or judgment

- Religious Studies → excellent descriptive scholarship S10
 but in private, these scholars judge truth/falsity of religion
 for many religion is nothing but human imagination

V. PSYCHOLOGICAL DEFINITION OF RELIGION I

S2

William C. Tremmel

educated as a theologian & worked in a department of religious studies

Religion is Difficult to Define

S3

10. “A good definition of religion is **hard to come by**, mostly because it must incorporate an enormous array of beliefs and activities all the way from magic to mysticism, from private prayer to sacred community.”

William C. Tremmel, *Religion, What Is It?*
(NY, Holt, Rinehart & Winston, 1984), 3

Phenomenistic Method

S4

11. In the **phenomenistic** method one is interested in **describing** and **defining** ... questions concerning value and truth are **suspended**.”

Tremmel, 9

Phenomenistic → Greek φαίνωμενον (*phainōmenon*): appearance

Purpose of Religion

S5

to meet human psychological needs

- why do people ‘do’ religion?
practical benefits: deals with psychological pain
- what happens to people?
personal experience: offers a happy psychological state

Definition of Religion: “Functional-Experiential”

S6

- (1) PREPARES FOR PSYCHOLOGICAL PAIN

S7

horrendous & uncontrollable events
death, suffering, guilt, meaninglessness, etc.

- (2) BELIEF IN A CENTRAL DIVINE REALITY

S8

12. “The conviction that there is at the center of human experience, and even of all reality, [1] **a being**, or [2] **beings**, or [3] **process** (a divine reality) in which and through which a person (or community of persons) can transcend the life-negating traumas of human existence, can overcome the sense of finitude.”

Tremmel, 7

- (3) TECHNIQUES

S9

beliefs, rituals, ethics

- (4) ENTER A PSYCHOLOGICAL STATE

S10

comfortable & satisfying state

COMMENTS:

S11

- **WIDE** definition of religion

Divine Reality can be: [1] a being

[2] beings

[3] a process

any belief or technique that deals with our psychological pain is a religion

☛ truthfulness or falsity of a religion is irrelevant

- an eloquent “Religion is a Crutch or Drug” theory

S12

similar to the well-known criticism of religion by Karl Marx

S13

13. “Religion is the opium of the people.”

T. Bottomore & M. Rubel, eds. *Karl Marx* (NY: McGraw Hill, 1964), 41

- many religious people are suspicious of psychology

S14

Religion = psychological & not rooted in reality

= emotion & wish fulfilment

= **nothing but** imagination in head of religious devotees

- QUESTIONS S2
- Is the BELIEF that God does NOT exist: S3
 - psychological & not rooted in reality?
 - emotion & wish fulfilment that there is no God and that we are not accountable to him after our death?
 - nothing but** imagination in the head of atheistic & agnostic devotees?
 - Do atheists & agnostics have Beliefs & Techniques that prepare them S4
 - for their psychological pain?
 - IF SO, are these Beliefs & Techniques:
 - (1) the opium of atheists & agnostics?
 - (2) a religion according to Tremmel’s definition?

VI. PSYCHOLOGICAL DEFINITION OF RELIGION II S5

Tom Pyszczynski, Jeff Greenberg & Sheldon Solomon
 social psychologists & founders of the field of Terror Management Theory S6

Terror Management Theory S7

14. “Knowledge of the inevitability of death gives rise to the potential for paralysing terror, which would make continued goal-directed behavior impossible. The theory posits that this terror is managed by a dual-component **cultural** anxiety buffer, consisting of (1) an individual’s personalized version of the **cultural worldview**, which consists of a **set of benign concepts** for understanding the world and one’s place in it, a set of standards through which one can attain a sense of personal value, and the promise of **literal** and/or **symbolic immortality** to those who live up to these standards; and (2) **self-esteem**, or a sense of personal value, which is attained by believing that one is living up to the standards of value that are part of the **cultural worldview**.”

Pyszczynski, Greenberg, Solomon, “Why Do We Need What We Need? A Terror Management Perspective on the Roots of Human Social Motivation,” *Psychological Inquiry* 8:1 (1997), 2

Features S8

- awareness of inevitable mortality S8
 - “potential for paralysing terror” → cripples us psychologically
- worldview manages terror S9
 - KEYWORD: **worldview** → our beliefs & metaphysics
 - offers the promise of immortality: literal (in heaven after death)
 - symbolic (one’s legacy on earth)
- practice of worldview S10
 - leads to self-esteem & keeps us psychologically functional

Definition of Religion (Implicit) S11

Religion is a Terror Management Technique
 terror of death is managed by the hope of life after death
 Religious worldview is **nothing but** “cultural” and “a set of benign concepts”
 ☛ truthfulness or falsity of a religion is irrelevant

QUESTIONS	S2
What keeps atheists & agnostics psychologically functional?	
Are atheistic & agnostic worldviews nothing but Terror Management Techniques?	
IF GAME	S3
• assume God exists	
• assume the Bible is correct:	
“It is a terrifying thing to fall into the hands of the living God.” Heb 10:31	
THEN	
Do atheistic & agnostic worldviews manage the terror of facing God after death?	
CONCLUSION: Psychological Definitions of Religion I & II	S4
1. Focus is on functional & practical aspects of religion, not the truth value	S5
religion has a psychological component → don’t be embarrassed, we are psychological beings!	
it provides comfort, happiness & meaning to life	
it meets the challenge of horrendous situations like suffering & death	
2. Modern psychology offers excellent DESCRIPTIVE work	S6
EG James Fowler, <i>Stages of Faith: Psychology of Human Development & Quest for Meaning</i>	S7
SQ2 see if these categories apply to your faith/philosophical development	
3. BE AWARE of dysteleological metaphysics CONFLATED into modern psychology	S8
50% of US psychologists are atheists & 11 % are agnostic	
N Gross & S Simmons, “Religiosity of American College & University Professors”	
<i>Sociology of Religion</i> 70:2 (2009), 116	
SUGGESTION for religious & teleological people:	S9
• Use the Metaphysics-Physics Principle in Psychology	
SEPARATE DON’T CONFLATE:	
dysteleological metaphysics & psychological sciences	
• INTEGRATE your metaphysics (eg, belief in reality of sin, guilt & forgiveness) with	S10
the psychological sciences to develop YOUR worldview on psychology	
EG Evolutionary Creation	
integrates the science of evolution & the metaphysics of creation	
MORE IF GAMES	S11
IF sin & guilt are SPIRITUAL REALTIES	
THEN modern secular psychology is missing a valuable piece of information	
this would be like doing biology without evolutionary theory	
IF a psychological problem is a SPIRITUAL PROBLEM	S12
THEN physical protocols won’t work	
<u>spiritual</u> protocols are required	
EG spiritual experience of God’s forgiveness	
4. Clinical Psychology & Psychiatry	S13
• a blessing to our culture and wonderful career choice	
• treatment & healing of:	
marriages, sexual abuse, eating disorders, depression	
• if you need the medications, use them under medical supervision	S14
it is NOT against God’s will	
anti-depressants = insulin	
DO NOT be ashamed if you need medication	
• I’ve struggled with depression & have been successfully treated using anti-depressants	S15
See my paper: “I Sleep a Lot” online at: www.ualberta.ca/~dlamoure/pdepression.pdf	

• **The Ultimate Reality**

S2

17. “This [Ultimate] Reality may be understood as a [1] **unity** or **plurality**, [2] **personal** or **non-personal**, [3] **divine** or **not**, and [4] **so forth**, differing from religion to religion.” Peterson, 4

COMMENTS:

WIDE range of Ultimate Realities, including those that are:

[2] non-personal

[3] not divine

[4] so forth → **WHATEVER!!!**

Therefore: anything can be the Ultimate Reality

CONCLUSION: Peterson *et al* Philosophical Definition of Religion

S3

1. Very **WIDE** definition of religion
2. Asserts some religions are not true!

Excursus: Criticisms of Philosophical Approaches to Religion

S4

• Problem of Impersonal Analysis of a Personal Faith

S5

some complain that critical analysis leads → impersonal God of the philosophers
not the living & personal God of religion

BUT not a substitute for religion or God

instead an instrument to improve & strengthen your relationship with God
EG marriage counselling

• Problem of Fideism

S6

Fideism Latin *fides*: faith

DEF: religious truth rests **ONLY** on faith, not reason

Therefore: religion cannot be analysed rationally

aka the ‘Just Believe’ or ‘Faith Only’ Argument

☛ **IRONICALLY** this is an **ARGUMENT**

fideism attempts to be **RATIONAL!!!**

BUT Jesus commands Christians to think!

S7

18. “Love the Lord your God with all your heart and with all your soul and with **all your mind**. This is the first and greatest commandment.” Matt 22:37

• Problem of Political Correctness

S8

a Post-Modern cultural value

don’t criticize or judge anyone’s religion today

practical importance → keeps the peace

BUT it leads to the death of thinking

criticism is valuable!!!

my atheistic/agnostic critics are some of my best colleagues

if my religious beliefs cannot stand criticism, then I get rid of them

SUGGESTION:

S9

- Openness—to all ideas. No idea unimportant

in my class that means questioning & rejecting the existence of God

- Respect Critics—at all times no matter what is said

- Thicken—your own skin → theology is a contact sport!

- Select Critics Carefully—some people you just can’t talk with

- Goal—to increase dialogue → get rid of the LUST to always be right

- “**Speak Truth in love**” Eph 4:15

you don’t have to be a Christian to appreciate this verse

VIII. PHILOSOPHICAL DEFINITION OF RELIGION II	S2
Roy A. Clouser philosopher of religion	S3
Philosophical Method	S4
19. “Logic requires that religious trust can be either [1] well placed or [2] misplaced as can nonreligious trust , since beliefs about the divine are—as all other beliefs—either true or false but not both at once. It follows, therefore, that when two beliefs disagree about what is divine, one or both of them must be (at least partly) false.”	
Roy A. Clouser, <i>Myth of Religious Neutrality</i> (Notre Dame: U Press, 1991) 34	
<u>COMMENTS:</u>	S5
• Describes & Judges truth value of religion	
• asserts some beliefs are WRONG	
☛ such a counter-cultural idea today in a post-modern world!!!	
• asserts two types of TRUST:	S6
[1] religious	
[2] non-religious	
• asserts two types of trust can be misplaced:	
[1] religious → BLIND FAITH	
[2] non-religious → BLIND UNBELIEF	
Definition of Religion: <u>ALL</u> Theories Are Religious	S7
Thesis Statement of Book:	
20. “No theory can avoid presupposing something to have the status of divinity .” Clouser, 18	
The Divine	S8
DEFINITION:	
21. “A religious belief is any belief in something or other as divine. ‘ Divine ’ means having the status of not depending on anything else. . . . All [religions] believe that the divine is whatever is ‘just there.’ ” Clouser, 19, 21	
<u>COMMENTS:</u>	
The Divine is something/s or someone/s that are <i>self-existent & not dependent</i> on anything or anyone	
EG eternal God of traditional religions	
eternal energy & matter of secular belief	
Types of Religious Beliefs	S9
<u>CORE BELIEFS</u>	
statements about the characteristics of the Divine	
WIDE variety of attributes: personal/impersonal, singular/multiple, good/evil/indifferent	
<u>SECONDARY BELIEFS</u>	S10
statements about how humans relate to the Divine	
WIDE variety of relationships: loved/hated/indifferent, worshipped/not worshipped	
Types of Religions	S11
Three basic types: (1) Pagan (2) Pantheist (3) Biblical	
based on the arrangement of the Divine to the non-divine	
CAUTION:	
a bit of a cartoon, because religions are much more complex	
but for our purposes, a reasonable instructional tool	

(1) <u>PAGAN RELIGIONS</u>	S2
DEF: the Divine is some Force <u>within</u> the universe (non-divine)	
Note: not a derisive term → an academic category in religious studies	
<i>Ritualist Pagan</i>	S3
Nature Religions: a Cosmic Force in the earth, sun, trees, <i>etc</i> (teleological)	
<i>Non-Ritualist Pagan</i>	S4
• Popular Culture: Fate, Destiny, the “Meant To be” (teleological)	
• Marxism: a Cosmic Force that pushes society forward (teleological)	
feudalism → capitalism → socialism → communism	
• Materialism: a purposeless Force in nature with no final goal (dysteleological)	S5
The Divine: blind chance	
The Non-Divine: matter & energy	
QUESTION: Can you call Richard Dawkins religious? Clouser would!	
<i>Dualistic Pagan</i>	S6
Two Divine Forces in opposition with each other (both teleological)	
Chinese Yin & Yang	
(2) <u>PANTHEIST RELIGIONS</u> Greek παν (<i>pan</i>): all θεος (<i>theos</i>) God	S7
DEF: everything is the Divine	
<i>Idealistic Pantheist</i>	S8
the physical universe (non-divine) is believed to be an illusion	
even the person & logical thinking are an illusion!	
22. [Idealistic] Pantheistic traditions insist that what is wrong with people is	S9
their attachment to the illusory world as it is encountered in ordinary	
experience by reason ... Logical criticism , they say, fails to recognize	
that logical thinking is also part of the everyday world of illusion .	
As such, logical thinking is part of the deception that prevents people	
from discovering the divine unity of all reality.” Clouser, 42	
<u>COMMENTS:</u>	S10
the goal is to detach from the illusion of the world & the self	
through mystical experience	
☛ annihilate the self & melt into The Divine	
EG Buddhism: to achieve Nirvana and melt into Nothingness	
<i>Naturalistic Pantheist</i> (NB: not included by Clouser)	S11
the physical universe is the only reality	
EG Albert Einstein (1879-1955)	S12
raised Jewish & rejected a personal God at 12 yrs of age	
God → the <u>physical</u> world with its beauty & harmony	
Complementary View of Science & Religion:	
23. “Science without religion is lame, religion without science is blind.”	
A. Einstein, “Science & Religion” <i>Ideas & Opinions</i>	
(NY: Crown, 1982 [1954]), 46	

- (3) BIBLICAL RELIGIONS Greek βιβλιος (*biblos*): book S2
 DEF: religions with Holy Books
 believe in a Creator (Divine) who made a creation (non-divine)
 EG Judaism, Christianity, Islam
- The Creation** S3
 not an illusion (Idealistic Pantheist) → but real
 not eternal (Pagan & Pantheist) → but temporal
 not exalted as Divine (Pagan & Naturalist Pantheist) → but good

Excursus: Doctrine of Creation S4

Central concept: the belief THAT God created, not on HOW God created

1. Realism S5

BELIEF the creation is real and not merely an illusion
 we are not trapped in some sort of computer program like the Matrix (the movie)

2. Transcendence

BELIEF the Creator is radically distinct from the creation

3. Ordinance

BELIEF the creation was ordained (ordered) into existence by the Creator
 the universe is NOT a fluke or mistake

4. *Creatio Ex Nihilo* Latin *creatio*: creation *ex*: out of *nihil*: nothing S6

BELIEF the Creator made the creation out of nothing
 ☛ the Creator created not only **matter**, but **space & time** as well

5. Temporality

BELIEF the creation has a beginning & an end

6. Dependence

BELIEF the creation is utterly dependent on the Creator
 the creation cannot exist outside the will of the Creator

7. Sustenance

BELIEF the Creator sustains the creation (matter, space & time) every moment of its existence
 in contrast to deism, the Creator does not stand outside the creation

8. Omnipresence Latin *omnis*: all, every S7

BELIEF the Creator is present everywhere throughout the creation

9. Omnipotence Latin *potentia*: power, force

BELIEF the Creator is all-powerful and can act upon the creation at any time
 through dramatic interventionism & subtle providentialism

10. Omniscience Latin *scientia*: knowledge

BELIEF the Creator is all-knowing and understands everything about the creation

11. Revelatory Intelligibility S8

BELIEF the creation reveals understandable messages from the Creator
 • physical world → non-verbal revelation of general attributes of the Creator
 • human conscience → non-verbal revelation of general moral laws of the Creator

12. *Imago Dei* Latin *imago*: image *deus*: God

BELIEF the Creator made human creatures in his likeness & image (aka Image of God)

13. Goodness

BELIEF the Creator made the creation good

CONCLUSION: Clouser's Philosophical Definition of Religion

S2

1. Extremely **WIDE** definition of religionALL beliefs, including dysteleological beliefs, are religious

2. Many religions are FALSE

S3

24. "Although there are strong similarities among [religious] traditions of the same type, those which fall into different types [Pagan, Pantheist, Biblical] are **hopelessly incompatible**. Far from being different **paths up the same mountain**, they do not agree on which mountain to climb." Clouser, 34

COMMENTS:

- challenges the common understanding of different religions S4
 - ☛ they are NOT paths up the same mountain to the same God

- challenges the so-called "**Problem**" of **Exclusivism** S5
 - today you can't make exclusive claims that you know "THE TRUTH"

- challenges Relativism → Post Modern Cultural Value S6
 - truth is relative & everyone has their own "truth"
 - everyone is "right" & no one is "wrong"

BUT recognize the **Fallacy of Relativism**

S7

ironically, relativism makes an exclusive TRUTH claim!!!

- ☛ it states that truth is relative

AND it excludes those who believe in absolute truths

SUGGESTION:

S8

since we can't help but make exclusive truth claims,

consider **Respectful Exclusivism** → "Speak truth in love" Eph 4:15**IX. CONCLUSION: WHAT IS RELIGION?**

S9

1. Common Definition

S10

religion has something to do with a Supreme Being, rituals & ethics
in North America coloured by Christian categories

2. Academic Definition

S11

Religion ≡ Metaphysics → **WIDE** definition of religionMODERN EXAMPLES:

S12

religion associated with being/s, process/es, state/s of being, etc

Ninian Smart:

invisible world (spiritual world, one God, nirvana, empty universe)

William Tremmel:

divine reality (being, beings, process)

Tom Pyszczynski *et al*:

management of terror (psychological state)

Michael Peterson *et al*:

ultimate reality (including the "so forth")

Roy Clouser:

the just there

HISTORICAL EXAMPLES:

Jesus Christ (5 BC/E to 30 AD/CE)

S2

S3

25. “No one can **serve** two masters. Either he will hate the one and **love** the other, or he will be **devoted** to the one and despise the other. You cannot serve both God and Money.”

Matt 6:24

COMMENTS:

WIDE definition of religion
not just spiritual beings, but things → \$\$\$

Martin Luther (1483-1546)

S4

Protestant Reformer

26. “That to which your **heart clings** and **entrusts** itself is, I say, really your **God**.”

Martin Luther, “Larger Catechism” in *Book of Concord*
(Philadelphia: Fortress, 1959), 365

COMMENTS:

WIDE definition of religion
whatever we trust & whatever gives us psychological comfort → God

3. Near Universality of Religion

S5

- A corollary (ie, built into) of the academic definition of religion (Religion ≡ Metaphysics) is the notion that nearly everyone is religious

Immanuel Kant (1724-1804)

Philosopher

S6

27. “That the human mind will ever give up **metaphysical** researches is as little to be expected as that we, to avoid inhaling impure air, should prefer to give up breathing altogether. There will therefore always be **metaphysics** in the world.”

I. Kant, *Prolegomena to Any Future Metaphysics*
B Logan, ed (NY: Routledge, 1996 [1784]), 124

COMMENTS:

S7

IF Religion ≡ Metaphysics
IF everyone has a metaphysics (according to Kant)
THEN nearly everyone is religious
☛ **WIDE** definition of religion

- The cause of the metaphysical (religious) impulse according to Kant:

S8

28. “**Two** things fill the mind with ever new and increasing admiration and reverence, the more often and more steadily one reflects on them: [1] the **starry heavens** above me and [2] the **moral law** within me.”

I. Kant, *Critique of Practical Reason* A Wood, ed
(Cambridge: U Press, 1996 [1788]), 269

COMMENTS:

S9 H2

General Revelation

[1] Natural Revelation

“starry heavens above” → intelligent design (Ps 19:1)

[2] Moral Revelation

“moral law within” → law written on the heart (Rom 2:14)

Summary Chart of Religious/Metaphysical Beliefs S2-5 H10
 See handouts manual page 10

Larson & Witham “Scientists Are Keeping the Faith” (1997) Revisited S6-7 H10
 Now that you have new categories, this study of the religious beliefs of US scientists can be seen in a new light
 See handouts manual page 10

X. TOWARD A WORKING DEFINITION OF RELIGION Lamoureux S8

- Religion deals with **teleology** in the world and **The Ultimate Foundation/s of Teleology** S9
 Teleology: BELIEF the world has an ultimate plan & purpose & the world it is headed toward an ultimate final goal
- Religion has been practised throughout history, because nearly every human being has attempted to be in a **relationship** with his or her Foundation/s of Teleology
- Religion offers **psychological comfort** and contributes to the **psychological stability** of humans, giving them the ability to function in life

COMMENTS: S10

WIDE definition of religion

Religion = Teleology

☛ I can't put dysteleologists (eg, Dawkins) in the religious camp

The Ultimate Foundation/s of Teleology: S11

Being/s or Thing/s (personal or impersonal): called “The God”

Religion is Relational: most humans yearn/crave a relationship with “The God”

Religion is Psychological: “The God” comforts & stabilizes humans

WHAT IS SCIENCE?

S2

I. KEY THOUGHTS

S3

1. Science is Difficult to Define

S4

- Did the Babylonians practice science?

they made remarkable celestial observations & predictions

BUT believed that stars are gods & influence human lives

- Was **Sir Isaac Newton** (1642-1727) a scientist?

S5

formulated Law of Gravitation & key figure in the 17th century scientific revolution

BUT

Principia Mathematica (1687):

S6

1. “This most **legant** system of the sun, planets, and comets, could not have arisen without the **design** and **dominion** of an **intelligent** and **powerful Being**.”

I. Newton, *Mathematical Principles*, Cohen-Whitman trans
3rd ed (Berkeley: California U Press, 1999), 940

COMMENTS:

Newton accepted: (1) a Creator

(2) intelligent design

(3) divine action in Origins & Operations

“dominion of an intelligent and powerful Being”

S7 H3

☛ Cosmological Providentialism in Operations

DOUBLE BUT:

S8

2. “The fixed stars would, through their gravity, gradually fall on each other, were they not **carried back** by the counsel of the **supreme Being**.”

I. Newton, Annotation in *Mathematical Principles*, Cohen & Koyre, eds
2nd ed (Cambridge: Harvard U Press, 1972), 2:760

NEWTON’S REWINDING OF THE UNIVERSE THEORY

Newton believed the universe is like a clock and that as it runs down

God has to intervene and wind it up

☛ Cosmological Interventionism in Operations

S9 H3

2. Trend in the History of Science

S10

- further back into the Past → science connected to religion

increase in teleology

increase in Divine Interventionism & Providentialism

- closer to the Present → science disconnected from religion

increase in dysteleology

increase in natural laws & no need for divine action in explanations

NB: Science is inevitably associated with metaphysics

☛ reflects Metaphysics-Physics Principle → deep human need to relate our beliefs & science

3. Post-Modern Epistemological Crisis (roughly around 1950)

S11

- breakdown of Modernity & rise of Post-Modernity

Contributing Factors:

new physics of the 20th century

beginning of a new academic discipline: History & Philosophy of Science

- challenges the so-called “pure objectivity” of science

science much more **personal & social**

II. OXFORD ENGLISH DICTIONARY

- Etymology S2
 - Latin *scientia*: “knowledge” S3
 - term “natural philosophy” in the past = term “science” today
 - term “scientist” coined in 1833 by William Whewell S4
- Definitions S5
 - General** (older): knowledge in general
 - Narrow** (newer): knowledge of the physical world
 - 3. “4b. in modern use, often treated as synonymous with ‘Natural and Physical Science,’ and thus restricted to those branches of study that relate to the phenomena of the material universe and their laws.” SQ 1 for the rest of this entry

III. CONCEPTIONS OF SCIENCE

- Historian of Science David C. Lindberg S6
S7
- 4. “The nature of science has been the subject of vigorous debate for centuries—a debate conducted by scientists, philosophers, historians, and other **interested parties** [theologians ☺] Although **no general consensus** has emerged, several **conceptions of science** have attracted powerful support.” David C. Lindberg, *The Beginnings of Western Science* (Chicago: U Press, 1992), 1

COMMENTS:

“no general consensus” → science is difficult to define

- Technology S8
gaining power over nature
- Theoretical Knowledge
theories behind the technology
- Laws S9
universal, law-like statements about nature
using the language of science → mathematics, stats & formulas
- Method
observation & experiment
- Knowledge of the Physical World
non-physical realm (eg, spiritual world) not investigated by science
- Epistemology S10
a way of knowing reality that is tentative and based on evidence, not dogma or authority
- Exacting Procedure
characterized by “rigour, precision & objectivity”
- Epithet of Approval
a cultural value today

IV. ANCIENT SCIENCE

- the study of history always offers helpful insights to understand the present S11
- QUESTION:
was there science in the past?
☛ this is a key idea in this course

- Outline: S12
 1. Prehistoric Science (in Preliterate or Oral Societies)
 2. Egyptian & Mesopotamian Science
 3. Greek Science

1. Prehistoric Science

S2

DEF: science in societies without writing → preliterate or oral societies

characteristic: emergence of many **technologies**

spears for hunting (450,000 years ago)

tools for farming (10,000 years ago)

QUESTION

S3

Is prehistoric science limited only to **technology**?

Problem: no written records → oral societies

Solution: Cultural Anthropology & the study of preliterate societies

ANSWER

found in ORAL TRADITION

BE AWARE: Lamoureux has a hermeneutical agenda!

S4

did the ancient preliterate Hebrews have an Oral Tradition?

did the basic ideas in Gen 1-11 first begin as an Oral Tradition?

A. Oral Tradition

S5

DEFINITION:

5. “Oral tradition ... serves as the principle repository for the collective experience and

S6

general **beliefs**, attitudes, and **values** of the community ... The **primary function** of oral tradition is the very practical one of **explaining**, and thereby **justifying**, the present state and structure of the community, supplying the community with a continuously evolving ‘**social charter**’ ...

[Oral traditions] will almost always include an **account of origins**—the beginning of the world, the appearance of first humans, the origin of animals, plants, and other important objects, and finally the formation of the community ...

S7

Oral traditions typically portray **the universe** as consisting of [1] sky and [2] earth, and perhaps also an [3] underworld.

S8 H6

Related to the account of origins is often a **genealogy** of gods, kings, or other heroic figures in the **community’s past**, accompanied by stories about their heroic deeds ...

S9

Deity is an **omnipresent** reality in the world of oral traditions.”

Lindberg, 6-8

COMMENTS:

Reflects: Metaphysics-Physics Principle
Message-Incident Principle

S10 H5

Beliefs & Values → Metaphysics & Message

Account of Origins → Physics & Incidental Ancient Science

S11 H5

community’s understanding of nature (science)

the origin of: plants & animals

1st humans & community → beginning of human history

3-tier universe [1] sky (heaven)

[2] earth

[3] underworld

REMEMBER

S2

Purpose of oral tradition is **Social**, not **Scientific**

social charter (Beliefs & Values) cements the community together

If it doesn't, then the community dies

account of origins does not cement the community together

all have a 3-tiered universe

*ALL are wrong → the ancient science is **incidental** to the social charter*

QUESTION

Are you starting to see the similarities to Gen 1-11?

B. The Account of Origins in Oral Traditions: Is it Science?

S3

Characteristics of Oral Traditions:

• **Explanatory**

S4

a psychological need → where do we & the world come from?

EG Genesis 1-11

origins of the universe, living organisms, the Hebrew community & surrounding nations

☛ isn't explanation part of science? YES

• **Use of Models & Metaphors**

S5

employ familiar objects & processes in explanations

agricultural & human reproductive models (EG, 1-seed theory/preformatism)

EG Egyptian Origin of the Universe

S6

god Atum **masturbates** & from his seed arise:

the gods Shu (air) & Tefnut (moisture)

Shu & Tefnut mate & give birth to earth & sky

Mesopotamian Origin of Humans

S7

gods planted the seeds of humans in the earth and then "**humans** broke through the earth's surface **like plants**" *Hymn to E'engura*, Line 3

Origin of Animals in Genesis 1 on the 6th Day of Creation

S8

"God said, 'Let the **LAND produce** living creatures according to their kinds:

livestock, creatures that move along the ground, and wild animals.'" Gen 1:24

similar to Sumerian origins → animals sprout out of the earth

Hebrew verb translated "produce" is *yātsā'*

same verb used for the origin of plants on the 3rd Day of Creation

"The **LAND produced** vegetation: plants . . ." Gen 1:12

☛ isn't the use of models & metaphors part of science? YES

• **Notion of Causality (Causation) in Nature**

S9

a deeply rooted instinct in all of us

something causes something, which causes something, etc, etc, etc . . .

HOWEVER:

S10

Ancient Causality

Agentic (a personal agent) → actions of the God/s, angels, demons, etc

decisive, dramatic, isolated events

EG Genesis 1: Origin of the Universe in Six Days

"And God said, 'Let there be . . .'"

Modern Causality:

S2

impersonal & mechanical natural processes
repeatable & usually gradual

- ☛ isn't causality part of science?
looking for natural causes: YES
looking for personal agents: NO

Excursus: De Novo CreationLatin: *de* 'from' *novus* 'new'

S3

DEF: creation that is: (1) quick
(2) complete

rapid origins into fully formed: living creatures & inanimate structures (earth, sun, stars, etc)
characteristic of Divine Action in most ancient accounts of origins

- ☛ Cosmological Interventionism in Origins

S4 H3

QUESTIONS

S5

Does God's *de novo* creative action in the origin of the world in Gen 1 ultimately reflect an ancient (agentic) understanding of causality?

Does divine action in Gen 1 ultimately reflect an ancient science?

Is God's creative action in Gen 1 ACCOMMODATED?

• **No Clear Demarcation between Natural & Supernatural**

S6

the God/s, angels, demons, etc & humans are intertwined

EG Garden of Eden in Genesis 2 & 3

Adam & Eve are in the presence of the Lord God and talking with him

- ☛ isn't this lack of a natural-supernatural demarcation part of science? NO
science limited to the physical world

• **Brevity**

S7

the length of oral traditions are limited by human memory

EG Genesis 1-11

amounts to only about 10 written pages
most people can remember the basic contents

NOTE

not an exhaustive record

therefore expect incompleteness → won't answer all your questions

- ☛ isn't brevity part of science? NO
science is dependent on massive amounts of written information

• **Genealogies**

S8

explain the origins of the community (nation)
limited by human memory & usually only 5-10 generations

EG Genealogies of the Hebrews in Genesis 1-11

S9

descend from one man—Adam
Gen 5 & 11 genealogies—10 generations each

- ☛ isn't this part of science? NO
science (genetics) recognizes that communities (nations) descend from a group of individuals, not just one person

• **Lack of Concern for Strict Coherence**

S2

termed a “primitive” or “pre-logical mentality”
 account are contradictory at times
therefore expect some contradictions

EG Conflicts in the Order of Creation Events:

S3

Genesis 1		Genesis 2	
birds	5 th Day	man	v. 7
land animals	6 th Day	land animals & birds	v. 19
man & woman	6 th Day	woman	v. 22

SOLUTION:

S4

two different creation accounts were edited together:

Priestly Account (500 BC/E) → Gen 1

Jahwist Account (1000 BC/E) → Gen 2 More Anon

- ☛ isn't a lack of concern for strict coherence part of science? NO
 science is hyper logical

QUESTION:

S5

Is there an **ANCIENT EPISTEMOLOGY** in oral traditions?

an epistemology not obsessed with the foundational epistemological categories of coherence, correspondence, and consilience?

David Lindberg → YES

S6

6. “A cosmology [a view of nature] ... exists within every oral tradition, but often beneath the surface, seldom articulated, and almost never assembled into a **coherent** whole.”
 Lindberg, 6

Therefore,

be cautious not to read oral traditions through our 21st century epistemological standards

IMPLICATION FOR HERMENEUTICS

S7

Don't read an ancient text (Bible) which features an ancient epistemology through modern (hyper-logical) 21st century epistemological categories

- ☛ EISEGESIS can extend to epistemology

SUGGESTION:

S8

CUT THE BIBLE SOME EPISTEMOLOGICAL SLACK

IF historians like Lindberg can recognize & respect ancient epistemology in ancient texts,
 THEN so too Christians with the Bible

- don't be concerned Christians!
 only a loosening of incidental features
 EG order of creative events
 NOT a loss of the Message of Faith
- this will solve a lot of so-called “contradictions” in Scripture

CONCLUSION: The Account of Origins in Oral Traditions: Is it Science?

S9

Is the Origins Account in Oral Traditions Science? Yes & No

Oral Traditions feature an **Ancient Science**

C. Oral Tradition & Genesis 1-11 S2

QUESTION #1 S3

Did the Hebrews have an Oral Tradition before they wrote down Gen 1-11?

Assume: S4

Traditional view of authorship

Moses wrote the Pentateuch (1st five books of Bible):

Genesis, Exodus, Leviticus, Numbers, Deuteronomy

• 1st References to Writing in the Bible are in the Book of Exodus S5

7. “The Lord said to Moses, ‘**Write down** these words, for in accordance with these words I have made a **covenant** with you and Israel’... And he **wrote** on the tablets the words of the **covenant**—the **Ten Commandments**.” Exo 34:27-28

SQ 2-6. Other references to Moses writing

COMMENTS: S6

Termed “Mosaic Covenant”

Covenant

DEF: an agreement between God & humans

• NO references to the Hebrews writing in the Book of Genesis S7

Abrahamic Covenant (Gen 15:1-19, 17:1-14)

establishes the Hebrew peoples

BUT

in contrast to Moses, Abraham is not told to write down the covenant

circumcision is “the sign of covenant” (Gen 17:11)

☛ indicates Abraham & his family were an oral community

Assume: S8

Traditional biblical dates:

Abraham 2000 BC/E

Moses 1250 BC/E

Question:

What kept the preliterate Hebrew community cemented together for 750 yrs?

Answer:

Hebrews were an **oral society** & must have had an oral tradition with a **social charter** to keep them functioning as a community

ANSWER TO QUESTION #1 S9

YES

Hebrews had an Oral Tradition before they wrote down Gen 1-11

Fundamental Beliefs & Values of Gen 1-11 had Oral Phase

based on the Covenant with God → social cement → Messages of Faith

CONCERN & FEAR S10

by having an Oral Phase, was there a problem with memory & the loss of words?

BUT

How powerful is your God?

8. Jesus: “The **Holy Spirit**, whom the Father will send in my name, will teach you all things and will **remind** you of everything I have said to you.” Jn 14:26

Therefore, the New Testament had an oral phase

QUESTION #2

S2

Were the Hebrews influenced by the Oral Traditions of the Ancient Near East (ANE)?

Answer: YES & NO

(1) **YES**

S3

FORMAT & characteristics of oral traditions appear in Gen 1-11

SOCIAL CHARTER (Messages of Faith)

Beliefs & Values of the Hebrews

ACCOUNT OF ORIGINS (Ancient Science)

9. To repeat part of **Quote 5**

S4

“[Oral traditions] will almost always include an **account of origins**—

the beginning of the world [Gen 1 & 2],

the appearance of first humans [Gen 1 Day 6; Gen 2:7 & 22],

the origin of animals [Gen 1 Days 5 & 6; Gen 2:19-20],

plants [Gen 1 Day 3; Gen 2:8-9], and

other important objects [eg, Tigris & Euphrates Rivers, Gen 2:14] and finally

the formation of the community [Hebrew Genealogies in Gen 5 & 11] ...

Oral traditions typically portray **the universe** as consisting of

S5

[1] sky [Gen 1 Days 2 & 4; Gen 2:4] and

[2] earth [Gen 1 Day 3; Gen 2:4] and perhaps also an

[3] underworld

Related to the account of origins is often a **genealogy** of gods, kings, or other

heroic figures in the community’s past, accompanied by stories about their

heroic deeds [Hebrew Genealogies in Gen 5 & 11; Table of Nations in Gen 10].

Deity is an omnipresent reality in the world of oral traditions [Gen 1-11].”

Lindberg, 7-8

(2) **NO**

S6

CONTENT of the Social Charter

• Radical

compared to the surrounding ANE nations

charter is a Covenant with ONE Holy God (Ethical Monotheism)

• Polemical

S7

it’s in your face

EG creation of sun, moon & stars on 4th Day in Gen 1

not gods, but created by the God of Hebrews TO SERVE HUMANS!

• Foundational Beliefs & Values of the Hebrews:

S8

EG there is only one holy God

ANE: many gods & they behaved badly (eg, murders, liars, adulterers, etc)

God created humans to be in a relationship with him

ANE: gods created humans to be their slaves

God chose the Hebrews to bless the entire world

ANE: other nations were to be conquered & subjugated

Oral Tradition & Message-Incident Principle

S2 H5

FORMAT

Account of Origins (Ancient Science) → Incidental

CONTENT

Social Charter (Covenant with God and Beliefs & Values) → Inerrant Message of Faith

Success of Hebrew Oral Tradition is its Message, not its Ancient Origins Science

☛ impact of the Message is still felt here today in synagogues & churches

Advantages in Recognizing the Oral Tradition behind Genesis 1-11

S3

- Relieves problems of incoherence (so-called “contradictions”)

Gen 1-11 has an Ancient Epistemology

Therefore CUT THE BIBLE SOME EPISTEMOLOGICAL SLACK

- Relieves problems of incompleteness

Gen 1-11 is brief and limited by human memory

Therefore it’s not an exhaustive record & it won’t answer all your questions

- Avoids conflicts between the Bible & science

Gen 1-11 features an Ancient Science

Therefore scientific concordism not possible

S4

- Directs attention to the Message of Faith, not the Ancient Science

Biblical Inerrancy is found in the Message

Power of Bible is in the Message which changes the lives of men & women

D. Transition from Prehistoric Science to Science in Literate Societies

S5

Contributing factors:

Invention of Writing

S6

Dates:

3000 BC/E: pictographs

1700 BC/E: alphabet

Modest & Practical Beginning:

lists → abstractions → criteria for classification & evaluation (CATEGORIES)

Becomes more complex:

charting celestial motions → patterns → mathematical astronomy

Results:

S7

replaces memory

can deal with high volumes of information

allows for new thought patterns → CRITICAL THOUGHT emerges:

- inspection
- comparison
- development of theories
- emergence of rhetoric (rules of argument)

Prosperous Society with Scribes & Scholars

S8

society with divisions of labour that is capable of absorbing an academic class

included individuals who could dedicate their attention to understanding the physical world

2. Egyptian & Mesopotamian Science (3000-500 BC/E)

S2

Key Thought #2: Trend in the History of Science
further back into the Past → science connected to religion

Mathematics

S3

SCIENCE:

- Egypt
engineering & construction of pyramids
 - Mesopotamia (Babylonians)
mathematical astronomy & celestial predictions
simultaneous base 10 (decimal) & 60 (sexagesimal) system
we have inherited from them 60 minutes in an hour, 360 degrees in a circle, etc
- Quantification** → Language of Science

RELIGION:

S4

Mystic-mathematicians → numbers viewed as Divine

Mystical Numbers

7, 10, & 60 and their multiples

EG

W-B 62 Sumerian King List **BEFORE** the Flood

S5 H11

extremely long reigns → 10s of 1000s yrs

all multiples of 100

mathematical formula with the Mesopotamian mystical number 60

Purpose:

legitimize the divinity of the Kings

Excursus: Biblical Genealogies & Stylistic Numbers

S6

NOTE: no hint of divinity in numbers, but sometimes used stylistically to make a point

Genesis 5: Genealogy of the Hebrews BEFORE the Flood

S7 H11

- very long lifespan: average 912 yrs
- 15/20 multiples of 5: should be only about 4 in 20.
- 5 non-multiples of 5: become multiples of 5 if you subtract 7

Statistics:

1 in 700 million chance of being a real/natural genealogy

Why the emphasis on number 5?

S8

legitimize the importance of the Hebrews

MAYBE to emphasize that the Hebrews are the people of the 5 Books (Pentateuch)?**Implication for the Origins Debate**

S9

numbers in the genealogy are stylistic

☛ therefore genealogies cannot be used to date the age of the earth

young earth creationists add up the genealogies & claim the world is 6000 yrs old

NB

S10 H11

not all numbers in the Bible are stylistic

EG The Reigns of the Kings of Judah:

17 years, 3, 41, 25, 8, 1, 6, 40, 29, 52, 16, 16, 29, 55, 2, 31, 1/4, 11, 1/4, 11

found in 1 & 2 Kings and 2 Chronicles → historical books

Always ask: is a number in the Bible LITERAL or STYLISTIC?

S11

Genealogies of Jesus (Matthew 1:1-17 & Luke 3:23-38)	S2
• they don't align with Old Testament genealogies (EG 1 Chr 1-3)	S3 H12
• they don't align with each other	S4 H12
<u>Matthew 1</u>	S5-6 H63
Central Theme of Book: Jesus is the Son of David	
David's Gematria → 4 + 6 + 4 = 14	S7 H12
3 groupings of 14 individuals emphasize the theme	S8-9 H12
<u>Luke 3</u>	
77 individuals in genealogy from Jesus to God	S10 H12
7 & its multiples carried notions of: (1) perfection (2) fulfilment	
Jesus is the fulfilment of the Bible	S11
10. Jesus: "Do not think that I have come to abolish the Law and Prophets [ie, the Old Testament]; I have not come to abolish them, but to fulfill them." Matt 5:17	
Conclusion	S12
11. Regarding biblical genealogies: "If such non-literal, non-chronological usage seems strange to us , that is OUR problem and our challenge to understand. The text [Bible] is, after all, our teacher." Lloyd R. Bailey, <i>Genesis, Creation & Creationism</i> (NY: Paulist, 1993), 58	
Don't read our modern concept of genealogies <u>INTO</u> the biblical genealogies ☛ EISEGESIS	

<u>Astronomy</u>	S13
SCIENCE:	
Babylonians	
excellent observations & developed mathematical astronomy	
could predict seasons, new moons & lunar eclipses	
RELIGION:	S14
priest-astronomers & astral religion	
celestial events → influenced the lives of people	
continues today with astrology & horoscopes	
<i>Agentic Notion of Causality</i>	
stars "act" on the world & change seasons, etc	
therefore stars are gods → NOT an unreasonable notion	
<u>Medicine</u>	S15
SCIENCE:	
medications, surgery, treatments, wrote up case studies	
RELIGION:	S16
demons/evil spirits cause diseases → <i>Agentic Notion of Causality</i>	
treated by priest-healers through exorcisms, prayers & sacrifices	

Excursus: Demons, Diseases & Disabilities in the Bible	S17
blindness, deafness, speechlessness & crippling afflictions caused by demons/evil spirits	
12. A man in the crowd called out, "Teacher, I beg you to look at my son, for he is my only child. A spirit seizes him and he suddenly screams; it throws him into convulsions so that he foams at the mouth . It scarcely ever leaves him and is destroying him" ...	S18
Even while the boy was coming, the demon threw him to the ground in a convulsion.	
But Jesus rebuked the evil spirit , healed the boy and gave him back to his father. Lk 9:38-40, 42	

COMMENTS:

S2

convulsions & a foaming mouth are classic signs of epilepsy

Matt 17:15 identifies the boy is epileptic. See **SQ 7**

Ancient Medicine

demons/evil spirits cause diseases → *Agentic Notion of Causality*

Principle of Accommodation

is Jesus accommodating & using ancient medicine? See **SQ 8-11**

QUESTIONS:

S3

- were ancient people able to understand neuro-pathological mechanisms of epilepsy?
- were ancient people capable of knowing a miracle had happened with the epileptic boy? S4
- was it within their **scope of understanding** to know that a miracle had happened even though they did not know the neuro-pathological mechanisms behind epilepsy?

Also see **Hermeneutical Principle #8** Scope of Cognitive Competence

CONCLUSION

S5

Is Egyptian & Mesopotamian science, science?

- Yes & No

YES: observations, math, predictions

NO: *Agentic Notion of Causality* (God/s & demons)

- Again, I term it '**Ancient Science**'

3. Greek Science (500-300 BC/E)

S6

called the "Greek Miracle" or Birth of Philosophy

asked questions about:

Natural World

S7

- composition: what is it made of?
- operation: how does it work?

- focussed on natural causes

gods not in the explanations

EG eclipses: not supernatural omens

natural cause → the sun was a bowl of fire that turns away

RESULT:

decrease in Divine Interventionism in nature

increase in natural processes

CHARACTERISTICS:

S8

- NOT anti-god

most believed in the gods & their activity in nature

a shift in divine action from interventionism → providentialism

- BUT

S9

by asking questions, it led to fewer functions for the gods in nature

the gods became redundant & DISPOSABLE

Historical Trend:

De-Sacralization (De-Deification) of Nature → elimination of god & divine action

☛ **SCIENCE IMPACTS RELIGION**

- BUT

the Greeks did produce the **Atomists**

S10

1st Dysteleologists

no mind & no divinity in the world

the world 'nothing but' atoms in random motion

<ul style="list-style-type: none"> • Huge impact on science in the western world <p>Aristotle (384-322 BC/E) 1st great scientist More anon in Galileo Affair</p>	S2
<p>CONCLUSION</p> <p>Is Greek science, science?</p> <ul style="list-style-type: none"> • Yes & No <ul style="list-style-type: none"> YES: focus on natural causes NO: presence of teleology & divine providentialism • Getting closer to our idea of science 	S3
<p>CONCLUSION: Ancient Science</p> <p>Science & Religion → closely connected in past</p>	S4
<p>13. “The historian, then, requires a very broad definition of ‘science’ ... we should expect that the farther we go [back in history], the broader we will need to be.” Lindberg, 3</p> <p><u>COMMENT:</u> WIDE definition of science</p>	S5
<p>V. MODERN* SCIENCE *as in ‘Modernity’ (1600-1950)</p>	S6
<p>BEGINS in 17th century as a METHOD to study nature</p>	S7
<p>Sir Francis Bacon <i>Novum Organum</i> (1620) Latin: New Instrument</p> <p><u>INDUCTION</u> DEF: reasoning from particular facts to general principles empirical facts → laws of nature</p> <p><u>DEDUCTION:</u> DEF: reasoning from general principles to particulars</p>	S8
<p>NOT Anti-God: most 17th century scientists were Christians still believed in some divine interventionism in operations EG Newton’s Rewinding of the Universe Theory</p>	S9
<p>BUT there was a significant shift in divine action focus on natural processes led to:</p> <ul style="list-style-type: none"> • <u>decrease</u> in Cosmological Interventionism • <u>increase</u> in Cosmological Providentialism <ul style="list-style-type: none"> ☛ God seen as acting through natural processes 	S10
<p>ENDS in mid-20th century as a METAPHYSIC about nature</p> <p>Features: redundancy of God → no need for divine action natural laws can explain everything de-sacralization (de-deification) of nature → dysteleological</p> <p>Result: SCIENTISM <u>conflation</u> of science with positivism, dysteleology & humanist ethics</p>	S11
<p>NB Excellent Evidence → SCIENCE IMPACTS RELIGION</p> <ul style="list-style-type: none"> ☛ why bother believing in God & religion? 	S12

The Peak of Scientism

S2

Hebert Feigl, "The Scientific Outlook: **Naturalism** and **Humanism**" (1949)

H Feigl & M Brodbeck, eds *Readings in the Philosophy of Science* (NY: Appleton, 1953), 8-18

1st paper in an 800+ page volume & included 3 papers by Albert Einstein

Naturalism better → **Metaphysical Naturalism**

S3

DEF: a dysteleological worldview conflated with science → Scientism

Methodological Naturalism

DEF: study of the physical world limited to nature and natural processes

Purpose of Paper

S4

"to dispel certain confusions & misunderstandings" between sciences & humanities

Cause of the Problem

S5

humanities "largely ignorant of the nature of modern science"

humanities hold "a distorted view of the philosophical basis of the humanities"

Errors of Humanities

S6

SEDUCTIVE FALLACY or "SOMETHING MORE" Myth

humanities believe in the existence of an irreducible spiritual element

REDUCTIVE FALLACY or "NOTHING BUT" Problem

humanities believe that science reduces the world into "nothing but" molecules

they believe that science leads to no human values

BUT Feigl has values (as you'll see)

14. "Neither a **philosophy** of the '**Something More**' nor a **philosophy** of the '**Nothing But**' S7

will do for our time. Only an approach that is resolutely guided by the question 'What is what?' will avoid **reading mysteries into the facts**, as well as refrain from impoverishing them by **reduction** to something less than experience attests them to be." Feigl, 9

Solution

S8

- reject pre-scientific thought patterns:
magic, miracles, theology & METAPHYSICS

Do you see the problem?

☛ doesn't Feigl have a metaphysics?

- disengage human values from theology & METAPHYSICS

S9

Feigl is blind to the fact he has his own metaphysics!!!

15. Theology & METAPHYSICS:

"immature, if not infantile, trait of thinking," "tender-minded,"

"maladjusted individuals," "largely emotive" etc, etc, etc

- Synthesize scientific attitude & human values

S10

16. "**Mature** mankind should be able to **determine** its own value standards on the basis of needs, wants, and the facts of the social condition of man." Feigl, 18.

COMMENT:

humanity is ultimate determiner of values → HUMANIST ETHICS

Achievement

S11

"intellectual adulthood" & "mature thinking"

last sentence of the paper:

17. "A Scientific Humanism emerges as a philosophy holding considerable promise for mankind—*if* mankind will at all succeed in **growing up**." Feigl, 18

COMMENT:

demeaning remark to "grow up" was common by scientism in the 1950s

FEIGL'S DEFINITION OF SCIENCE

S2

simply excellent!

dissect the good science from the suspect metaphysics → **SEPARATE, DON'T CONFLATE**

Aspects of Science

S3

- empirical: factual
- formal-conceptual: rational & logical
- tentative & historically conditioned: gets better with time

Aims of Science

S4

- description: (1) observation
(2) experiment
- explanation: using causal interpretation (natural causes only)
- prediction: fruitfulness & confirmation

Criteria of Science

S5

- objectivity: open to public testing
- reliability: repeatable & confirmable
- precision: quantitative (math & stats) instead of qualitative
- coherence: internally consistent
- comprehensiveness: connectedness of all scientific disciplines (consilience)

THE PROBLEM

S6

SCIENTISM'S METAPHYSICAL BLIND SPOT

DEF: most who accept scientism fail to recognize that they hold a metaphysical position they think that their view is purely "scientific"

Feigl believes METAPHYSICS = TELEOLOGY

BLIND to fact scientism has a dysteleological metaphysic & humanist ethics

BLIND to the Metaphysics-Physics Principle

Lamoureux's suggestion to Feigl:

S7

To repeat Feigl's words in **Quote 14**

"Only an approach that is resolutely guided by the question 'What is what?' will avoid reading mysteries into the facts."

Dr Feigl how about if you:

"avoid reading **your dysteleological metaphysics** into the facts"

Better:

"avoid **CONFLATING your dysteleological metaphysics** and the facts" and passing it off as "The Scientific Outlook" as you attempt to do in your paper

CONCLUSION: The Peak of Scientism

S8

1. Common view of science

science offers pure **Objective Truth**

wickedly anti-theological & anti-teleological

fuels Science-Religion conflict → academic trash talk

2. Conflates scientific METHOD & dysteleological METAPHYSIC

S9

scientism attempts to pass itself off as "science" & "THE scientific position"

BUT in reality it is a dysteleological metaphysic that baptizes itself with scientific authority

DISTINGUISH Methodological Naturalism from Metaphysical Naturalism

3. Confident, Triumphant & Patronizing S2
Bertrand Russell S3

depicts the reign & attitude of scientism between **1900-1950**:

18. “The world which Science presents for our belief: That Man is the product of causes which had **no prevision of the end** [teleology] they were achieving; that his origin, his growth, his hopes and fears, his loves and beliefs, are [nothing] **but** the outcome of **accidental collocations of atoms**; . . .

S4

all the labours of the ages, all the devotion, all the inspiration, all the noonday brightness of human genius, are destined to extinction in the vast death of the solar system . . . all these things, if not quite beyond dispute, are yet so **nearly certain**, that no philosophy which rejects them can hope to stand.”

Bertrand Russell, “Free Man’s Worship” (1903) in Egner & Dennon, eds. *Writings of Bertrand Russell 1903-1959* (NY: Simon & Schuster, 1961), 67

COMMENTS: S5

- CONFLATES science and a dysteleological metaphysic tries to pass this off as “science”
- common view of science by mid 20th century still here today

- **The 50 Year Rule** S6

it takes about 50 yrs for major concepts to change
 Why?
 people have to die!!!

EG Science-Religion Dialogue appears in mid 1990s
 about 50 yrs after Feigl’s paper

VI. POST-MODERNITY & ANTI-REALISM S7

Roughly around 1950:

- a reevaluation of science & scientific **certitude**
- led to a crisis in rationality/epistemology
- gave birth to **Anti-Realism**

DEF: BELIEF that science cannot know physical reality “out there”

Factors Precipitating the Epistemological Crisis: S8

1. Professionalization of the History & Philosophy of Science
 becomes an academic discipline

19. “Philosophers long made a mummy of science. When they finally unwrapped the cadaver and saw the remnants of an **historical process** of becoming and discovering, they created for themselves a **crisis of rationality**. That happened around **1960**.”

Ian Hacking, *Representing and Intervening*
 (Cambridge: U Press, 1983), 1

COMMENTS: S9

Science is “historical process”

NOT pure **Objective Truth**

BUT dirtier & messier → more (1) social &
 (2) personal

2. Early 20th Century Scientific Discoveries
so-called “New Physics”

S2
S3-6

	Modern Science 1600-1900 NEWTON	Post-Modern Science 1900 to present EINSTEIN
“Big Physics”	<u>CLASSICAL MECHANICS</u>	<u>THEORY OF RELATIVITY</u>
Time	universal uniform flow	relative to observer (everyone experiences own time)
Mass	static & unchanging	varies with motion
Space	3-dimensional	4-dimensional; includes time
	NEWTON <u>CLASSICAL MECHANICS</u>	BOHR <u>QUANTUM MECHANICS</u>
“Small Physics”	deterministic	indeterministic probabilistic
Causality		

To summarize:

S7

Newton: space & time → separate

Einstein: space & time → together

Newton: causality → precisely predictable

Bohr: causality → “roughly” predictable

EPISTEMOLOGICAL IMPLICATIONS

S8

- undermine the foundations of reason to understand **REALITY**
 1. categories of time, mass & space
 2. notion of causality
- create doubt that science can study **REALITY**
gave birth to Anti-Realism

Anti-Realism

S9

DEF: BELIEF that science cannot know physical reality “out there”
surrenders science’s claim to truth
mostly the work of philosophers

Categories of Anti-Realism

- **Conventionalism** S10
DEF: science is merely democratic truth
scientific laws & theories are only “conventions” of the scientific community
Science = Sociology
- **Instrumentalism** S11
DEF: scientific laws & theories are only tools to manipulate nature
EG 3-Tier Universe Astronomy
could still bring ships safely to a port despite incorrect astronomy
Science = What Works
- **Anarchism** S12
DEF: anarchism must replace rationalism
scientific “anything goes”
EG astronomy & astrology equally valid!
Science = Personal Whatever!

- 1. Theory Laden Character of Science—Social Factors** S2
- Scientific Community
 - embraces a PARADIGM (foundational theory)
 - EG evolution is the paradigm accepted by biologists
 - new data is FILTERED through the paradigm
 - Society at Large S3
 - science is influenced by social needs & values of our society
 - EG discovery of telescope in 1609 → military
 - space travel in 1960s → US-USSR Cold War
 - internet → military
- BUT NO Post-Modern Excesses: Science ≠ Sociology** S4
- scientific discoveries & revolutions do occur
 - EG geocentricity to heliocentricity in 17th century
 - WHY?** PHYSICAL WORLD DICTATES
 - society can retard or accelerate the pace of scientific discovery S5
 - BUT society does not control scientific truth
 - WHY?** PHYSICAL WORLD DICTATES
- 2. Theory Laden Character of Science—Personal Factors** S6
- Science is practised by fallible & limited people
 - influenced by human values & judgment
 - EG physics → beauty & parsimony (simplicity) are values in theories
 - Science is NOT ONLY the application of STRICT LOGIC S7
 - includes personal judgment & the operation of silent (tacit) categories called the “art” of science
- Personal Skill S8
- DEF: application of a set of rules which are not known as such to the person following them
- EG *riding a bike*: are you aware you adjust the curvature of your bicycle’s path in proportion to the ratio of your unbalance over the square of your speed?!?
- language*: are you aware of the rules of grammar?
- working in a lab*: “learn by example” of authority like an intellectual “osmosis”
- Personal Intuition S9
- includes flashes of genius, illuminating insights, hunches
- EG Einstein at 16 yrs of age gets an intuition about theory of relativity
it did not arrive through the application of strict logic See **SQ 12**
- Personal Trust S10
- scientists trust & believe:
- physical world really exists (realism) → we’re not in the Matrix
 - paradigm → to set up experiments
 - laws of nature & their repeatability
- EG scientists trust no God/s or demons tinker with natural processes
- BUT NO Post-Modern Excesses: Science ≠ Personal Whatever!** S11
- WHY?** PHYSICAL WORLD DICTATES
- it even shapes our skills, intuitions & trust

Excursus: Critical Realism—A New Philosophy of Science	S2
this view of science is in the process of being developed & is embraced by many Sci-Rel scholars	
1. Realism	S3
<u>ASSUMES</u> (BELIEVES) the physical world is real and not merely an illusion we are not trapped in some sort of computer program like the Matrix	
2. Intelligibility	
<u>ASSUMES</u> (BELIEVES) the physical world features a deeply embedded rationality & coherence EG Einstein: “The eternal mystery of the world is its comprehensibility”	
<u>ASSUMES</u> (BELIEVES) humans can know & understand the physical world no “4 Fs” mind problem	
3. Explanatory Limitations	S4
<u>RECOGNIZES</u> scientific knowledge is <u>limited</u> to the physical world & natural processes scientific explanations are <u>limited</u> to natural causality science <u>does not</u> recognize agentic/supernatural causality (God/s, demons, etc) NB science <i>does not discount supernatural causality</i> → <i>can’t detect it</i>	
<u>RECOGNIZES</u> scientific knowledge is <u>limited</u> to different levels of the physical world EG Newton’s Laws for objects falling to earth Einstein’s Theory of Relativity for traveling at the speed of light	S5
4. Verisimilitude Latin <i>vēra</i> : true <i>similis</i> : similar	S6
<u>RECOGNIZES</u> scientific knowledge is most likely true & corresponds to physical reality but not absolute or complete or purely objective knowledge	
5. Historically Progressive	S7-9 H6, 22-23
<u>RECOGNIZES</u> scientific knowledge is tentative and becomes more accurate over time EG 3-tier universe → geocentric universe → heliocentric universe → today	
6. Comprehensiveness & Interconnectedness	S10
<u>RECOGNIZES</u> scientific knowledge is extensive & consilient all sciences fit together into one large-scale explanation of the physical world	
7. Fruitfulness	
<u>RECOGNIZES</u> scientific knowledge leads to new explanations & predictions	
8. Counterintuitiveness	S11
<u>RECOGNIZES</u> common sense intellectual categories are at times insufficient EG 20 th century “new” physics	
9. Human Factor	
<u>RECOGNIZES</u> scientific knowledge is influenced by personal and social factors EG human values of beauty & parsimony in scientific theories	
10. Primacy of Nature	S12
<u>RECOGNIZES</u> the physical world ultimately <u>dictates</u> scientific knowledge nature imposes itself upon us, more than we impose upon it	
11. Practice of Day-to-Day Scientists	
<u>RECOGNIZES</u> scientists may not be fully aware of Critical Realism, but they employ many of its categories in their scientific work	

CONCLUSION: Polkinghorne & Critical Realism

S2

Polkinghorne's critical realism leads him to a healthy relationship between Science & Religion

21. "I have attempted to defend a view of science which asserts its achievement to be a **tightening grasp** [over history] of **an actual reality** [realism]. In the course of the discussion we have acknowledged the role that [1] **personal judgement**, presented for the approval of [2] the [social/scientific] **community** and pursued along lines which are rational but **not wholly specifiable** [tacit categories & personal skill], has to play in the enterprise. S3

In my view this means that science is not **different in kind** from other kinds of human understanding involving evaluation by the knower, but only **different in degree**. S4
It is clear that the **personal element** is less significant in science [thus, science is more objective] than in, say, judging the beauty of a painting, **but it is not absent**.

We are to take what science tells us with great seriousness but we are not to assign it an **absolute superiority** [scientism] over other forms of knowledge, so that they are neglected, relegated to the status of **mere opinion** [religion]. Our discussion has taken science off the pedestal of **rational invulnerability** and placed it in the **arena of human discourse**. It is not the only subject with something worth saying. S5

If differing disciplines, such as **science** and **theology**, both have insights to offer concerning a question (the nature of man, for example) then **each is to be listened to with respect to its appropriate level of discourse.**" S6
Polkinghorne, 24-25

COMMENTS:

S7

- criticizes common perceptions:
 - science not "absolute superiority"
 - religion not "mere opinion"
- opens a COMPLEMENTARY relationship between Science & Religion S8
 - Latin *complēre*: to fill, complete
 - take insights from each at their "appropriate level of discourse"
 - science → physical
 - religion → metaphysical

VIII. CONCLUSION: WHAT IS SCIENCE?

S9

1. Common Definition

S10

Science = Scientism

Conflation: science & dysteleological worldview

Distinguish: Method of Science from Metaphysic of Scientism

Methodological Naturalism from Metaphysical Naturalism

2. Academic Definition

S11

No consensus

History reveals a **WIDE** definition of science (some scientists accept divine action; eg Newton)

Trend Today: moving toward Critical Realism?

3. Science IMPACTS Religion

S2

History of Science reveals:

- science has contributed to the de-sacralization (de-deification) of nature
- natural processes have replaced Cosmological Interventionism in both Origins & Operations

QUESTION:

S3

Is the loss of divine action in the physical world a rejection of God,
or a rejection of an ancient agentic causality?

- a shift in understanding divine action with religious scientists
decrease & rejection of Cosmological Interventionism
increase in Cosmological Providentialism

S4

QUESTION:

Why bother keeping God?

4. History of Science has Significant Implications for Hermeneutics

S5

Gen 1-11 points back to an earlier Oral Tradition

Features of Oral Tradition:

Ancient Epistemology → conflicts between events (eg creative acts in Gen 1 & 2)

Ancient Agentic Notion of Causality → *De Novo* Creation of the universe & life (Gen 1 & 2)

Ancient Science → Ancient Science of Origins

- ☛ we need to RECOGNIZE & RESPECT these ancient features when reading the Bible

IX. TOWARD A WORKING DEFINITION OF SCIENCE

Lamoureux

S6

- Science deals with **knowledge** of the **physical world**—**understanding** its structure, operation, and origin. S7
- Science has been practised by humans throughout **history**, resulting in broad distinctions such as “Ancient Science,” “Modern Science,” and “Post-Modern Science.”
- Science throughout history has been intimately connected to **metaphysics**, including a wide variety of religious beliefs as well as a dysteleological worldview in recent times.

COMMENTS:**WIDE** definition of science

S8

includes the Babylonians, Newton, Dawkins, *et al*

“physical world” → assumes belief in realism

S9

recognizes the primacy of nature → PHYSICAL WORLD DICTATES

“knowledge” & “understanding” → assumes intelligibility: (1) in nature

(2) by humans

“practised by humans throughout history” → recognizes human factor: (1) social

S10

(2) personal

“broad distinctions such as ...” → recognizes science is historically progressive

“intimately connected to metaphysics” → science & religion can’t help but be related

S11

- ☛ reflects Metaphysics-Physics Principle

MODELS ON THE RELATIONSHIPS BETWEEN SCIENCE & RELIGION

I. KEY THOUGHTS

1. Warfare is the Common Perception of the Relationship between Science & Religion

59% of Americans believe science & religion are often in CONFLICT (Pew 2015) Notes 30
BUT science-religion scholarship has moved well beyond warfare

2. Foundation of Science-Religion Scholarship Reflects the Metaphysics-Physics Principle

Two steps: 1st distinguish the fundamental differences between science & religion S6 H5
2nd look for points in common for a reciprocal exchange of information → relationship S7

3. Science-Religion Scholarship is a Young Academic Discipline

- emerged during the 1990s
- still in the process of developing
- two founding scholars: Ian Barbour & John Haught

II. SCIENCE & RELIGION MODEL OF JOHN F. HAUGHT

Science and Religion: From Conflict to Conversation (NY: Paulist Press, 1995) S10
Roman Catholic theologian

Haught's MODEL of Science & Religion

NB: a model includes as many relationships as possible, including those we do not accept

Four Relationships between Science & Religion:

1. Conflict
2. Contrast
3. Contact
4. Confirmation

Haught's POSITION on Science & Religion

NB: a position is a personal & specific view of the relationship between Science & Religion

Haught:

- rejects Conflict
- starts with Contrast
- integrates Contact & Confirmation

1. “The ‘**contrast**’ approach, while perhaps a necessary first step away from both conflation and **conflict**, is also unsatisfying ... I think that the ‘**contact**’ approach, supplemented by that of ‘**confirmation**,’ provides the most fruitful and reasonable response to the unfortunate tension that has held so many scientists away from an appreciation of religion, and an even larger number of religious people from enjoying the discoveries of science.” Haught, 4

TIP: Select & Combine the relationships to develop YOUR position

1. CONFLICT RELATIONSHIP

Common perception of the relationship between Science & Religion

asserts it is impossible to be both religious & scientific

☛ especially if you are honest or not crazy!!!

Science & Religion are completely *irreconcilable*

therefore, they are in a constant & never-ending conflict

Conflict fuelled by two groups: 1. Scientific Skeptics

2. Biblical Literalists

SCIENTIFIC SKEPTICS

S2

DEF: 2. People who “reject religion in the name of science” Haught, 11
 Religion → *oppressor & enemy* of truth & enlightenment
 Science → *liberator & saviour*

Criticisms against Religion

S3

Epistemological Problems

religion is not testable & not objective

3. “Religion tries to **sneak by** without providing any **concrete evidence** [ie, scientific evidence] of God’s existence.” Haught, 10

BUT

Do God & religion lend themselves to scientific methods & standards?

Historical Problems

S4

church’s persecution of Galileo (17th century)

church’s rejection of Darwin (19th century)

BUT

Is this good history? More Anon

Hermeneutical Problems

S5

Bible is full of contradictions

Ironically, scientific skeptics are LITERALISTS like Young Earth Creationists!!!

BUT

Is this good hermeneutics? More Anon

Ethical Problems

S6

Why is there suffering & evil in the world?

This is a serious challenge

Why would an all-loving, all-powerful, and all-knowing God allow Holocaust?

☛ Yet religious people just keep on believing

BUT

Is the problem of suffering & evil that simple? More Anon

Conflict Relationship of Scientific Skeptics

S7-8

common perception of science & religion by those who reject religion

RELIGION

- based on mindless faith
- *a priori* reasoning (Deduction)
 general rule to particular case
- emotional & irrational

SUBJECTIVE

SCIENCE

- based on hard facts & logic
- *a posteriori* reasoning (Induction)
 particular case to general rule
- dispassionate & rational

OBJECTIVE

Latin *a priori*: from something earlier (not based on observation/experience)

a posteriori: from something later (based on observation/experience)

COMMENTS:

S9

trapped in simple dichotomies & connotations
 entrenched in black & white and either/or thinking

BIBLICAL LITERALISTS

S2

DEF: 4. “People who think the words of the Bible are **literally true**” Haight, 11

Modern Science → *enemy* of truth & God

Religion → *defender* of REAL science

REAL science is Creation Science (Young Earth Creation)

Conflict Relationship of Biblical Literalists

S3-4

common perception of science & religion by many who accept religion

RELIGION

- offers **True** science
- based on hard facts
- Godly & competent

OBJECTIVE

MODERN SCIENCE

- offers **False** science
- misinterprets the facts
- Satanic & incompetent

SUBJECTIVE

COMMENTS:

S5

trapped in simple dichotomies & conflations
entrenched in black & white and either/or thinking

CONCLUSION: Conflict Relationship

S6

1. Ironically, Scientific Skeptics & Biblical Literalists are quite similar

BOTH:

appeal to the “hard facts”

claim to be “purely objective”

use *ad hominem* arguments Latin: against the person (ie, they disrespect people)

steeped in simple dichotomies & conflations

think in black & white and either/or categories

have a literalist hermeneutic → assume scientific concordism is a feature of the Bible

2. Scientific Skeptics alienate religious people from modern science

S7

Biblical Literalists alienate scientific people from religion

2. CONTRAST RELATIONSHIP

S8

NO conflict between Science & Religion

Each deals with RADICALLY different issues & questions

Problem with the common perception of Science & Religion: CONFLATION

DEF: 5. “**Conflation** ... simply means the collapsing of distinct items in such a way that

S9

their differences are apparently lost ... [Conflation blends] **science** and **belief**

into an undifferentiated smudge ... a careless commingling of **science** with **belief**

... a tangled muddle.”

Haight, 13-14

COMMENTS:

S10

Note the word “**belief**”

ultimate belief → metaphysic → religion

WIDE definition of religion

Types of Conflation:

Science conflated with: 1. Religious Belief (Concordism)

2. Secular Belief (Scientism)

SCIENCE CONFLATED WITH RELIGIOUS BELIEF

S2

Concordism

DEF: 6. “Concordism **forces** the biblical text to **correspond**, at least in a loose way, with the contours of modern cosmology (ie science). In order to salvage the literal truth of the biblical book of Genesis, for example, some religious scientists match the **six days of creation** with what they consider to be **six corresponding epochs** in the scientific account of cosmic evolution.”

Haught, 13

COMMENTS:

S3

Haught uses classic definition → **Day-Age Theory** (Progressive Creation)
Days of Genesis 1 = Cosmological/Geological Periods (millions of yrs)

BUT some serious problems:

S4

- light created on Creation Day 1, but the sun created on Day 4
light before the sun?
- plants created on Day 3, but the sun on Day 4
frozen plants through a geological age? More Anon

BE AWARE OF MY DEFINITION & QUALIFICATION

Lamoureux

S5

Scientific Concordism

DEF: common belief held by both religious individuals & religious skeptics that the Bible corresponds, or is supposed to correspond with modern science

- ☛ I have a **WIDER** definition
- I also include young earth creation

Pastoral Concern regarding Concordism

S6

7. “The contrast [relationship] wisely points out how **dangerous** it is for religion to seek support for its teachings in any particular scientific theories, since currently accepted scientific theories may easily be **discarded by the next generation of explorers.**”

Haught, 22

COMMENTS:

S7

excellent pastoral insight

IF you conflate science & your religion,
AND new discoveries overturn your science,
THEN do you also toss away your religion?

EXAMPLES

S8 H13

Structure of the Universe

Martin Luther’s geocentric universe in his 1534 Bible

Geocentricity Greek γη (*gē*): earth

DEF: the earth is at the centre of the entire universe

Heliocentricity Greek ηλιος (*hēlios*): sun

S9 H24

DEF: the sun is at the centre of the entire universe

PASTORAL QUESTION:

Did the readers of Luther’s Bible lose their faith with the discovery of heliocentricity by Copernicus in 1543?

Operations in the Universe

Retrograde Motion of Planets Latin *retro*: backward

DEF: a short backward loop (east-to-west) by a planet from its normal west-to-east “motion” across the sky.

☛ entirely a VISUAL effect

BUT for Luther → REAL

S3

he believed that planets literally looped back east-to-west

8. “The retrograde motion of the planets also is a work of God, created through his word. This work belongs to God himself and is too great to be assigned to the angels.”

M. Luther, *Lectures on Genesis 1-5*, J. Pelikan, ed
(St. Louis: Concordia, 1958), 30

PASTORAL QUESTIONS:

S4

Did the readers of Luther’s *Lectures on Genesis* lose their faith once Copernicus discovered heliocentricity and that retrograde motion was merely a visual effect?

Did they lose their faith in God once they realized that God did not actually intervene to cause planets to move backward?

EXCURSUS: God-of-the-Gaps

S5

DEF: belief that God intervenes at different times in: (1) **origins** of the cosmos *and/or/both* (2) **operations** of the cosmos (eg Luther above)

NOTE: term not used in a **Personal Context**
only used in a **Cosmological Context**

FEATURES

S7

- Term carries a negative nuance

BUT logically feasible:

God can intervene in nature at any time he wants to

- Prediction

S8

IF gaps in nature are real,

THEN gaps should WIDEN with scientific research

No natural explanations or mechanisms will be found

Therefore a point in nature where God intervenes

- History of Science

S9

ALL proposed gaps have CLOSED

natural explanations or mechanisms have been found

☛ gaps are **Gaps in Knowledge**, NOT **Gaps in Nature**

EG Isaac Newton’s Rewinding of the Universe Theory

S10

saw wobbles in the orbits of Saturn & Mercury

believed God intervened to fix wobbles & stop the collapse of the universe

BUT a **Gap in Knowledge**

wobbles are self-correcting & explained by:

1. gravitational pull of Uranus on Saturn

telescopes in Newton’s day were too weak to see Uranus

2. Theory of Relativity for Mercury

only discovered in 20th century

- Pastoral Concern

S11

IF new scientific knowledge closes gaps in nature (which religious people claim to exist),
THEN does this lead to a loss of belief in God?

SCIENCE CONFLATED WITH SECULAR BELIEF

S2

Scientism

DEF: 9. “Scientism may be defined as ‘the **belief** that science is the **only** reliable guide to truth.’ Scientism, it must be emphasized, is by no means the same thing as science. For while science is a modest, reliable, and fruitful method of learning some important things about the universe, scientism is the **assumption** that science is the **only** appropriate way to arrive at the **totality of truth**. Scientism is a philosophical **belief** (strictly speaking an ‘**epistemological**’ one) that enshrines science as the **only** completely trustworthy method of putting the human mind in touch with ‘**objective**’ reality.” Haught, 16

COMMENTS:

S3

Note the word “belief”
Scientism is NOT science!

Haught’s Criticism of Scientism

S4

• Metaphysically Blind

10. “**Without usually being aware of it**, scientific skeptics have uncritically fused [conflated] the scientific method with scientism, a **belief system** that **assumes, without any scientific demonstration**, that science is the **only** appropriate way to look at things.” Haught, 17

COMMENTS:

S5

Scientism’s Metaphysical Blind Spot
conflation of: methodological naturalism &
metaphysical naturalism

Notes 59

NB: there is no scientific experiment to prove that science is the best & only way to understand the world

• Religious in Character

S6

11. Scientism “is a kind of **faith-commitment** not entirely unlike the kind we find in religion. **Devotees** of scientism place their **trust** in the scientific method itself, but no more than religious believers can they scientifically demonstrate the truth of this **faith** ... Skeptics **trust** in science almost as though, like the gods of religion, it were our **savior** from the **original sin** of prescientific ignorance.” Haught, 16

Note religious language! **WIDE** Definition of Religion

Contrast Relationship of Science & Religion

S7-8

separate science & religion from each other & recognize their fundamental differences

SCIENCE**RELIGION**

HOW questions of nature

WHY questions of belief

- patterns & processes
- natural causes
- works of nature

- meaning & mystery
- ultimate causes
- Foundation of Nature

COMMENTS:

NO conflict is possible: Science → Physical
Religion → Metaphysical

CONCLUSION: Contrast Relationship S2

- 1. Conflation is the main problem in the common conflict perception of science & religion
- 2. Contrast is the 1st step toward a peaceful relationship between science & religion S3

12. “Perhaps it is even **almost essential for us to pass through the discipline of contrast** as we make our way out of the confusions of conflation and move toward a more nuanced discussion of science and religion.” Haught, 15-16

COMMENTS:

also called: “an important step toward clarity”
 “helpful first approximation” Haught, 17
 reflects the 1st Principle in this course → Metaphysics-Physics Principle

- 3. Leaving science & religion in separate compartments is UNSATISFYING S4

13. “The urge to discover the coherence of all our ways of knowing is too powerful for us to suppress indefinitely.” Haught, 17

COMMENTS:

many students enter this course with science & religion compartmentalized
 BUT we all want an INTEGRATED worldview

3. CONTACT RELATIONSHIP S5

Cautious (but not too intimate) move toward a relationship between science & religion
 beginning of a more integrated picture of reality

Two-Way Relationship: S6

- science **broadens** religion’s horizon of the natural world
 offers physical facts
- religion **deepens** science’s understanding of the ultimate meaning of nature
 offers metaphysical beliefs

SCIENCE CONTACTS RELIGION S7

14. Theology “must pay attention to what is going on in the world of scientists. It must seek to express its ideas in the terms that take the **best of science** into account lest it [theology] become **intellectually irrelevant**.” Haught, 18

COMMENTS:

being intellectually relevant is loving God with our mind (Matt 22:37)
 “best of science” → a call to relate evolution & theology?

15. “**Whether they are aware of it or not**, theologians always bring at least **implicit cosmological assumptions** to their talk about God, and it is only honest that they acknowledge this fact.” Haught, 18

Implicit Cosmological Assumptions = Implicit Scientific Concepts (**Herm Prin 7**)

THEOLOGY’S HERMENEUTICAL BLIND SPOT S11

DEF: most religious people are not aware they use science in their theology
 EG, dark watery earth in Gen 1:2 → most think it’s a spherical earth! S12
 • BLIND to the fact they use modern science

NOTE: IF religious people are going to talk about the creation, S13
 THEN they can’t help but use the science of their generation

SUGGESTION: IF religious people use science,
 THEN they should be reasonably competent

Contributions of Science to Theology: S2

- Improves Hermeneutics
 - modern science: reveals there is an ancient science in the Bible
 - assists religious people to focus on the Message of Faith
 - ☛ formulation of the Message-Incident Principle
- Enriches & Magnifies the Doctrine of Creation S3
 - EG Who has a greater & more magnificent picture of God’s grandeur in nature? S4
 - Biblical writers (3-Tier Universe) & Luther (Geocentricity)?
 - OR
 - Our generation with the Hubble Telescope? S5

Rejects the Proof/Argument from Design S6

REMEMBER: Cautious (but not too intimate) move toward a science-religion relationship

16. The Contact Relationship “does not strive to prove God’s existence from science ...

It does not seek to shore up religious doctrines by appealing to point directly to a **divine designer**. The days in which scientific ideas could be used to seal **arguments** for God’s existence **are over.**” Haught, 18

COMMENTS: S7

NOT Haught’s personal view, but that of Contact relationship
 he accepts intelligent design
 problem with the terms **Proof** or **Argument ???**

Lamoureux’s Position on Intelligent Design S8

Term “proof” is too strong, but term “argument” is more accurate

Arguments for Design:

- Historical: common belief in philosophy & theology throughout history
- Biblical: Ps 19 & Rom 1
- Scientific: Anthropic Principle → fine-tuning in laws of nature S9
- Experiential: Most people sense the world is designed More Anon

RELIGION CONTACTS SCIENCE S10

not as substantive as science contacting religion
 religion does not impact/change/add to science

17. The Contact relationship “is content simply to interpret scientific discoveries within the framework of religious meaning.” Haught, 18

COMMENTS: S11 H5

religion brings “religious meaning” (metaphysics)
 EG: God is the creator
 cosmos is heading in an ordained direction

CONCLUSION: Contact Relationship S12

1. NOT recognizing Implicit Cosmological Assumptions is a problem with religious people
 EG an understanding of nature is needed BEFORE a doctrine of creation is formulated
 ☛ a physics is needed BEFORE a meta—(after)—physics

2. Science impacts Religion more than Religion impacts Science S13
 science: improves hermeneutics
 offers a greater & more magnificent picture of God
 religion only adds a metaphysic & has no real effect on scientific research

4. CONFIRMATION RELATIONSHIP

S2

Intimate relationship between Science & Religion

religion: nourishes science at a “very deep level”

S3

impacts science substantively

NB: Haught uses a **WIDE** definition of religion (metaphysics)

claims that religious elements are COMPONENTS of science!!!

☛ **Metaphysics-Physics Principle**

S4 H5

downward movement of religious ideas into science!!!

ACKNOWLEDGES THE FIDUCIARY CHARACTER OF SCIENCE

S5

Fiduciary Latin *fides*: faith

DEF: to have faith and belief

18. “Science, to be more specific, cannot even get off the ground without **rooting** itself in

S6

a kind of *a priori* ‘faith’ that the universe is a **rationally ordered** totality of things.Scientists always rely on a **tacit faith** (which they seldom reflect on in an explicitly conscious way) that there is a **real world** ‘out there,’ that this **real world** hangstogether **intelligibly**, that the human mind has the capacity to comprehend at leastsome of the world’s **intelligibility**, and that no matter how far we probe there willstill be further **intelligibility** to uncover. Without this kind of **trust** there would beno incentive to look for the **order** present in nature or to keep looking deeper intothe specifics of this **order**.”

Haught, 23

COMMENTS:

S7

scientists have: “*a priori*‘faith’” → assumed & not empirically proven

“tacit faith” → silent

scientists: “seldom reflect on [this faith] in an explicitly conscious way”

THE RUSE “CONFESSION”

S8

Michael Ruse

atheist & famed philosopher of biology

19. “I think philosophically that one should be sensitive to what I think**history** shows, namely, that ... **evolution, akin to religion**, involvesmaking certain *a priori* or **metaphysical assumptions**, which atsome level **cannot be proven empirically**. I guess we all knew that,

but I think that we’re all much more sensitive to these facts now.

Well, I’ve been very short, but that was my message, and I think it’s

an important one.”

Moderator: “Any questions?” [There is a momentary silence]

Ruse: “State of shock?!?”

M Ruse, “The New Anti-Evolutionism”

1993 AAAS Meeting trans P. Nelson

COMMENTS:

S9

scientists have “*a priori* or metaphysical [religious] assumptions”

also recognized by skeptics of religion like Ruse

Therefore → not special pleading by religious people

IDENTIFIES METAPHYSICAL (RELIGIOUS) FOUNDATIONS IN SCIENCE S2

Quote 18 → first two features of Critical Realism Notes 64

Realism

BELIEF “there is a real world ‘out there’”
refers to “real world” 2X

Intelligibility of Nature S3

BELIEF “universe is a rationally ordered totality of things”
refers to world’s intelligibility 3X and orderliness 3X → Intelligent Design

Human Intelligence

BELIEF “human mind has the capacity to comprehend” & truly can know nature
NO 4Fs mind problem here!

☛ **Metaphysics-Physics Principle** S4 H5

downward movement of metaphysical/religious ideas into science

PROPOSES A METAPHYSICAL (RELIGIOUS) ROOT FOR SCIENCE S5

20. “Science has nothing to lose and everything to gain by **rooting** itself in religion’s fundamental vision of **reality** as an **intelligible** whole **grounded** in the ultimately trustworthy Being that followers of Moses, Jesus, and Muhammad call by the name ‘**God**.’”
Haught, 22

QUESTION S6

In who or what do we root: Notes 14

tacit faith of scientists, reality, intelligibility of nature & human intelligence

(1) a dysteleological universe & 4 Fs brain?

OR

(2) the Foundation of a teleological universe (eg God) & a brain
that was intended to know the world through science? S7

CONCLUSION: Confirmation Relationship S8

1. Don’t overstate impact of Religion on Science
EG some Christian historians say science in 16th century rose because of Christianity
BUT science was being practised well-before Christianity (eg ancient Greeks)

2. Religion can be in a peaceful relationship with modern science S9

- Confirmation appreciates fiduciary aspects of the human epistemological condition
DO NOT be embarrassed to say that we are creatures of FAITH
- Confirmation asserts that science has *a priori* metaphysical (religious) foundations
Christianity offers science a metaphysic → rooted in God

CONCLUSION: Science & Religion Model of John Haught S10**1. Haught’s Personal Position on Science & Religion** (Quote 1) S11

rejects Conflict

begins with Contrast as a “necessary 1st step away from conflation & conflict”

accepts Contact supplemented by Confirmation

Therefore → Select & Combine various categories & relationships S12

2. The Problem of Conflation S13

fuels the common perception that Science & Religion are in a never-ending conflict

always lurking in the background

Lamoureux fights it all the time!

III. SCIENCE & RELIGION MODEL OF IAN G. BARBOUR

Religion in an Age of Science (San Francisco: Harper, 1990) S2
 “The Dean” of the science-religion dialogue S3
 PhD physics & Master of Divinity
 Protestant Christian

Barbour’s MODEL of Science & Religion S4

NB: a model includes as many relationships as possible, including those we do not accept

Four Relationships between Science & Religion:

1. Conflict
2. Independence
3. Dialogue
4. Integration

Barbour’s POSITION on Science & Religion S5

NB: a position is a personal & specific view of the relationship between Science & Religion

Barbour:

- rejects Conflict
- starts with Independence
- integrates Dialogue & aspects of Integration

21. “I will argue that none of the options considered above [**Conflict & Independence**] S6
 is adequate to the task ... I will suggest reasons for supporting **Dialogue**, and with
 some qualifications, certain versions of **Integration**.” Barbour, 3 & 16

TIP: Select & Combine the relationships to develop YOUR position

The Challenge to Religion S7

The Success of Science

22. “The first major challenge to religion in an age of science is the **success** of the
 methods of science.” Barbour, 3

COMMENTS:

aligns with Polkinghorne’s “Psychological Effect” Argument Notes 62

The Problem S8

Epistemological: science appears to be the only way to find Truth (capital “T”)

23. “**Science** seems to provide the **only reliable path to knowledge**. Many people view
 [1] **science** as objective, universal, rational and based on solid evidence.
 [2] **Religion**, by contrast, seems to be subjective, parochial, emotional, and based
 on traditions or authorities that disagree with each other.” Barbour, 3

COMMENTS:

- common perception of the relationship between science & religion: S9-10

SCIENCE	RELIGION
objective	subjective
universal	parochial
rational	emotional
<u>Based on:</u>	<u>Based on:</u>
solid evidence	disagreeing traditions

- trapped in simple dichotomies & connotations
 entrenched in black & white and either/or thinking

1. CONFLICT RELATIONSHIP

S2

Never-ending conflict between science & religion
 Fuelled by two groups: 1. Scientific Materialists
 2. Biblical Literalists

SCIENTIFIC MATERIALISTS

S3

Foundational Principle

reality is “nothing but” energy & matter → there is no spiritual reality

Foundational Method**Reductionism**

everything is explainable by reduction into physical laws
 EG love & religion are “nothing but” energy & matter

EXAMPLES**Carl Sagan**

S4

astronomer & hosted the most popular science TV series in 1980s
 HUGE impact promoting the conflict relationship & the idea Science = Atheism

24. “THE COSMOS IS ALL THAT IS OR EVER WAS OR EVER WILL BE.”

C Sagan, *Cosmos* (NY: Random House, 1980), 4. Capitals original

QUESTIONS:

- is this a scientific or religious statement?

is it not the same as:

S5

**25. Jesus: “I am the Alpha and Omega, the First and the Last,
 the Beginning and the End.”** Rev 22:13

- did Sagan alienate the 90% of teleologists in Canada & US? S6
 did he do a disservice to science by discouraging them to be scientists?

Jacques Monod

S7

Nobel Prize winning molecular biologist

**26. “Man knows at the last that he is alone in the universe’s unfeeling immensity,
 out of which he emerged **only by chance.**”**

J Monod, *Chance and Necessity* (NY: Vintage Books, 1972), 180

QUESTION:

- is this not an overstatement: “Man knows . . .”

90% of Canadians & Americans are teleologists & would disagree

Excursus: God, Chance & Christians

S8

Christians demonize: chance, randomness, indeterminacy

RESULT

another false dichotomy → between God & chance

BUT

could chance, randomness, indeterminacy be a *part* of God’s good creation?

could there be some freedom & flexibility in nature?

EG

S9

Video Gambling Machines

computer program in these machines are set up for them to win over time

a randomness generating chip is ultimately directed by the overriding computer program

- randomness is used by the machine for the purpose of winning

Chance & Creation

S10

God sets up the laws of nature to create the world over time

chance processes in nature are ultimately directed by the overriding laws of nature

- chance is used by God to create the world

Purpose of Chance in the Creation

S2

offers an element of Divine Hiddenness

termed “*Deus Absconditus*” Latin: God who hides

offers a non-coercive environment for free-will & the development of faith

E. (Edward) O. Wilson

S3

Harvard professor & Father of Sociobiology (Evolutionary Psychology)

religion is “nothing but” a survival behavior of human species

religion chosen by natural selection & tribes with religious behavior were the fittest

☛ the brain was “**hardwired for God**”

God “exists” only in the brain

27. “**The ultimate question:** Do religion and moral reasoning also have a S4

biological origin? Are they the products of evolution? So stated, the

meaning of spiritual authority breaks into **TWO** competing possibilities,

TWO competing hypotheses that now appear susceptible to empirical testing.

EITHER [1] humanity is guided by moral principles that were formulated

outside human existence, in other words by divine will or natural law,

OR else [2] humanity has evolved these principles on its own during its long

genetic and cultural history ... The [metaphysical] **naturalistic hypothesis**

arising from scientific knowledge holds that the powerful emotions of

religious experience are **entirely neurobiological**, that they evolved as

part of the programmed activity of the brain favoring survival of the tribe

and individual.”

E. Wilson, “Hardwired for God” *Forbes ASAP*
(4 Oct 99), 132, 134. Capitals added

COMMENTS:

S5

• trapped in a deep ditch dichotomy!!!

“**two** competing possibilities” “**two** competing hypotheses”

“**Either . . . or . . .**”

• an admission that everyone has a religious impulse
confirmation → 90% believe in teleology

Excursus: The 3rd Hypothesis—Evolutionary Psychology & Evolutionary Creation

S6

God created through evolution (teleological) a set of neurons that are sensitive to him and spiritual realities like moral revelation in our conscience & Intelligent Design in nature

Analogy I

S7

God created through evolution optic neurons for seeing the physical world

God created through evolution *God neurons* for *seeing* the spiritual world

☛ **GOD’S EVOLUTIONARY HARDWIRING** is behind: Natural Revelation (ID) S8 H2
Moral Revelation

Analogy II

S9

we have the freedom:

to close our physical eyes & not see the physical world

to close our *spiritual eyes* & not *see* the spiritual world

QUESTIONS on Intelligent Design

S10

• has your evolved brain been built to *see* the beauty, complexity, and functionality in nature as reflections of the design of an Intelligent Designer?

• have you been hardwired **BY** God through evolution so that you can find him?

Comments on Scientific Materialism S2

For the skeptics of religion:

Historical Trend: science explains more & more aspects of nature and life
 science eliminates a God-in-the-gaps

QUESTIONS: S3

- will science eventually explain away God & religion?
- can we extrapolate this trend and PROVE there is no God?

NO. Categorically not possible

Metaphysics-Physics Principle stops extrapolation of physics to metaphysics

BUT

you can take a Step of Faith and come to the BELIEF there is no God

BIBLICAL LITERALISTS S4

Foundational Principle

Bible reveals True science

Therefore, biological evolution is false

Foundational Method

Scientific Concordism

align the scientific evidence with the literal statements about nature in the Bible

EXAMPLE S5

Institute for Creation Research

most important Young Earth Creationist organization in the world
 founded by Henry Morris in 1972

28. LITERAL JESUS & LITERAL RESURRECTION: S6

“The entire HOPE of the Christian rests on the existence of a

- (1) *literal* Jesus Christ, described by Scripture as the Second Adam, who
- (2) *literally* offered up His body as a sacrifice for sinners loved by God,
 and who paid the price for their sins on a
- (3) *literal* cross—a Jesus Christ who
- (4) *literally* was the Son of God. It was this God-man who
- (5) *literally* died and was
- (6) *literally* resurrected on the
- (7) *literal* third, 24-hour day after His crucifixion.”

LITERAL GENESIS & LITERAL CREATION IN SIX DAYS S7

“This was necessary BECAUSE the

- (8) *literal* first man, named Adam, who was created on the
- (9) *literal* sixth 24-hour day of creation with all of creation in a state of
- (10) *literal* deathless perfection, and was
- (11) *literally* declared by God to be
- (12) *literally* perfect. Adam lived in a
- (13) *literal* garden called Eden, and broke a
- (14) *literal* commandment which was

- (15) *literally* spoken to him by God Almighty, a commandment which instructed him not to eat of a
- (16) *literal* tree of knowledge of good and evil, thus causing
- (17) *literal* death to fall on all men and animal life. Now all of creation is
- (18) *literally* dying, the subject of entropic forces of decay, and creation is waiting for the final redemption in which the earth will
- (19) *literally* be restored to its original glory—the same
- (20) *literal* sinless/deathless perfection of the
- (21) *literal* first creation as described in Genesis 1.”

SUMMARY S3

“Remove any one of these foundation blocks and the entire structure collapses, leaving the believer with NO HOPE ... **If Genesis did not happen exactly as the Creator said it did, then our view of God, of man, of sin, and of the world collapses.**” D Phillips “An Urgent Appeal to Pastors” *Back to Genesis* (119) *Acts & Facts* (Nov 98) Italics & numbers original

COMMENTS: S4

- on the surface, a very reasonable argument held by many conservative Christians → I use to believed it
- BUT conflates 6-day creation & the resurrection of Jesus

QUESTIONS: S5

- do you see the importance of hermeneutics? especially the hermeneutics of Gen 1-11?
- do you see the potential PASTORAL disaster?
IF you reject a literal Genesis
THEN do you need to reject Jesus?

THE REALLY BIG QUESTION: S6

Does the reality of sin need a real Adam?

CONCLUSION: Conflict Relationship S7

1. Fuels the common perception that there are only two choices—either Science or Religion

29. “Both sides [scientific materialists & biblical literalists] **err** in assuming that evolutionary theory is **inherently atheistic**, and they thereby perpetuate the **false dilemma** of having to choose between science and religion.” Barbour, 10

COMMENTS: S8

common assumption: evolution “inherently atheistic” = dysteleological
“false dilemma” = false dichotomy

2. Misappropriation of Academic Authority S9

DEF: an expert in one academic discipline acts like an expert in another

30. “Scientists are no wiser than anyone else when they step out of their laboratories and speculate **beyond [μετα]** strictly scientific work.”
Barbour, 14

COMMENTS: S10

echoes the Metaphysics-Physics Principle
also happens with religious experts speculating about science

2. INDEPENDENCE RELATIONSHIP

S2

Science & Religion are totally independent & autonomous
 each asks different **questions**
 each uses different **methods**
 each is **limited**

THEME

☛ it's impossible for Science & Religion to conflict

EXAMPLES

Langdon Gilkey

S3-4

	SCIENCE	RELIGION
Questions	Physical HOW?	Metaphysical WHY?
Domain	Public	Personal
Authority	Objective Repeatable Data Nature	Good, Evil, Meaning God
Language	Logic & Experiment Quantitative	Revelation & Spiritual Experience Symbolic & Analogical

☛ it's impossible for Science & Religion to conflict

Karl Barth

S5

Neo-Orthodox Christian
 Religion is based on the Bible ONLY

REJECTS Natural Revelation

Intelligent Design arguments based on sinful human reason → even idolatrous!!!
 Science has NO VALUE for Religion

☛ it's impossible for Science & Religion to conflict

Rudolf Bultmann

S6

Father of 20th century Liberal Christianity

REJECTS Divine Action

Demythologization of Bible

“competent” biblical interpretation rejects ALL the accounts of miracles
 focus on personal/existential lessons in Scripture

☛ it's impossible for Science & Religion to conflict

CONCLUSION: Independence Relationship

S7

1. A first step in moving beyond the conflict relationship

31. “The **independence** of science and religion represents a good **starting point** or **first approximation.**”

Barbour, 5

COMMENTS:

similar to: Haught's Contrast Relationship

1st move in this course (Metaphysics-Physics Principle)

2. BUT incomplete & unsatisfying

S8

32. “We do not experience life as neatly divided into **separate compartments**; we experience it in **wholeness** and **interconnectedness**. . . There are also biblical grounds for the conviction that God is the Lord of our **total lives** and of **nature**, rather than of a **separate** ‘religious’ sphere.”

Barbour, 16

COMMENTS:

similar to: Haught's criticism of his Contrast Relationship
 many students entering this course

3. DIALOGUE RELATIONSHIP

S2

The beginning of a discussion between Science & Religion

Deals with indirect interactions & leads to questions at the boundary between Science & Religion

History & the Origins of Science

S3

QUESTION:

why did modern science arise in the Jewish-Christian-Muslim West?

many leading scientists were Christians

EG astronomer Johannes Kepler:

science was “thinking God’s thoughts after him”

Royal Society (1st scientific society) → 70% Puritans (conservative Christians)

ANSWER:

S4

impact of Doctrine of Creation → at a TACIT (silent) level

- realism—God created a real world
- intelligibility & order in nature—natural revelation & intelligent design
- de-sacralization of nature—nature is not a god
- consistent & trustworthy laws of nature—faithfulness of God

COMMENT

S5

some historians overstate this argument

all four categories above can be dissected from Christianity

However, Christianity & the Doctrine of Creation are certainly compatible with science

Cosmology

S6

QUESTIONS:

what happens before the Big Bang?

physics can go back to 10^{-43} sec after the Big Bang (called Planck Time) S7 H14

why are the laws & initial conditions of the Big Bang so finely-tuned? S8 H14

EG explosive & gravitational forces balanced to 1 part in 10^{60}

☛ Is there a Fine Tuner?

Ethics

S9

QUESTIONS:

when does life begin?

implications for the abortion debate

when does life end?

implications for the physician-assisted death debate

EXAMPLE

Stephen Jay Gould

S10

leading evolutionary biologist at Harvard University

contributor to Science-Religion dialogue

33. “No such **conflict** should exist [between science & religion] because each S11

subject has a legitimate magisterium, or domain of teaching authority—

and these magisteria **do not overlap** (the principle that I would like to

designate as **NOMA**, or ‘non-overlapping magisteria’). The **net of science**

covers the empirical universe: what is it made of (fact) and why does it work

this way (theory). The **net of religion** extends over questions of moral meaning

and value. These two magisteria **do not overlap**, nor do they encompass all

inquiry (consider, for starters, the magisterium of art and the meaning of beauty).

“To cite the arch clichés, we [scientists] get the **age of the rocks**, and religion retains the **Rock of Ages** [God]; we study **how the heavens go**, and they [theologians] determine how to go to heaven [aphorism from Galileo]. This resolution might remain all neat and clean if the nonoverlapping magisteria (NOMA) were separated by a no man’s land. But, in fact, the two magisteria **bump right up against each other, inter-digitating** in wondrously complex ways along their **joint border**. Many of our **deepest questions** call upon aspects of both for different **parts of a full answer.**”

Stephen Jay Gould, “Non-overlapping Magisteria”
Natural History 106 (1997), 19-20

COMMENTS: S3

NOT an independence relationship
because Science & Religion: “bump right up against each other”
share a “joint border”

NOT all sci-rel contributors are RELIGIOUS
☛ Gould was an agnostic

NOMA allows Gould to state: S4

34. “Evolution [is] both **true and entirely compatible** with
Christian belief—a position I hold **sincerely.**” Gould, 16

BUT not everyone is happy with Gould: S5

35. “The belief that religion and science occupy separate
magisteria is **dishonest.**” [!!!] See Q 8 N4
Richard Dawkins, “Snake Oil & Holy Water”
Forbes ASAP (4 Oct 1999), 237

CONCLUSION: Dialogue Relationship S6

1. Boundary questions between Science & Religion are quite valuable especially in cosmology & ethics
2. Dialogue between Science & Religion only informs the other party exchanges of information do not support or change either of them S7

4. INTEGRATION RELATIONSHIP S8

- an integration between the content of Science & the content of Religion in areas that overlap
- Science supports and even changes Religion

Types of Integration: S9

1. Natural Theology: part of traditional Conservative Christianity throughout history
2. Theology of Nature: a new approach originating from modern 20th century Liberal Christianity

NATURAL THEOLOGY S10

tends to be a confusing term because it is used in a variety of ways:

- wide definition: General Revelation
- narrow definition: Natural Revelation → definition used by Barbour

General Revelation S11 H2

Moral Revelation

Natural Revelation

Integration Relationship uses science to argue for Intelligent Design/er

EXAMPLES OF NATURAL THEOLOGY (INTELLIGENT DESIGN ARGUMENTS)

William Paley	S2
famed book <i>Natural Theology: Or Evidences of the Existence and Attributes of Deity, Collected from the Appearances of Nature</i> (1802)	
science-of-the-day in early 19 th century	
<u>Watch Maker Argument</u>	S3
IF you find a watch in a field, THEN it is reasonable to believe in a watchmaker	
IF you find design in nature, THEN it is reasonable to believe in a Designer	
<u>Perfect Adaptation</u>	S4
belief that <u>each</u> & <u>every</u> detail in nature is perfectly adapted & fitted	
Therefore → a STATIC world won't work in a DYNAMIC (evolutionary) world	
Darwin was educated in Paley's categories perfect adaptation later conflicted with his evolutionary science More anon	
Anthropic Principle Greek ανθρωπος (<i>anthrōpos</i>): man, human	S5
DEF: observation that the physical laws of the universe are finely-tuned and that minor changes to them would not allow the evolution of human life	
<u>Big Bang Physics</u>	S6
<ul style="list-style-type: none"> • the math reveals: “mysterious numerical coincidences” “delicate fine-tuning” • raises the questions: are the coincidences a reflection of intelligence? is Someone/s or Something/s behind the universe? • no one questions the amazing fine-tuning ☛ debate is over whether it reflects intelligent design → Intelligent Designer 	
<u>Types of Anthropic Principles</u>	S7
1. Strong Anthropic Principle	
fine-tuning is intentional & points to a Fine Tuner held by those who <u>BELIEVE</u> in intelligent design & God	
2. Weak Anthropic Principle	S8
fine-tuning is nothing but an accident held by those who do <u>NOT BELIEVE</u> in intelligent design & God	
<u>Multiple Worlds Hypothesis</u> (2 variations)	S9
1. Sequential: many Big Bangs in a sequence over time	S10
our universe is the successful Big Bang → produced humans	
2. Parallel: many universes exist parallel to our universe at the same time	S11
our universe is successful → produced humans	
<u>COMMENTS:</u>	S12
<ul style="list-style-type: none"> • proposing a high number of universes reduces statistical improbability EG assume that the universe is fine-tuned to 1 part in 10¹⁰⁰ IF there are 10¹⁰⁰ universes, THEN one is bound to be like ours 	

- NO scientific evidence for sequential or parallel universes S2
Therefore, Multiple Worlds Hypothesis is NOT scientific
 ☛ it is an “out-of-this-world” argument just like RELIGION

• John Haught’s Lack of Gratitude Theory S3

36. “In brief, the multiple-worlds hypothesis provides skeptics with a convenient way to avoid an interpretation of the universe that would call forth the religious response of gratitude for its truly gracious existence ... So in order to avoid the obligation of responding to our existence with the gratitude appropriate to such an improbable gift, skeptics must find a way to show that in the final analysis there is nothing ‘remarkable’ or improbable about our being here at all.”

Haught, *Science & Religion* (NY: Paulist Press, 1995), 134

EXAMPLES OF THE STRONG ANTHROPIC PRINCIPLE SEE SQ 4-9 S4

Note Terminology: “coincidences,” “fine-tuning,” “delicately balanced,” “uniquely fit,” “precisely organized,” “just right,” “chain of coincidences”

Note Publishers: Oxford & Cambridge University Presses

Paul Davies SQ4 S5

physicist & leading Science & Religion scholar

Big Bang → explosive force & force of gravity → 1 part in 10^{60}

Sir Roger Penrose SQ 5 S6

Oxford University mathematical physicist

amount of precise order in the Big Bang → 1 part in $10^{10^{123}}$

estimated number of atoms in the entire universe → 10^{80}

Hugh Ross S7-8 H15-16

astronomer & leading progressive creationist

fine-tuning evidence that is accessible to popular audiences

Michael Denton SQ 8 S9

geneticist & defender of teleological evolution

Nature’s Destiny: How the Laws of Biology Reveal Purpose in the Universe (1998)

Simon Conway Morris SQ9 S10 H17

Cambridge University paleontologist

believes “the emergence of human intelligence is a near-inevitability”

☛ evolution is setup or loaded for humans to evolve

evidence: pattern of convergence in the fossil record points to a teleological evolution

Convergent Evolution S11 H17

DEF: appearance of the same basic structures on unrelated evolutionary branches

EG eye evolved 40 X

camera-like eye 6 X (eg humans & octopus)

CHALLENGES S12

Stephen Jay Gould’s “Re-Play the Video Tape of Evolution” Analogy

Gould: rewind the tape of evolution & played it again

DIFFERENT living organisms, or maybe NONE at all

BUT Conway Morris:

SIMILAR living organisms would evolve

EXAMPLES OF REFORMULATION S2

- (1) God’s Interventionistic Action S2
 science reveals only natural processes
 Therefore, God **does not** intervene in the universe or in the lives of people
- (2) God’s Omniscience (all-knowing) S3
 science reveals random & indeterministic natural processes
 Therefore, God **does not** know the future of the universe
- (3) God’s Omnipotence (all-powerful) S4
 science reveals vicious & wasteful character of biological evolution
 Therefore, God **does not** control the universe

The Attraction of Theology of Nature S5

a solution for the problem of suffering & evil in the world

Theodicy Greek θεος (*theos*): God δίκη (*dikē*): justice

DEF: arguments justifying the existence of suffering & evil in a world created by an all-loving, all-powerful, and all-knowing theistic God

THEREFORE: S6

It is beyond God’s ability to:

- (1) intervene in the world & deal with suffering & evil
- (2) know that suffering & evil will arise
- (3) control suffering & evil in the world

This is a god that is “becoming” just like us

NOT the eternal & unchanging God of traditional religions

Panentheism Greek παν (*pan*): all εν (*en*): in aka **Process Theology** S7

DEF: BELIEF that the world & God are inseparable realities, yet distinct realities therefore, not pantheism

38. “God is in the world, but the world is also in God, in the sense that God is more than the world ... the analogy of the world as **God’s body**, and God as the **world’s mind or soul**.” Barbour, 27

COMMENTS: S8

termed a “**Dipolar God**”

challenges traditional the Creator-creation distinction

reformulation is a substantive change

☛ not an incidental change

changes the character of God

God is a GROVELLER through time just like us

CONCLUSION: Integration Relationship S9

1. Natural Theology (Natural Revelation & Intelligent Design)

the traditional position is alive and well today → Strong Anthropic Principle

2. Theology of Nature S10

NOT the God of traditional religions (eg Judaism, Christianity, Islam)

intellectually titillating for intellectuals

irrelevant for the average person in the pews & rarely transforms lives

CONCLUSION: Science & Religion Model of Ian Barbour

S2

1. Barbour's Personal Position on Science & Religion

(Quote 21) S3

rejects Conflict

begins with Independence as a 1st step

integrates Dialogue & parts from Integration

Therefore → **Select & Combine** various categories & relationships

S4

2. Natural Theology (Natural Revelation & Intelligent Design)

S5

Barbour is positive. Why?

he once was a professional physicist & was impacted by the fine-tuning in the laws of nature

IV. TOWARD A WORKING MODEL OF SCIENCE & RELIGION

Lamoureux S6 H18

My Position: reject Warfare, start with Compartment, and integrate Boundary & Complementary S7**1. Warfare Relationship**

S8 H18

• Scientism

• Fundamentalism

2. Compartment Relationship

S9 H18

Science & Religion in separate airtight containersNO contact whatsoever between them

EG: Science restricted only to physical reality

Religion restricted only to spiritual reality

3. Boundary Relationship

S10 H18

Science & Religion share a border & contact each other

One picks up where other stops

S11 H14

EG: Science takes us to the edge of physical reality & 10⁻⁴³ of a second after the Big Bang

Religion reveals that God is on the other side of this boundary & created the Big Bang

4. Complementary Relationship

S12 H18

Science & Religion overlap on certain topics & have a two-way exchange of information

They enhance, enrich, and complete each another

Reflects the reciprocal relationship of the Metaphysics-Physics Principle

S13-14 H5

RELIGION UNDERGIRDS SCIENCE

UNDERGIRD: to support, reinforce from beneath

S15

Metaphysical (Religious) Beliefs in Science → **W I D E** definition of religion

EG: belief in realism & belief in the intelligibility of nature (Intelligent Design)

Fiduciary Character of Science

S16

EG: scientists have faith in the laws of nature & faith in their scientific paradigms

Ultimate Metaphysical (Religious) Foundation of Science

S17

EG: belief God ordained & sustains nature & belief science is a gift from God

SCIENCE BOLSTERS RELIGION

BOLSTER: to boost, fortify, empower

S18

Science Improves Hermeneutics

S19 H5-6

EG: identifies ancient science in the Bible → Message-Incident Principle

Science Magnifies the Doctrine of Creation

S20

EG: Hubble telescope gives us a great appreciation of God's marvellous creation

S21

Science Strengthens Belief in Intelligent Design

S22

EG: anthropic fine-tuning evidence & biological complexity (flagellum)

S23-24 H14

☛ the creation **SELF-ASSEMBLES** through evolution

INTELLIGENT DESIGN & NATURAL REVELATION S2

I. KEY THOUGHTS S3

1. Definition of Intelligent Design S4

DEF: BELIEF that the beauty, complexity, and functionality in nature reflect rationality and the creative work of an Intelligent Designer

BELIEF THAT nature reflects design, not HOW design arose in nature

2. ID is the Classic Complementary Relationship between Science & Religion S5

reflects the Metaphysics-Physics Principle S6 H18

features reciprocal Steps of Faith between Intelligent Design & nature

Requirement of Faith: S7

1. “By faith we understand that the universe was formed at God’s command.” Heb 11:3

☛ By faith we understand that the universe *reflects God’s intelligent design*. S8

ID is not a **proof**, but at best an **argument**

☛ EVERYONE—believers & skeptics of ID—takes a step of faith/intellectual leap

3. ID is a Powerful, but Limited Non-Verbal Revelation S9

at best ID only points to a teleological reality:

Someone, Someones, Something, or Somethings

II. INTELLIGENT DESIGN ARGUMENTS S10

Two basic arguments:

ARGUMENT FROM DESIGN TO NATURE (Downward Arrows) S11 H18

Presuppositional Approach → often overlooked & not acknowledged

BEGINS with the belief in God & design,

THEN uses this belief as a Metaphysical Filter to view nature

EG **Cardinal John Henry Newman** S12

famous 19th century Roman Catholic theologian

2. “I believe in design because I believe in God; not in God because I see design.”

C Dessain & T Gornall, eds. *Letters & Diaries* 25
(Oxford: Clarendon, 2006), 25:97

ARGUMENT FROM NATURE TO DESIGN (Upward Arrows) S13 H18

Evidential Approach → ID often limited to this argument

aka: argument from design for God’s existence

BEGINS with the natural world,

THEN looks for physical evidence to argue for belief in design & God

EG **Antony Flew** S14-15

famous atheist who became a deist because of ID in biology

3. “Biologists’ investigation of DNA has shown, by the almost **unbelievable complexity** of the arrangements to produce life, that **intelligence** must have been involved ... **The only satisfying explanation** for the origin of such ‘end-directed, self-replicating’ life as we see it on earth is an **infinitely intelligent Mind.**”

A Flew, *There Is a God: How the World’s Most Notorious Atheist Changed His Mind* (NY: HarperOne, 2007), 123, 132

III. RICHARD DAWKINS & INTELLIGENT DESIGN

The Blind Watchmaker (1986) famed book that rejects ID S2 S3

title mocks William Paley & his watchmaker argument

Blind Watchmaker = blind evolutionary processes

4. “The **problem** is that of complex design ... every single one of more than a trillion S4

cells in the body contains about a thousand times as much precisely-coded digital information as my entire computer. The **complexity** of living organisms is matched by the **elegant efficiency** of the **apparent design**. If anyone doesn’t agree that this amount of complex design **CRIES OUT for an explanation, I give up ...**

Our world is dominated by [1] feats of **engineering** and [2] works of **art**. S5

We are entirely accustomed to the idea that **complex elegance** is an indicator of **premeditated, crafted design**. This is probably the **most powerful reason** for the **belief**, held by the **vast majority of people** that have ever lived, in some kind of **supernatural deity** ... It is as if the human brain were **specifically designed to misunderstand** Darwinism, and find it hard to believe.”

R Dawkins, *The Blind Watchmaker* (London: Penguin, 1986), xiii, xvi, xv; my capitals

COMMENTS: S6

- despite being only “apparent” design (not real & nothing but an illusion): nature powerfully **IMPACTS** Dawkins “cries out for an explanation”

- impact of nature is the “most powerful reason for the BELIEF” in God S7 an argument from nature to design “held by the vast majority of people” an admission that nearly everyone has a religious impulse confirmation → 90% believe in teleology

- Characteristics of ID: S8
 - (1) engineered → “complexity” & “efficiency” (functionality)
 - (2) artistic → “elegance”
 combines both characteristics in the terms: “elegant efficiency” “complex elegance”

- common definition of “Darwinism” S9
 - Darwinism = Atheism = Dysteleological Evolution
 - BUT is this Darwin’s view? **NO!** more anon

DAWKINS ANTI-THESIS S10

“It is as if the human brain were **specifically designed** [by God] **to UNDERSTAND** Darwinism [atheistic evolution], and find it hard to believe.”

- ☛ our brain has been designed by God to say: “You can’t possibly believe in atheistic evolution” confirmation → 90% of teleologists today

Excursus: The 3rd Hypothesis—ID, Evolutionary Psychology & Evolutionary Creation S11

God created through evolution (teleological) a set of neurons that are sensitive to reflections of ID in nature.

- God hardwired the brain with *ID sensitive neurons* for *seeing* ID in nature
- We have the freedom to close our *ID sensitive eyes* & not *see* in ID in nature

☛ **GOD’S EVOLUTIONARY HARDWIRING** is behind Intelligent Design S12 H2

IV. SCRIPTURE & INTELLIGENT DESIGN

S2

NB: term “Intelligent Design” does not appear in the Bible
BUT the concept of ID is definitely there

The Classic Passages:

S3

- (1) Psalm 19 (Old Testament)
- (2) Romans 1 (New Testament)
- (3) Wisdom of Solomon 13 (Deutero-Canon or Apocrypha)

Characteristics of the Revelation in Nature according to Scripture:

S4

- Active
the creation powerfully impacts humans
- Intelligible
humans are fully equipped to understand the revelation in nature
- Incessant
natural revelation never stops
- Universal
natural revelation is heard by everyone (both religious & non-religious people)
- Non-Verbal
natural revelation is like music → it does not use words, but it definitely communicates
- Revelatory
natural revelation reveals general attributes of the Creator
- Rejectable (Rom 1 & Wis 13)
humans have the freedom to reject natural revelation
- Accountable (Rom 1 & Wis 13)
humans “are without excuse” if they reject natural revelation

S5

S6

1. PSALM 19:1-6

S7

features two parallel panels reflecting the Two Divine Books & concludes with a meditation

Book of God’s Works

- ¹The heavens declare the glory of God;
the firmament proclaims the work
of his hands.
- ²Day after day they pour forth speech;
night after night they display knowledge.
- ³They have no speech, they use no words;
no sound is heard from them.
- ⁴Yet their voice goes out into all the earth,
their words to the ends of the world.
In the heavens he has pitched a tent for the sun, S10
- ⁵which is like a bridegroom coming forth
from his pavilion, like a champion
rejoicing to run his course.
- ⁶It rises at one end of the heavens
and makes its circuit to the other;
nothing is hidden from its heat.

S8

Book of God’s Words

- ⁷The law of the Lord is perfect, reviving the soul.
The statutes of the Lord are trustworthy,
making wise the simple.
- ⁸The precepts of the Lord are right,
giving joy to the heart.
- ⁹The commands of the Lord are radiant,
giving light to the eyes.
- ⁹The fear of the Lord is pure, enduring forever.
The ordinances of the Lord are sure
and altogether righteous.
- ¹⁰They are more precious than gold,
than much pure gold;
They are sweeter than honey,
than honey from the comb.
- ¹¹By them is your servant warned;
in keeping them there is great reward.

COMMENTS:

- note all the verbs in the Active Voice (subject does an action) S2
 Heavens: “declare” “proclaim” “pour forth” “display”
Dawkins: “complex design CRIES OUT for an explanation”
- note all the terms related to intelligent communication S3
 “speech” “knowledge” “language” “words” “voice”
 Hebrew *qaw* (translated as “voice” in v. 4) means “line”
 can be rendered “a chord of music”
 ☛ nature is like a heavenly hymn
- Non-Verbal Revelation S4
³They have no speech, they use no words;
 no sound is heard from them.
⁴Yet their voice goes out into all the earth,
 their words to the ends of the world.
- Ancient Astronomy S5 H86
 “firmament” “ends of the heavens” movement of sun & tent metaphor
- Message-Incident Principle** S6 H5
 Message: the heavens are a Natural Revelation
 they reveal: God’s glory
 that they were created by God
 Incident: ancient astronomy → 3-tier universe
 it is the vessel that transports the spiritual truths

2. ROMANS 1:19-23

S7

Book of God’s Works

S8

¹⁹Since what may be known about God is plain to them, because God has made it plain to them. ²⁰For 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 and women are without excuse.**

Epistemological Impact of Sin

S9

²¹For although they knew God, they neither glorified him as God nor gave thanks to him, but their **thinking became futile** and their **foolish** hearts were darkened. ²²Although they claimed to be wise, they became **fools** ²³and exchanged the glory of the immortal God for images made to look like mortal man and birds and animals and reptiles.

COMMENTS:

- Nature reveals some of God’s general attributes S10
 “his eternal power and divine nature”
- Natural Revelation & ID are connected to Commandments #1 & #2 S11
 reject: “immortal God” S12 H4
 replace God with: idols of “mortal man and birds and animals and reptiles”
- Sin Impacts Thinking S13
 “their thinking became futile” → “they became fools”
 in the Bible the words ‘fool’ & ‘foolish’ do not mean intellectually stupid
 a fool is someone who is missing out on the best part of life → GOD
- Natural Revelation makes all humans accountable S14
The Without Excuse Clause:
 “so that men and women are without excuse”

3. WISDOM OF SOLOMON 13:1-9

- ¹For all people who were ignorant of God were **foolish** by nature; and they were unable from the good things that are seen to know the one who exists, nor did they recognize the Artisan while paying heed to his works; S2
- ²but they supposed that either fire or wind or swift air, or the circle of stars, or turbulent water, or the luminaries of heaven were the gods that rule the world. S3
- ³If through delight in the beauty of these things people assumed them to be gods, let them know how much better than these is their Lord, for the Author of Beauty created them. S4
- ⁴And if people were amazed at their power and working, let them perceive from them how much more powerful is the One who formed them. S5
- ⁵For from the greatness and beauty of created things come a corresponding perception of their Creator. S6
- ⁶Yet these people are little to be blamed, for perhaps they go astray while seeking God and desiring to find him. S7
- ⁷For while they live among his works, they keep searching, and they trust in what they see, because the things that are seen are beautiful. S8
- ⁸Yet again, **not even they are to be excused**. S9
- ⁹For if they had the power to know so much that they could investigate the world, how did they fail to find sooner the Lord of these things? S10
- COMMENTS:
- Nature reveals some of God’s general attributes
“greatness and beauty” → “corresponding perception of their Creator”
☛ 4 references to beauty S8
 - Natural Revelation & ID are connected to Commandments #1 & #2
reject:
“Creator” “Artisan” “Author of Beauty” “Lord of these things”
replace God with:
idols of “fire or wind or swift air, or the circle of stars, or turbulent water, or the luminaries of heaven” → thought to be gods S9
 - Natural Revelation makes humans accountable
The Without Excuse Clause: “not even they are to be excused” S10
 - Verse 9 updated with Antony Flew in mind (**Quote 3**):
⁹ For if *we today* have the power to know so much about *molecular biology* that we *can open* and investigate the *cell and DNA*, how *do we* fail to find sooner the Lord of these things? S11

V. CHRISTIAN TRADITION & INTELLIGENT DESIGN

S2

Pope John Paul II

S3

5. “Developing a **philosophical argument** in popular language, the apostle [Paul] declares a **profound truth**: Through all that is created, the ‘**eyes of the mind**’ can come to know God. Through the medium of creatures, God stirs in **reason**, an **intuition** of his ‘power’ and his ‘divinity’ (Rom 1:20) ... By discoursing on the data provided by the senses, reason can reach the cause which lies at the origin of all perceptible reality. In philosophical terms, we could say that this important Pauline text affirms the human capacity for **metaphysical inquiry**.”

Pope John Paul II, “Faith & Reason” *Origins: CNS Documentary Service* 28 (15 Oct 1998), 324

COMMENTS:

- reflects the Metaphysics-Physics Principle S4 H5
creatures (physics) → intuition & reason → God’s attributes (metaphysics)
☛ “his ‘power’ and his ‘divinity’”
 - Argument *from Nature to Design* S5 H18
this is the most common design argument
 - God hardwired the brain with *ID sensitive neurons* for *seeing ID* in nature S6
“the ‘eyes of the mind’”
6. “This is to recognize as a **first stage of divine revelation** the marvellous ‘**book of nature**,’ S7 which, when read with the proper tools of human reason [ie, science], can lead to knowledge of the Creator. If human beings with their intelligence **fail** to recognize God as Creator of all, it is **not because they lack the means to do so**, but because their **free will** and their **sinfulness** place an impediment in the way.” Ibid., 324

COMMENTS:

- accepts The Two Divine Books S8 H2
two stages of divine revelation:
1st Stage → Book of Nature → Works point toward God
2nd Stage → Book of Scripture → Words reveal who exactly is God
- humans have “free will” & can reject ID & Natural Revelation S9
- epistemological Impact of Sin with regard to ID & Natural Revelation
sinfulness “an impediment”

VI. CONCLUSION: NATURAL REVELATION & INTELLIGENT DESIGN

S10

1. ID & Natural Revelation are Powerful

S11

experienced even by skeptics (Dawkins) & former skeptics (Flew)
affirmed by Biblical Texts & Christian Tradition

2. ID & Natural Revelation Require Reciprocal Steps of Faith (or Epistemological Jumps)

S12

ALL skeptics of ID & ALL believers of ID make a leap of faith

☛ whether they are aware of it or not → so be aware!

ID is a metaphysical BELIEF

ID is not a **proof**, but at best an **argument**

3. ID & Natural Revelation are Limited

S2

only points to Someone, Someones, Something or Somethings

only reveals general attributes of the Intelligent Designer/s

ID is Non-Verbal

calls for a **Verbal Special Revelation** (eg Bible) → fuller revelation of the Intelligent Designer/s

4. Christian Views of ID & Natural Revelation Informed by the Bible & Include Spiritual Factors

- sufficiency of nature to reveal God S3-4

- proficiency of humans to understand natural revelation

☛ everyone is impacted by nature

BUT not everyone wants to accept this revelation

- requirement of faith S5

By faith, we believe nature reflects ID

- epistemological impact of sin

ID connected to Commandments #1 & #2

- humans have the freedom to accept or reject ID S6

- humans accountable regarding the message of ID

The Without Excuse Clause

VII. TOWARD A WORKING MODEL OF INTELLIGENT DESIGN Lamoureux S7

NB: a model includes as many positions on ID as possible, including those that reject ID

PARAMETERS OF INTELLIGENT DESIGN S8

Ontological Parameter Greek ONTOS (*ontos*): participle of the verb “to be” S9

Asks the question: What **IS** Intelligent Design?

- Character:

ARTISTIC & ENGINEERED

- Gradient:

(1) Artistic → OPTIMAL to NONE

(2) Engineered → OPTIMAL to NONE

- Integrity:

REAL or an ILLUSION

EXAMPLES S10-11 H19

Epistemological Parameter S12

Asks the question: How **CERTAIN** is knowledge of intelligent design?

- Range:

Proof—Argument—Suggestive—Consistent—Inert

- Epistemological Impact of Sin (1st Commandment): S13

YES or NO

- Integrity:

TRUSTWORTHY or UNTRUSTWORTHY

EXAMPLES S14-15 H19

POSITIONS ON INTELLIGENT DESIGN

S2

intersection of the two parameters results in a countless number of positions

EXAMPLES

Richard Dawkins	S3-4 H20
ID is an illusion	
Intelligent Design Theorists	S5-6 H20
ID can be proven scientifically	
Lamoureux	S7- 8 H20
ID is real & we are accountable	
ID → Beyond a Reasonable Doubt	

WHY IS INTELLIGENT DESIGN SUCH A CONTROVERSIAL TOPIC?

S9

My Answer: the implications of ID are **DEEPLY PERSONAL**

IF intelligent design is real: S10

 THEN it points to an Intelligent Designer/s

 raises the question of our **relationship** to this Designer/s

 ☛ is the Intelligent Designer/s ultimately in charge over our life?

 are we accountable to Someone/s or Something/s greater than ourselves?

 THEN nature is an incessant reminder forcing us to deal with Commandment #1 S11 H4

 raises the question, “Who or What is #1 in our life?”

What about you? S12

MIDTERM EXAM

is on material up to here

FINAL EXAM

is on material from next section (Galileo) to the end

ASTRONOMY & THE GALILEO AFFAIR S2

I. KEY THOUGHTS S3

1. The scientific issue in the Galileo Affair was NOT about a flat earth! S4

anti-religious individuals in 19th century concocted that myth
debate was between:

Old Science (Geocentricity) vs. New Science (Heliocentricity) → Copernicus & Galileo

Earth at center of universe

Sun at center of universe

γη (*gē*) earth

ἥλιος (*helios*) sun

2. Galileo had a PEACEFUL relationship between Science & Religion S5

IMPLICITLY he accepted the Metaphysics-Physics Principle & Message-Incident Principle
his hermeneutics were remarkable & ahead of church theologians!

Features:

- Principle of Accommodation
- Incidental Ancient Science in Scripture
- Baconian Hermeneutic → science assists biblical interpretation

3. The Re-cycle Thesis S6

QUESTION: Is the origins debate today a re-cycling of the Galileo Affair with a different science?

☛ **evolutionary biology** instead of **astronomy**

4. Pattern & Process in Science S7

Galileo's day (early 1600s):

Pattern (observation) is known → movement of the planets

Process (mechanism) is not known → believed planets were in moving heavenly spheres

☛ Isaac Newton's Theory of Gravity only appears in late 1600s

II. BRIEF HISTORY OF ASTRONOMY S8

Ancient Greek Astronomy S9

Basic features:

THE EARTH

- centre of the entire universe (**Geocentricity**)
- spherical
 - curved shadow of earth on face of the moon during an eclipse
 - sightings of stars not previously seen as they travelled south
- immovable
 - they did not feel the movement of earth's rotation
 - they argued objects would be thrown off & birds left behind

THE HEAVENS

- spherical
 - single or multiple spheres
 - last sphere called "the **Firmament**"
- motion of the spheres caused movement of the stars
- Two Types of Stars S11

(1) Fixed Stars

attached to the Firmament & they move together in unison as Firmament moves

(2) Wandering Stars (Planets)

travelled on their own path

Retrograde Motion S12 H13

DEF: a brief east-to-west loop by a planet from its normal west-to-east movement across the sky

believed to be **real** → not a visual effect

EXAMPLES

Plato (427-347 BC/E)	S2 H22
single heavenly sphere rotates daily	
Aristotle (384-322 BC/E)	S3 H22
multiple heavenly spheres & the last sphere (Firmament) rotates daily	
universe features two parts:	
(1) Terrestrial	
sublunar → below the sphere of the moon	
bodies changeable & destructible	
(2) Celestial	
unchangeable & indestructible	
☛ Galileo will challenge this idea	
Claudius Ptolemy (100-170 AD/CE)	S4
<i>Great System of Astronomy</i> (150 AD/CE)	
basically Aristotelean → geocentric with many spheres	
dominant astronomy for the next 1400 years	
Achievement:	
accurate predictions	
offered an explanation for retrograde motion of “wandering stars”	S5 H23
☛ Galileo will challenge Ptolemaic astronomy	
Nicholas Copernicus (1473-1543)	S6
formulated heliocentric astronomy	
• sun is at the of the <u>entire</u> universe	S7 H24
• planets & moon are in their own sphere	
• motion of spheres caused the motion of the planets & moon	
• fixed stars are attached to the firmament (last sphere of the universe)	
• firmament is immovable	
faithful Christian	S8
church cannon (a religious assistant/administrator) for 40 yrs	
had a peaceful relationship between Science & Religion	
Brief Treatise (1514)	S9
written anonymously & given to trusted friends	
made 7 assertions	
1. <u>ASSERTION #3</u>	S10
“All the spheres revolve about the sun as their mid-point, and therefore the	
sun is the center of the universe. ”	E Rosen, <i>Three Copernican Treatises</i> (NY: Dover 1959), 58
<u>COMMENT:</u>	
heliocentricity is NOT our understanding!	
2. <u>ASSERTION #7</u>	S11
“The apparent retrograde and direct motion of the planets arises not from their	
motion but from the earth’s. The motion of the earth alone, therefore, suffices	
to explain so many apparent inequalities in the heavens.”	Ibid, 59
<u>COMMENT:</u>	
retrograde motion is only an appearance → a visual effect	S12 H13

On the Revolutions of the Heavenly Spheres (1543)

S2

Copernicus's most famous book

heliocentricity was rarely taught openly by end of 16th century

if so, as a “hypothesis” and not as description of physical reality

an academic book written in Latin

therefore, no negative reaction from common people

Galileo wrote in Italian → common people drawn into the controversy

3. “The machinery of the world ... has been built for us by the **Best and Most Orderly Workman** of all ... And although I realize that the **conceptions of a philosopher** [ie, natural philosopher or scientist] are placed **beyond the judgment of the crowd** ... it is his loving duty to seek the truth in all things, in so far as **God has granted** that to **human reason**.” S3

N. Copernicus, *On the Revolutions of the Heavenly Spheres, Great Books of the Western World*, RM Hutchins, ed (Chicago: Encyclopaedia Britannica, 1543 [1948]), 6, 508

COMMENTS:

S4

- world was designed by God
- reason & science were rooted in God
- Scientific Knowledge Gap between the academics & common people
“conceptions of a philosopher” & “the crowd”

Copernicus Anticipated Theological Criticism

S5

4. “But if perchance there are certain ‘**idle talkers**’ who take it upon themselves to pronounce judgment, although wholly **ignorant of mathematics**, and if by shamelessly **distorting the sense of some passage of Holy Writ** to suit their purpose, they dare to reprehend and to attack my work; they worry me so little that I shall ever scorn their judgments as foolhardy... Mathematics is written for mathematicians; and among them, if I am not mistaken, my labours will be seen to **contribute** something to the ecclesiastical commonwealth [the church], the principate of which Your Holiness [Pope Paul III] now holds.” Ibid., 509

COMMENTS:

S6

- Scientific Knowledge Gap between the academics & common people
“mathematicians” & those “wholly ignorant of mathematics”
- Hermeneutical debates over New Science
eisegesis → “distorting the sense of some passage of Holy Writ”
- Science a contribution to the church
dedicated *Revolutions* to Pope Paul III

Example of a Critic: Martin Luther

S7-8 H13

5. “The **new astronomer** [Copernicus] wants to prove that the Earth goes around [the sun] and not the heavens, the Sun, and the Moon [around the earth] ... The **fool** will turn the whole science of Astronomy upside down. But, as **Holy Writ declares**, it was the Sun and not the Earth which Joshua commanded to stand still [Josh 10:12-13].” S9

M Luther, *Table Talk* (4 Jun 1539), in A. Armitage
World of Copernicus (NY: Signet, 1951), 90

6. “Joshua said to the Lord in the presence of Israel: ‘**O sun, stand still** ... The **sun** **stopped in the middle of the sky** and delayed going down about a full day.’” S10

Josh 10:12-13 **SQ 1** for full passage

COMMENTS:

S2

- Luther accepts **SCIENTIFIC CONCORDISM**
“But, as Holy Writ declares, it was the Sun ...”

Luther’s geocentrism:

based on a literalist & concordist reading of the Bible

- classic example that Scientific Concordism **FAILS** S3 H13
the Bible should not be used as a book of science

CONCLUSION: Brief History of Astronomy

S4

1. ALL astronomers accepted the earth is spherical in 1600s

Galileo Affair is not about a flat earth!

2. Scientific Knowledge Gap growing between the academics & common people S5
3. Hermeneutical debates beginning to emerge because of heliocentrism S6

III. BRIEF HISTORY OF GALILEO GALILEI (1564-1642)

S7

Preamble

S8

volatile time & volatile personality → a formula for disaster

SOCIAL FACTORS

S9

- Roman Catholicism on the defensive
fresh off the Protestant Reformation
- Works of Aristotle rediscovered in 12th to 13th centuries S10
became the **Science-of-the-Day**
integrated (conflated) into Roman Catholic theology
- Invention of Printing S11
wide distribution after 1500 & public accessibility
1559 Roman Catholic Church establishes the **Roman Index** (prohibited books)

PERSONAL FACTORS

S12

- Galileo: arrogant, sarcastic, quick to anger → many enemies
- wrote his books in Italian S13
common people became a factor
- used **DIALOGUE** style → to protect the author S14
Galileo put the words of opponent professors in mouths of peasants!

1564

S15

born 15 Feb in Pisa, Italy

raised a Roman Catholic

his father Vincenzo was a music theorist & **experimentalist**
in many contentious debates**1581**

S16

studied medicine at U of Pisa, but did not complete program
nicknamed “Wrangler” for his argumentative style**1585**

moved to Florence

studied **physics & math** with tutorimportant scientific advances in 16th century Italy were made outside the universities

- 1589** became a professor of mathematics at U of Pisa
mathematicians deemed inferior & suspicious!
Therefore, part of the Galileo Affair is a **Professional Clash**
- | <u>NATURAL PHILOSOPHERS</u> | <u>MATHEMATICIANS</u> |
|-----------------------------|-----------------------|
| Aristotelians | Galileo |
| qualitative | quantitative |
| based on Aristotle's works | based on experiments |
| DEDUCTIVE | INDUCTIVE |
- Aristotle's Categories**
- coined the term 'category'
 - categories based on common sense perceptions of daily life
 - 'quantity' was only 1 of his 10 categories:
 - quantity**, quality, substance, relation, place, time, posture, having, action, being acted on
- 1590 *On Motion***
- THESIS: **motion & math** are the key to science
attacks Aristotle's common sense views
EG
speed of falling bodies proportional to weight (ie, heavier objects fall faster)
☛ ARISTOTLE WRONG → theme throughout Galileo's career
Famous Experiment
dropping cannon balls off Tower of Pisa is probably not true
- 1592**
- became a math professor at U of Padua
- 1597**
- admits he had long ago accepted Copernican Astronomy
- 1604**
- Supernova (exploding star)
Aristotle → celestial realm doesn't change
a comet is friction between air & lunar sphere
Galileo → new star
☛ ARISTOTLE WRONG
gives 3 PUBLIC lectures
- 1608**
- telescope was invented by Hans Lippershey
- 1609**
- Galileo made his own telescope & pointed it to the heavens:
- moon was not a perfect sphere and has valleys & mountains
Aristotle: heavens were perfect spheres
 - moving spots on sun
Aristotle: heavens do not change
 - four moons of Jupiter
Aristotle: all heavenly bodies revolve around the earth
 - phases of Venus indicated that Venus & the earth revolve around sun
Aristotle: earth was the centre of the universe
- ☛ ARISTOTLE WRONG

- 1610 *Starry Messenger*** S2
- THESIS: telescope findings reveal the Aristotelian universe is incorrect
- ☛ ARISTOTLE WRONG
- BUT
- ambiguous about heliocentrism
 - 2nd edition made Galileo famous throughout Europe
 - frenzy of telescope watching
- ARISTOTELIAN REACTIONS: S3
- refused to use the telescope
 - claimed to see nothing
 - argued flaws in lenses
 - claimed optical illusions
 - accused Galileo of fraud
- SIMILAR TO ANTI-EVOLUTIONARY ARGUMENTS TODAY? S4
- refuse to study fossils
 - claim to see no transitional fossils
 - argue flaws in the fossil record
 - claim transitional fossils are illusions → diseased creatures
 - accuse paleontologists of fraud (and even demonic deception!)
- Clergy drawn into the debate S5
- pastoral concern emerging:
 - was Galileo undermining the faith of Christians with his astronomy?
- 1610** S6
- left U of Padua & returned to Florence
 - became “Philosopher & Mathematician” of the **Grand Duke of Tuscany**
 - an opportunity to challenge the ideas in the universities
- 1611** S7
- visited **Rome** → very positive
 - very good dialogue with astronomers at Roman College (Jesuits)
 - elected to Lincean Academy (scientific society)
 - had audience with the Pope who was impressed
- 1612 *Discourse on Floating Bodies*** S8
- THESIS: **AUTHORITY** in science is based on **experiments** (Induction)
- NOT based on the works of Aristotle (Deduction)
 - ☛ ARISTOTLE WRONG
- 1613 *Letters on Sunspots*** S9
- fully embraces Copernican heliocentric astronomy
 - Lincean Academy in Rome publishes it
- 1613** S10
- THE BREAKFAST
- Grand Duchess Christina asks about theological implications of Galileo’s astronomy:
 - was Galileo undermining Christian Faith?
 - Benedetto Castelli informed Galileo
 - 1st response is the “Letter to Castelli” (1613)
 - later expanded to the “Letter to Grand Duchess” (1615)

- 1615 Roman Catholic church informed that Galileo was interpreting the Bible S2
 ☛ THE PROTESTANT PROBLEM
- 1616 church placed Copernicus' *On the Revolutions* (1543) on the Roman Index S3
 "suspended for correction"
THE COMMITTEE:
 made up of only theologians & pastors, and they consulted for only a few days
 examined the propositions:
 1. The sun is at the centre of the world & does not move
 2. The earth is not at the centre of the world & is in motion
- THE JUDGMENT S4
 11 to 0 vote
 7. "All said that this proposition [1] is foolish and absurd in philosophy [natural philosophy = science], and formally **heretical** since it **explicitly contradicts** in many places the sense of **Holy Scripture**, according to the **literal meaning** of the words and according to the **common interpretation & understanding** of the Holy Fathers and the doctors of theology ...
 All said that this proposition [2] receives the same judgment in philosophy S5
 and that in regard to theological truth it is at least **erroneous in faith.**"
 M.A. Finocchiaro, ed/trans, *The Galileo Affair: A Documentary History*
 (Berkeley, CA: U of California Press, 1989), 146
- COMMENT: S6
 ☛ church was entrenched in SCIENTIFIC CONCORDISM
 hermeneutics was a significant factor in the Galileo Affair
- Galileo summoned to Rome S7
 Cardinal Robert Bellarmine:
 warned Galileo against the REALISM of heliocentricism
 asked him to call it a HYPOTHESIS
 Bellarmine was correct → no experimental evidence the earth moved
 only appears in 1838 with stellar parallax
- 1618 S8
 3 comets appear
 Jesuits of Roman College publish a book on comets
 they used an Aristotelean interpretation
 comets not celestial, but sparks between air & lunar sphere
- 1623 *The Assayer* S9
 Galileo's work on comets
 attacks Jesuits & alienates them → in the end they'll get Galileo!
- 1624 S10
 Galileo visited Rome & met with Pope Urban VIII
 this Pope was a friend of Galileo's
 encouraged to write up his views as **HYPOTHESIS**
 worked on book between 1624 and 1630
 argued that tides are evidence of the earth's motion

- 1631 Galileo receives the *Imprimatur* for his book → church's seal of approval S2
- 1632 ***Dialogue on the Two Chief World Systems: Ptolemaic & Copernican*** S3
February
 Galileo's most famous book
 PROOF the earth moves → tides
 used the dialogue style
 Jesuits convinced Pope Urban VIII that he is the character named "Simplicio"
 Pope feels betrayed & never talks to Galileo again
- August S4
 the church stopped distribution of the book
 committee was formed to examine it
- October
 Galileo called to Rome
- 1633 S5
June 16
 recommendations of committee:
 • Galileo publicly recant his views
 • Galileo put under house arrest
 • *Dialogue* to be banned
- June 22 S6
Galileo's Heresy Trial & "Recantation"
 8. "I, Galileo, son of the late Vincenzo Galilei of Florence, seventy years of age ...
 I have been judged vehemently suspected of heresy, namely of having held and
 believed that
 [1] the sun is the center of the world and motionless
 [2] and the earth is not the center and moves ...
 With a sincere heart and unfeigned faith I abjure, curse, and detest the aforesaid
 errors and heresies."
Galileo Affair, 292
- COMMENTS: S7
 regrettable, but somewhat understandable
 Galileo was 70 yrs old & sick → wants to get home
 BUT
 Galileo becomes the SYMBOL of the WARFARE relationship
 of Science & Religion
- December S8
 returned to Florence & was under house arrest for rest of his life
 NOT in a dungeon & in chains!!!
 continued scientific work & focussed on motion
- 1637 S9
 abandoned his theory that tides are proof the earth moves
- 1638 ***Discourses & Mathematical Demonstration Concerning Two New Sciences*** S10
 • ARISTOTLE WRONG again!!!
- 1642 S11
 dies January 8 & was buried in Florence, Italy

Epilogue

S2

1687Newton describes Theory of Gravity in *Mathematical Principles* (1687)

NB

Galileo did not have the concept of gravity in his science

1835Roman Catholic church removed *Dialogue* from the Roman Index**1838**

stellar parallax confirms earth that moves

CONCLUSION: Brief History of Galileo Galilei

S3

1. The Galileo Affair much more complex than simple Science & Religion Warfare

S4

numerous contributing factors:

• Social

Roman Catholicism still reacting to the Protestant Reformation

• Personal

Galileo's bad attitude

• Professional

Aristotelians (Old Science) vs Mathematicians (New Science)

• Theological

Church was steeped in scientific concordism

Aristotle was conflated into Roman Catholic theology

S5

• Scientific

Geocentricity vs. Heliocentricity

• Knowledge Gap

between growing academic knowledge vs. common knowledge

2. History of Scientific Discovery

S6

1st a pattern (observation) is discovered, 2nd a process (mechanism) is discovered

Pattern: 1543 Copernicus & heliocentricity

Process: 1687 Newton & Theory of Gravity

Parallel to Evolutionary Biology?

S7

Pattern: 1800s fossil record

Process: today just beginning to be understood through genetics

3. Hermeneutics (poor) played a significant part in the Galileo Affair

S8

Lesson for Today:

IF we are going to be involved in the origins debate,

THEN we need to have competent hermeneutics of Genesis 1-11

☛ let's not repeat the hermeneutical errors of the church in Galileo's day

IV. GALILEO'S HERMENEUTICS AND SCIENCE & RELIGION RELATIONSHIP S2

Background: 1613 a breakfast & 2 hr discussion afterward S3

Grand Duchess Christina asks about theological implications of Galileo's astronomy:
was Galileo undermining Christian Faith?

Galileo responded with "Letter to Castelli" (1613)
expanded into "Letter to Grand Duchess Christina" (1615) S4

1. FOUNDATIONAL PRINCIPLE: THE TWO DIVINE BOOKS S5Scripture & Nature Rooted in the Trinitarian God S6

9. "For the **Holy Scripture** and **nature** derive **equally** from the **Godhead**, the former as the dictation of the Holy Spirit and the latter as the most obedient executrix of God's orders."

COMMENTS: "Letter to Christina" in Finocchiaro, 93
"Godhead" a term for the Holy Trinity—Father, Son & Holy Spirit
balance between the Two Books → both "derive equally" from God

Scripture & Nature Reveal God S7

10. "God **reveals** himself to us **no less excellently** in [1] the **effects of nature** than in [2] the **sacred words of Scripture**, as **Tertullian** [theologian; 160-220 CE/AD] perhaps meant when he said, 'We postulate that God ought **first** to be known [1] by nature, and afterward further known [2] by doctrine—[1] by nature through his works, [2] by doctrine through official teaching.'" "Christina" 93

COMMENTS: S8
balance between the Two Books → both equally "excellent"
strong view of Natural Revelation (ID)
☛ start 1st with Nature in order to know God

Priority of Scripture over Nature in Theological Issues S9

11. "I have no doubt at all that, **where human reason cannot reach**, and where consequently one **cannot have a science**, but only opinion and **faith**, it is appropriate piously to conform absolutely to the **literal meaning of Scripture**." "Christina" 104

COMMENTS: S10
reflects Metaphysics-Physics Principle
theology (metaphysics) is **beyond** science (physics)
accepts the literal meaning of theological statements

Priority of Nature over Scripture in Scientific Issues S11

12. "I think that in disputes about natural phenomena **one must begin NOT** with the authority of scriptural passages, but with sensory experience and necessary demonstrations [science] ... after becoming certain of some physical conclusions, we should use these as **very appropriate aids** to the **correct** interpretation of Scripture." "Christina" 93

COMMENTS: S12

REJECTS scientific concordism
science contributes to hermeneutics
"very appropriate aids to the correct interpretation of Scripture"
Baconian Hermeneutic (Principle #11) → "creatures are a key to Scriptures"

QUESTION S13
Is **evolutionary biology** a "very appropriate aid to the correct interpretation" of the Genesis 1 & 2 creation accounts?

2. NATURE: THE BOOK OF GOD'S WORKS

S2

God Created Faithful Laws of Nature

S3

13. Nature is “the most obedient executrix of God’s orders ... Nature is inexorable and immutable, [and] **never** violates the terms of the laws imposed on her.” “Christina” 93

COMMENTS:

implications: God is faithful & not deceptive → we can trust nature & science
nature is not a God-of-the-Gaps world

Science is a Gift from God

S4

14. “I do not think one has to believe that the same God who has given us our senses, language, and intellect would want us to set aside the use of these ... Indeed, **who wants the human mind put to death?** . . . When one is in possession of this [scientific information] it too is a **gift from God.**” “Christina” 94, 96, 105

COMMENTS:

crushes the science vs. religion dichotomy
human epistemology & knowledge rooted in God
☛ science ultimately rooted in God!

QUESTION

S5

Is **evolutionary biology** also a gift from God?

Practice of Science IMPLICITLY Affirmed in Scripture

S6

15. “To prohibit the entire science [astronomy] would be no different than to reject hundreds of statements from the Holy Writ, which teach us how the **glory** and the **greatness** of the supreme God are marvellously seen in all his **works** and by divine grace are **read** in the open **book of the heavens.**” “Christina” 103

COMMENTS:

Two Divine Books Metaphor → “book of the heavens”

strong view of natural revelation (ID)

Ps 19:1 re-written:

“The open book of the heavens declare the glory & greatness of God”

Nature is Intelligible & Written in Language of Mathematics

S7

16. From *The Assayer* (1623) “Philosophy [i.e., natural philosophy, or science] is written in this **grand book**, the universe, which stands continually open to our gaze. But the **book** cannot be understood unless one first learns to comprehend the language and to read the letters in which it is composed. **It is written in the language of mathematics** ... without which it is humanly impossible to understand a single word of it; without these, one wanders about in a dark labyrinth.” S. Drake, *Discoveries & Opinions of Galileo* (NY: Doubleday, 1957), 237-8

COMMENTS:

nature is rational & understandable → strong view of natural revelation (ID)

Albert Einstein:

S8 N15

“The eternal mystery of the world is its comprehensibility.” Q7 N15

BUT

no mystery for Galileo → God wrote the mathematics into nature

QUESTION

S9

What do we need to “first learn” before understanding origins?

geology, palaeontology, genetics, comparative anatomy

Otherwise, will we “wander about in a dark labyrinth”?

3. SCRIPTURE: THE BOOK OF GOD'S WORDS

S2

Scripture is Inerrant, NOT its Interpreters

S3

17. “Holy Scripture can **never lie or err**, and its declarations are **absolutely and inviolably true** ... Though the Scripture was **inspired by the Holy Spirit** ... we cannot assert with certainty that **all interpreters speak by divine inspiration** since if this were so then there would be no disagreement among them about the meaning of the same passages ... Holy Scripture can **never lie**, as long as its **true meaning has been grasped**.

“Letter to Castelli” in Finocchiaro, 49, 51; “Christina” 92, 96

COMMENTS:

S4

accepted Doctrine of Biblical Inspiration

“Scripture was inspired by the Holy Spirit”

accepted Doctrine of Biblical Inerrancy

Bible “can never lie or err”

Biblical “declarations” “absolutely & inviolably true”

human interpreters are the problem

☛ we need hermeneutics!

Intention of Scripture is for Salvation, NOT Science

S5

18. “I should believe that the authority of Holy Writ has merely **the aim** of persuading men of those articles and propositions which are necessary for their **SALVATION** and surpass all human reason, and so could not become credible through some other science or any other means except [1] **the mouth of the Holy Spirit** ... If [2] **the first sacred writers** had been thinking of persuading the people about the arrangement and the movements of the heavenly bodies, they would not have treated them **so sparsely**.” “Castelli” 51-2

COMMENTS:

S6

Principle of Authorial Intentionality (Principle #10)

Dual authorship of Scripture:

[1] Divine Intention → SALVATION

“mouth of the **Holy Spirit**”

“the aim” of the Bible

[2] Human Intention → NOT SCIENCE

“first sacred writers would not have treated [astronomy] so sparsely”

Science in Scripture is INCIDENTAL

S7

19. The Scripture “speak[s] **incidentally** of the earth, water, sun, or other created thing ... **sciences** [are] discussed in Scripture to a **very minor extent** and with **disconnected statements**; such is precisely the case of **astronomy**, so little of which is contained therein that one does not find there even the names of the planets, except for the sun, the moon, and only once or twice Venus, under the name Morning Star.” “Christina” 93-4

COMMENTS:

S8

reflects the Message-Incident Principle

science in Scripture is “incidental”

science only appears to a “very minor extent and with disconnected statements”

QUESTION

S9

does Scripture “speak incidentally” of the origin of the world?

20. “Propositions **dictated by the Holy Spirit** were expressed by the sacred writers in such a way as **to accommodate** the capacities of the very unrefined and undisciplined masses ... in order **not to sow confusion** into the minds of the **common people** and make them more obstinate against dogmas involving **higher mysteries** ... Indeed I shall further say that it was not only **respect** for **popular inability**, but also the **current opinion of those times** ... This doctrine [accommodation] is **so commonplace** and so definite among all theologians that it would be superfluous to present any testimony for it.” Ibid., 92, 106

COMMENTS:

S3

reflects the Message-Incident Principle

science is “current opinion of those times” → science-of-the-day
ancient science

Principle of Accommodation (Principle #3)

S4

refers to accommodation 8 X in “Letter to Christina”

“so commonplace” in the 17th century

reason for accommodation:

to avoid **pastoral** problems

“in order not to sow confusion into the minds of the common people”

QUESTION:

S5

Why is evolution not in the Bible?

☛ to avoid pastoral problems

4. THE CONFLICT BETWEEN GALILEO & HIS CRITICS

S6

Central cause → poor hermeneutics

QUESTION:

Are the issues similar today with Anti-Evolutionism?

Scientific Concordism is the Root of the Conflict

S7

21. “So the reason they [Galileo’s critics] advance to condemn the opinion of the earth’s mobility and sun’s stability is this: Since in many places in Holy Scripture one reads that the [1] **sun moves** and the [2] **earth stands still**, and since the **Scripture can never lie or err**, it follows as a necessary consequence that the opinion of those who want to assert the [1] sun to be motionless and the [2] earth moving is **erroneous** and **damnable** ... They want to **extend**, not to say abuse, its [ie, the Bible’s] **authority**, so that even for purely **physical** [scientific] **conclusions**, which are not **matters of faith**, one must totally abandon the senses and demonstrative arguments [ie, scientific] in favour of any scriptural passage whose apparent words may contain a different indication.” Ibid, 92, 90

COMMENTS:

S8

Galileo’s critics accepted Scientific Concordism

“authority” of the Bible “extends” to “physical conclusions”

a superficial logic to the argument of the critics:

S9

• The Bible states the “sun moves” & “earth stands still”

• The Bible “never lies or errs”

Therefore:

belief the sun stands still & earth moves is “erroneous & damnable”

BUT critics fail to appreciate Message-Incident Principle:

☛ “physical conclusions ... are not matters of faith”

Recasting Galileo's Words for TODAY:

S2

“So the reason **anti-evolutionists** advance to condemn the opinion of the **evolution of life** is this:

- Since in many places in Holy Scripture one reads that **life was created *de novo*** [quick & complete; Gen 1 & 2], and
- since the Scripture can never lie or err,

[Therefore]:

it follows as a necessary consequence that the opinion of those who want to assert the **evolution of life** is erroneous & damnable.”

QUESTION:

S3

Can you **empathize** with scientific concordists & anti-evolutionists? on the surface this argument is reasonable

BUT

in the end falls short hermeneutically

similar to Galileo's critics, it assumes scientific concordism is a feature of the Bible

Excessive Biblical Literalism

S4

22. “Though the **Scripture cannot err**, nevertheless some of its interpreters and expositors may sometimes err in various ways. One of these would be very serious and **very frequent**, namely to want to limit oneself always to the **literal meaning of the words.**” “Castelli” 49

COMMENTS:

interpreters are the problem, not the Bible

- ☛ “frequent” error is literalism

TODAY

S5

2004 ABC TV survey: 87% Evangelical Protestants & 51% Roman Catholics accept Gen 1 is literal → Young Earth Creation

Proof-Text “Hermeneutics” aka “Sound-Bite TV Reporting”

S6

23. “They published some writings full of useless discussions and **sprinkled with quotations** from the Holy Scripture, taken from passages which they **do not properly understand** and which they **inappropriately adduce.**” “Christina” 87

TODAY

S7

anti-evolutionists often use the *de novo* creation of living organisms “after their kinds” in Gen 1 to claim that God did not create through evolution

- ☛ they fail to recognize that *de novo* creation is an ancient science of origins

Misappropriation of Academic Authority

S8

DEF: an expert in one academic discipline acts like an expert in another unrelated discipline

Absolute Prince Analogy

24. “**Officials and experts of theology** should not **arrogate** to themselves the authority to issue decrees in the professions they **neither exercise nor study** [eg, astronomy]; for this would be the same as if an absolute prince, knowing he had unlimited power to issue orders and compel obedience, but being neither a **physician** nor an **architect**, wanted to direct medical treatment and the construction of buildings, resulting in serious **danger to the life** of the unfortunate sick and in the obvious **collapse of structures.**”

“Christina” 100-101

<u>COMMENTS:</u>	S2
theologians are not astronomers!	
TODAY	S3
most of the leading anti-evolutionists <u>do not</u> have biology degrees: law, engineering, history, philosophy, mathematics, astronomy, education, theology, etc	
SUGGESTION	
always ask: What type of Doctor?	
CONCLUSION: Galileo’s Hermeneutics and Science & Religion Relationship	S4
1. Galileo had a <u>peaceful</u> relationship between his astronomy & his Christianity there was no hint of conflict	
2. Galileo believed that science <u>does not</u> deal with religion	S5
25. “The motion or rest of the earth or the sun are not articles of faith and are not against morals.”	“Christina” 109
3. Galileo believed that the purpose of Scripture was for worship & salvation	S6
26. “The primary purpose of the Holy Writ [is] the worship of God and the salvation of souls.”	“Christina” 93
4. Galileo’s hermeneutics reflect the Message-Incident Principle	S7
to summarize his views, he used Cardinal Baronio’s hermeneutical aphorism	S8
27. “The intention of the Holy Spirit is to teach us how one goes to heaven, and not how heaven goes.”	“Christina” 96
<u>MESSAGE OF FAITH</u>	S9 H5
How to Go to Heaven	
“articles of faith” “morals” “worship of God” “salvation of souls” Quotes 25-26	
“primary purpose of the Holy Writ” “intention of the Holy Spirit” Q 26-27	
<u>INCIDENTAL ANCIENT SCIENCE</u>	S10 H5
How Heaven Goes (astronomy) in the Bible:	
appear “incidentally” Q 19	
mentioned “sparsely” Q 18	
“current opinion of those times” Q 20	
“accommodated” to the level of “common people” Q 20	
“in order not to sow confusion” Q 20	

V. GALILEO'S HERMENEUTICAL GAFFE: LITERALISM & CONCORDISM S2

Despite Galileo's excellent hermeneutics in the "Letter to Christina," he succumbs to literalism and scientific concordism near the end of the letter

- ☛ moving completely beyond literalism & concordism is difficult!

The firmament is LITERALLY the last sphere in the heavens S3

28. "The word **firmament** [in the Bible] is **literally** very appropriate for the **stellar sphere** [ie, the sphere of fixed stars] and everything above the planetary orbs, which is totally **still and motionless** according to this arrangement [Copernican astronomy]." "Christina" 118

COMMENT: S4 H24

Galileo believed the firmament was the boundary of the physical universe

The sun is LITERALLY in the middle of the heavens S5

29. "With the Copernican system one can very clearly and very easily give a **literal meaning** to another detail which one reads about the same miracle [Josh 10]; that is, that the sun stopped in **the middle of the heavens.**" Ibid, 117

COMMENT: S6 H24

Galileo believed the sun was literally in the center of the entire universe

The rotation of the sun LITERALLY turns the spheres of the planets S7

30. "The sun is both the source of light and **THE ORIGIN OF MOTION** [my capitals], and given that God wanted the whole world system to remain motionless for several hours as a result of Joshua's order, it was sufficient to stop the sun, and then **its immobility stopped all the other turnings**, so that the earth as well as the moon and the sun (and all the other planets) remained in the same arrangement; and during that whole time, night did not approach, and the day miraculously got longer." Ibid, 117

COMMENT

- Galileo believed: S8-9 H24
the rotation of the sun caused the movement of the spheres & planets
Therefore: stop the rotation of the sun and it stops the earth's rotation and the sun will not "set"
- Galileo believed:
Josh 10 miracle really happened
☛ personal interventionism

The Problem of Scientific Concordism S10

with the advance of science:

the concordism of one generation is rejected by the next generation
it's like the God-of-the-Gaps

with regard to Galileo's Scientific Concordism: S11

- sun is NOT in middle of heavens
- sun is NOT surrounded by spheres with a planet
- firmament does NOT exist above planets
- sun's rotation does NOT transmit motion to spheres & planets

PASTORAL CONCERN: S12

IF science advances & destroys your scientific concordism,
THEN is your faith in God also destroyed?

VI. THE “APOLOGY TO GALILEO”

S2

Pope John Paul II “Lessons of the Galileo Case” (1992)

The Problem

S3

hermeneutical **incompetence** of 17th century theologians of the Church

31. “The new science [Copernican astronomy] ... obliged **theologians** to examine their own criteria of scriptural interpretation. **Most of them did not know how to do so ...** The **majority of theologians** did not realize the formal distinction between [1] Sacred Scripture and [2] its interpretation, and this led them unduly to **transpose** [conflate] into the realm of the **doctrine of the faith** a question that in fact pertained to **scientific investigation.**”

JP II, “Lessons of the Galileo Case,” *Origins: CNS Documentary Service* 22 (1992), 372-373

COMMENTS:

S4

The Bible is NOT the problem → the interpreters are!

Failure to distinguish:

[1] “Sacred Scripture” from

[2] “its interpretation”

Problem of Conflation:

“**transpose** [conflate] into the realm of the **doctrine of the faith** a question that in fact pertained to **scientific** investigation.”

The Tragic Consequence

S5

Galileo has become the SYMBOL of Science & Religion Warfare

32. “The Galileo case has been a sort of ‘**myth**’ in which the image fabricated out of the event was quite far removed from reality ... **This myth** has played a considerable **cultural role**. It has helped anchor a number of scientists of good faith in the idea that there was an **incompatibility** between [1] the spirit of **science** and its rules of research on one hand and [2] the **Christian faith** on the other.”

Ibid, 373

COMMENTS:

S6 H1

today this Galileo myth continues to fuel: Science & Religion Warfare
Science vs. Religion Dichotomy

The Problem Re-Stated

S7

Cardinal Paul Poupard

commissioner of 13 yr study that led to the Galileo apology

33. “Galileo’s judges, incapable of dissociating **faith** from an **age-old cosmology**, believed quite **wrongly** that the adoption of the Copernican revolution, was such as to undermine Catholic tradition.”

P. Poupard, “Report” Ibid, 374-5

COMMENTS:

S8

Problem of Conflation

17th century theologians conflated “faith” & “age-old cosmology”

The Solution

S9 H5

Message-Incident Principle → **Separate, Don’t Conflate!**

QUESTIONS:

S10-11 H5

Are Christians today:

“incapable of dissociating faith” from an “**age-old biology**”?

“incapable of dissociating faith” from an “**age-old biology of human origins**”?

VIII. CONCLUSION: ASTRONOMY & THE GALILEO AFFAIR	S2
1. Galileo did <u>NOT</u> view Science & Religion in a Warfare Relationship	S3
He believed:	S4
• Two Divine Books	
God reveals equally well:	
(1) “the effects of nature” Quote 10	
“book of the heavens” Q 15	
“grand book” Q 16	
(2) “the sacred words of Scripture” Q 10	
• Science was a “gift from God.” Q 14	
• Science was a “very appropriate aid to the correct interpretation of Scripture.” Q 12	
2. Galileo was a Christian (though far from perfect → but who is?)	S5
He believed:	S6
• The Trinitarian God of Christianity	
referred to as the “Godhead” Q 9	
• The Bible was inspired by God	
“the Scripture was inspired by the Holy Spirit” Q 17	
• Biblical Inerrancy	
“its [Scripture’s theological] declarations are absolutely and inviolably true” Q 17	
“conform absolutely to the literal meaning of Scripture” Q11	
• Natural Revelation & Intelligent Design	S7
“the glory & the greatness of the supreme God are marvellously seen in all His works” Q 15	
1 st stage of knowing God	
“God ought first to be known by nature” Q 10	
• Divine Action	
<i>Cosmological Providentialism in Operations</i>	
“nature [was] ... the most obedient executrix of God’s orders” Q 9	
<i>Personal Interventionism</i>	
Josh 10 stopping of sun miracle Q 29 & 30	
3. Galileo had Academic Hermeneutics	S8
Despite his minor hermeneutical gaffe, he rejected scientific concordism	
He accepted the hermeneutical principles of:	S9
• Accommodation Q 20	
• Authorial Intentionality: Divine & Human Q 18	
• Baconian Hermeneutic → Science is a KEY to understanding the Scriptures Q 12	
• Message-Incident Principle (Implicit) Q 19, 20, 25-30	S10
• Incidental Ancient Science in Scripture Q 19	

4. Lessons from the Galileo Affair for Today

S2

History reveals:

S3

- anti-heliocentrism (anti-Copernicism) rooted in: (1) tradition (Aristotle)
(2) scientific concordism
- scientific concordism → failed
- solution to Science-Religion conflicts → competent hermeneutics

Similarly, TODAY reveals:

S4

- anti-evolutionism rooted in: (1) tradition (87% evangelical Protestants → Young Earth Creation)
(2) scientific concordism
- scientific concordism → will fail
- solution to Sci-Rel conflicts → competent hermeneutics of Gen 1-11

IF Lamoureux were the Pope of evangelical Protestants

S5

- I would write a letter of apology to all evolutionary scientists

5. Time for a New Symbol for Science & Religion?

S6

Galileo as a symbol of a PEACEFUL relationship between Science & Religion?

S7

Time for a new aphorism?

S8

GALILEO TAUGHT THE 17TH CENTURY CHURCH:

“The intention of the Holy Spirit is to teach us how one goes to heaven,
and not how heaven goes.”

S9

GALILEO COULD TEACH THE 21ST CENTURY CHURCH:

“The intention of the Bible is to teach us **THAT** God is the Creator,
and not **HOW** the Father, Son, and Holy Spirit created.”

D. Lamoureux, *Evolutionary Creation* (2008), 35

GEOLOGY & THE BIBLICAL FLOOD

	S2
I. KEY THOUGHTS	S3
1. As Geology develops, it <u>shifts</u> the understanding of God’s action in the world	S4
<u>increase</u> in understanding natural mechanisms → <u>decrease</u> in God-of-the-Gaps	
<u>decrease</u> in Cosmological Interventionism → <u>increase</u> in Cosmological Providentialism	
☛ Science IMPACTS Religion’s understanding of divine action	
2. As Geology develops, it <u>shifts</u> the interpretation of the Biblical Flood Account (Gen 6-9)	S5
<u>increase</u> in understanding natural mechanisms → <u>decrease</u> in Scientific Concordism	
<u>decrease</u> in worldwide (global) flood interpretations → <u>increase</u> in local flood interpretations	
☛ Science IMPACTS Religion’s understanding of the Bible	
3. Logic of the Science-of-the-Day	S6
everyone thinks within their “Intellectual Tool Box”	
very rational considering their limited knowledge	
4. Pattern & Process in Science	S7
Pattern (observation) is discovered FIRST	
fossil pattern in the strata (layers) of the earth’s crust	
Process (mechanism) is discovered AFTERWARD	
17 th century geologists believed Noah’s worldwide flood produced the strata. EG Newton	
natural mechanisms were only understood in the 19 th century	
II. BIBLICAL TEXTS ON THE FLOOD	S8
Old Testament	S9
Biblical Flood Account (Gen 6:9-9:29)	
1. “ <u>600th year of Noah’s life</u> , 17 th day of 2 nd month ... 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 heavens were covered . The waters rose and covered the mountains to a depth of more than 15 cubits (20 ft). Every living thing that moved on the earth perished —birds, livestock, wild animals, all the creatures that swarm over the earth, and all mankind ... Only Noah was left, and those with him in the ark ... The water receded steadily from the earth ... the ark came to rest on the mountains of Ararat . The waters continued to recede ... until the tops of the mountains became visible ... <u>601st year of Noah’s life</u> by the 27 th day of the 2 nd month the earth was completely dry.”	S10
	Gen 7:11, 18-21, 23; 8:3-5, 13-14
<u>COMMENTS:</u>	S11
• worldwide flood & lasted 1 year	
all of life was destroyed	
flood was above the Ararat Mountains → like the Rockies (12-16,000 ft)	
• little reference to flood in the Old Testament outside Gen 6-9	S12
• 60% of Americans believe in a worldwide flood (2004 ABC TV Poll)	
87% Evangelical Protestants & 44% Roman Catholics	
Gen 6-9 “literally true, meaning it happened that way word-for-word”	

New Testament

S2

Flood is a historical & worldwide event

used as a warning (eg, 1 Pet 3:18-21; 2 Pet 2:5, 3:3-7). See **SQ 1-5**

2. Jesus: “As it was in **the days of Noah**, so it will be at the **coming of the Son of Man** S3

[ie, 2nd coming of Jesus]. 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.**”

Matt 24:36-39 (also Lk 17:26-27)

COMMENTS:

S4

Jesus spoke as if Noah, the ark & the flood were historical

QUESTIONS

was Jesus’ intention to affirm that the flood was historical?

OR

to reveal a Message of Faith about rampant sin before his 2nd Coming?

MORE QUESTIONS

S5

was Jesus using the **history-of-the-day** (worldwide flood) in a way similar to his use of the science-of-the-day (mustard seed)?

☛ was Jesus ACCOMMODATING?

CONCLUSION: Biblical Texts on the Flood

S6

1. The flood in Scripture is viewed as a real, historical & worldwide event

2. The flood account is self-authenticating

S7

no need to defend its reality

no appeal to non-biblical sources or scientific evidence

III. BRIEF HISTORY OF GEOLOGY & THE BIBLICAL FLOOD

S8

A. THE EARLY CHURCH & THE FLOOD (to 500 AD/CE)

S9

Preamble: The Rise of Apologetics

S10

Apologetics

DEF: the use rational arguments to defend the truthfulness of Christian Faith

due to the impact of critical thinking on Christianity

caused a shift in attitude toward non-biblical information (eg science)

3. Clement of Alexandria (150-215)

S11

Some Christians “do not wish to touch either philosophy or logic; nay more, they do not wish to learn science [Latin *scientia*: knowledge in general]. They demand bare faith alone ... [But] the **truly learned** [Christian] brings everything to bear on the truth; so that, from geometry, and music, and grammar, and philosophy itself, **culling what is useful, he guards the faith against assault** ... And he who brings everything to bear on a right life, procuring examples from the **Greeks** and **barbarians**, this man is an experienced searcher after the truth, and in reality a man of much counsel.”

Clement of Alexandria, *Stromata* in A. Roberts & J. Donaldson, eds *Ante-Nicene Fathers*, 10 vols. (Eerdmans, 1962), II:309. (1:9)

COMMENTS:

S2

- rejects **fideism** Latin *fides*: faith Notes 38
DEF: religious truth rests ONLY on faith, not reason.
aka the ‘Just Believe Argument’
- accepts the practice of apologetics
using non-biblical information “guards the faith against assault”
- no Christian “ghettoisation” of knowledge S3
no preaching-to-the-choir-Bible-school mentality
“procuring examples from the **Greeks and barbarians**”
- critical mindset is a characteristic of the “truly learned” Christian
Jesus’ 1st Commandment:
☛ love God with out mind (Matt 22:37)

Flood Scholarship (Apologetics)

S4

critical thinking leads to questions regarding:

(1) landing site of ark (2) size of ark (3) extent of the flood (4) redistribution of animals

1. Landing Site of the Ark

S5

much disagreement

BUT no one doubted there was a site

the flood was viewed as a real, historical, worldwide event

Epiphanius (315-403)

S6

4. “Do you seriously suppose that we are unable to **prove** our point, when even to this day the **remains of Noah’s Ark** are shown in the country of the Kurds (Gordians)?”

JW Montgomery, *The Quest for Noah’s Ark*
(Bethany Fellowship, 1972), 72-73

COMMENTS:

accepts historicity of flood

notice the word “prove”

John Chrysostom (345-407)

S7

5. “Have you heard of **the Flood**—of that **universal destruction**? That was not just a threat, was it? **Did it not really come to pass**—was not this mighty work carried out? Do not the mountains of Armenia **testify to it**, where the **Ark rest**? And are not the remains of the **Ark** preserved to this very day for **our admonition**?” Ibid.

COMMENTS:

accepts historicity of flood

“universal destruction” → worldwide flood

2. Size of the Ark

S8

skeptics doubted the ark was large enough

Apelles the Marcionite (2nd century)

6. “In no way was it possible to receive, in so brief a space, so many kinds of animals and their foods, which would be sufficient for a whole year.”

In Origen, *Homilies on Genesis & Exodus*, RE Heine, trans.
Fathers of the Church, v 71 (Catholic U Press, 1982), 76

COMMENTS:

S9

Size of Ark in Gen 6:15

300 long X 50 wide X 30 high **cubits** cubit = 18 inches150 X 25 X 15 **yards**

ark could fit inside a football stadium

Response to the Skeptics: S2

- used Egyptian Cubit (square of ordinary cubit)
therefore the Ark is 22,500 X 625 X 225 yards
- thinking within their “Intellectual Tool Box”

3. Extent of the Flood S3

nearly unanimous agreement that the flood was worldwide
scientific evidence → **MARINE FOSSILS** on the tops of mountains

Procopius of Gaza (465-538) S4

7. “It can be shown clearly in many other ways that a **universal flood** came upon the earth ... these things were explained by Moses [traditional author of the Book of Genesis]. For even today in **mountains** that are lofty and difficult to climb, **marine remains** are found; this is, shells and fragments of tortoise shells and other such things, which even **ourselves have seen.**” D Young, *The Biblical Flood* (Eerdmans, 1995), 26

COMMENTS:

“universal flood” → worldwide

QUESTION

what would you have thought seeing fish bones at the top of mountains?

4. Redistribution of the Animals after the Flood S5

problem emerged regarding distant islands → Azores & Canary Islands
how did animals get there after a worldwide flood?

St. Augustine (354-430) S6

regarded as the most important theologian in Christianity
Roman Catholics call him “THE theologian”
Protestant Reformers Luther & Calvin were steeped in St. Augustine’s theology

8. “A question arises how wild animals, propagated by **ordinary mating**, like S7
wolves and the rest, can be found on the islands far at sea, unless those which were destroyed by the Flood were replaced by others descended from the animals, male and female, which were saved in the ark. (There is no problem in regard to domestic animals or to those which, like **frogs, spring directly from the soil.**)

[1] One **hypothesis** is that they swam to some islands, but only to those that S8
were near. But there are some islands so far from the continental mainland that it seems impossible that any of the animals could have swum there.

[2] Of course, there is nothing incredible in the supposition that men captured S9
the animals and took them with them and bred them for the sake of hunting.

[3] Another possibility is that, by the command or permission of God and with S10
the help of **angels**, the animals could have been transferred to the islands.

[4] Another hypothesis would be that they sprang up from the earth, as they S11
sprang up **in the beginning** when God said: ‘Let **the earth** produce a living soul’ [Gen 1: 24].”

St. Augustine, *City of God* (426) 16.7
GG Walsh et al (Doubleday, 1958), 364

COMMENTS: S2

St. Augustine is thinking within his “intellectual tool box”

- very logical

“One hypothesis, . . . Another hypothesis”

- science (biology)-of-the-day S3
spontaneous generation: “frogs, spring directly from the soil”

- God or angels-of-the-gaps S4
to transport animals to distant islands → Interventionism

- scientific concordism S5

AUGUSTINE’S SEED PRINCIPLES THEORY S6

God initially created a world with seeds of different animals
termed: *rationes seminales*

these seeds then sprouted like plants into the various animals

☛ 1-seed theory of reproduction

Augustine appeals to the **6th Day of Creation:** S7

“God said, ‘Let the **LAND** produce living creatures
according to their kinds: livestock, creatures that move
along the ground, and wild animals.’” Gen 1:24

Hypothesis [4] S8

Augustine theorizes that some animal seeds landed on
distant islands after the flood, and they sprouted to become
the animals of those islands

☛ **scientific concordism & biology-of-the-day**

Excursus: St. Augustine, Adam, Original Sin, and Ancient Biology S9**Doctrine of Original Sin** S10

formulated by St. Augustine around 400 AD/CE

Two Foundational Beliefs:

- (1) first sin committed by Adam
a real man & the first man in history
- (2) sin transferred from Adam to ALL humans
ALL humans descend from Adam

Therefore: S11

historical Adam is entrenched in Roman Catholic & Protestant Christianity

BUT S12

St. Augustine accepted **Ancient Biology** → spontaneous generation
Seed Principles Theory

QUESTION

is Augustine’s **historical Adam** based on an **ancient biology of human origins?** S13

CONCLUSION: The Early Church & the Flood S14

1. the biblical flood was viewed as a REAL historical & worldwide event
2. flood scholarship (apologetics) emerged & used non-biblical information S15
eg marine fossils on the tops of mountains
3. God & angels-of-the-gaps was a mechanism to explain the physical world S16
eg transport animals to distant islands after flood
4. **scientific & historical concordism** characterized the hermeneutics of Gen 6-9 S17

- B. THE MIDDLE AGES & THE FLOOD** (500-1450) S2
- limited advances in scholarship & no new issues raised regarding the flood
debate continued regarding the landing site of Noah's ark S3 H25
- Muslims now part of the debate → Muhammad (570-632) S4
- THE KORAN & CREATION IN 6 DAYS
9. "Throned above the waters, God made the heavens and the **earth in six days**, to find out which of you shall best acquit himself." Hud 11:7
- COMMENT:
reflects ancient astronomy with God above the heavenly sea S5 H83
- THE KORAN & NOAH'S FLOOD (Hud 11:21-46) S6
- basically the biblical story with a twist:
Noah's son climbs a mountain to save himself, but he drowns
- NB: S7
- Re-Cycle & Re-Interpret** an account is common in the ancient world (more anon)
- C. THE EARLY MODERN PERIOD & THE FLOOD** (1450-1750) S8
- two factors impacted flood scholarship: 1. discovery of the new world
2. rise of modern science
1. New World Discoveries S9
- oceans were immensely large
Problems: **source & sink** of flood water
where did it come from & where did it go?
animal migration
how did they travel great distances across oceans to get to & from the ark?
 - countless **new species** S10
Problem: how did they all fit in the ark?
 - **Flood Accounts** around the world S11 H28
Not a Problem!
used in apologetics to prove the reality of a global flood
- Argument:
- global flood destroyed everyone except Noah & his family in the ark S12
 - entire world was repopulated from Noah's 3 sons S13
10. "The sons of Noah who came out of the ark were Shem, Ham & Japheth ...
from them came the people who were scattered over the earth." Gen 9:18-19
- **ORAL** account of the flood is passed down to everyone S14
easy to modify into different versions because it was in an oral form
BUT the main idea (motif) remained intact
☛ a worldwide flood & some people with animals saved in a boat
2. Rise of Modern Science S15
11. "Toward the end of the Middle Ages ... scholars gradually broke with the reigning assumption that the surest knowledge of the created world was derived **deductively** from first principles [eg, Aristotle's works] and turned instead to exploration, experiment, and observation for clues to its true nature [ie **induction**]. Powerful mathematical tools helped observers to explain and predict a broad range of physical motion and helped give rise to a vision of the cosmos as a **great machine designed and maintained by God** ...

In doing so, it was not their intent to challenge biblical authority or to diminish God's role in creation. They were simply trying to view the divine creative activity in a new way, premised on the assumption that within the context of the physical world **God typically acts in and through describable secondary mechanical causes** [natural processes].” S2
 Young, *Biblical Flood*, 43-44

COMMENTS:

shift in understanding God's activity in the world S3
 scientific mindset → looks for natural causes
increase in understanding natural mechanisms
decrease in God-of-the-Gaps (Cosmological Interventionism)

NOT an anti-God movement S4
 most scientists were Christians
 natural processes seen as “designed & maintained by God”
increase in Cosmological Providentialism
 natural processes as being ordained & sustained

BUT S5
 Science IMPACTS Religion
 • elimination of divine interventions in nature

QUESTION S6
 Why bother with God?

Impact of New World Discoveries & Rise of Modern Science on Flood Scholarship S7

Adjusted the Global Flood Theory S8

claimed land bridges once existed between the continents & oceans were much smaller
 Therefore, migration to & from the ark not a problem

claimed new world animals are transformed old world animals S9

Limited Form of Evolution

base on seeing “sports” → variant animals
 animals left the ark & changed
 natural causes → interbreeding, natural mutation & response to climate
 Therefore, there were not that many original species
 no problem to fit them inside the ark

Local Flood Theory S10

begins as a minority view in mid-1600s & rejects Global Flood
 flood is limited to a region in the Middle East → usually Mesopotamia

References in the Bible to: S11

“all” the earth being flooded = all the area in a small region being flooded
 “all” humanity & “all” animals being drowned = all humanity & animals in the region
 flooding of the highest “mountains” = highest “hills” in the region

Local Flood solves problems with a Global Flood: S12

NO problems with: the source & sink of the flood water
 migration to & from ark
 the size of ark & the great number of species

NO need to appeal to miracles S13
 • a distaste developing for ‘easy answer’ God-of-the-gaps interventions

Niels Steensen & Principle of Superposition (1638-1686) S2
 studied shark teeth S3-4 H26
 PATTERN observed: S5
 specific shark teeth appeared in specific layers of rock
 PROCESS proposed:
 teeth were laid down at different times on the sea floor
 the sea floor later rose to become dry land
 lifted by subterranean gases → movement of land with volcanoes & earthquakes

PRINCIPLE OF SUPERPOSITION S6
 foundational concept of geology
 • rock strata are historical documents
 • lowest layer is the oldest & highest is the youngest

BUT Steensen still believed in global flood & young earth
 his work hardly noticed

Global Flood Theories S7

12. “Captivated by the new understanding of the world developed by Galileo, Kepler, and later Newton, scholars expanded their understanding of the course of creation and **the flood** in terms of an intricate **machine-like earth**, attributing its motion, behaviour, and **history** to mechanical action among discrete particles. The results of their new learning turned up in numerous **global deluge [flood] theories** published during the late 17th and early 18th centuries. During this period, the **flood was at the center** of mainstream theoretical earth science in Europe.”

Young, Biblical Flood, 66

COMMENTS: S8

- scientific mindset applied to understanding the earth
 shift occurs from debates over size of ark, animal migration, etc to
 the **geological effects of a global flood**
- Global Flood = **Paradigm** of Geology = science-of-the-day
- Noah’s Flood Account (Gen 6-9) real event S9
 still accepted historical & scientific concordism
 ☛ but only a dim outline
- Historical Pattern S10
 scientific mindset starts with astronomy & now applied to geology
 QUESTION: will biology be next?

CONCLUSION: The Early Modern Period & the Flood S11

1. majority viewed the biblical flood as a REAL historical & global event
 only a few accepted a local flood
2. Science IMPACTS Religion S12
 Divine Action → decrease in God-of-the-Gaps divine interventions
 Biblical Interpretation → decrease in strict literalism

QUESTIONS S13

- is the scientific mindset like a virus?
 will it “infect” all of your thinking?
 ☛ does it extend to the resurrection of Jesus & his miracles?
 how do you control it? hermeneutics?

C. THE BEGINNING OF GEOLOGY (1750-1825) S2**Geomorphology & Stratigraphy** S3

started to map the earth & categorize different strata (layers in the crust of the earth)

1. primary: non-stratified rocks
2. secondary: stratified rocks
3. tertiary: sand, clay, gravel

PATTERN observed: S4

- strata did not reflect Specific Gravity
 - some heavier objects were above lighter ones
- GLOBAL FLOOD PREDICTION:
heavy objects should be at the bottom of strata

- consistent order of strata
 - 1000s of feet thick & 10s to 100s of miles wide

GLOBAL FLOOD PREDICTION:
a haphazard pattern should appear

PROCESS proposed:

James Hutton & Principle of Actualism (1726-1797) S5

- strata were deposited in seabeds by erosion S6 H25
 - straight lines of strata indicate they were laid down in water
- heat & pressure from below SLOWLY raise the strata to become dry land
 - mechanism based on the experience of earthquakes & volcanoes:
 - the raising & lowering of land
 - ☛ explanation for marine fossils on mountains

Therefore: a great amount of time was needed

PRINCIPLE OF ACTUALISM S7

foundational concept of geology
the earth's *past* is explained through the processes observed on earth *today*

Retrojection:

taking *present* evidence & casting it back in time to reconstruct the *past*
CSI type of thinking

The End of Global Flood Theories S8

geomorphology & stratigraphy proved that it was impossible for a 1 yr global flood to lay down all the layers in the crust of the earth

13. “By the beginning of the 19th century, the interpretation of geological strata had changed radically. Virtually **no established geologist** thought that the thick sequences of stratified sedimentary rocks so evident in quarries, cliffs, and mountains had anything to do with **the flood**.” Young, 98

COMMENTS:

BUT not the end of the Flood
unexplainable surface features:

1. wide U-shaped valleys with only small rivers S9
2. “erratic” boulders (even perched up) S10
3. gravel beds without rivers anywhere near them S11

Catastrophism

S2

DEF: multiple catastrophic water events that caused surface features
 Noah's Flood was often seen as the last catastrophic event
 mainstream geology in Europe & North America in late 18th & early 19th centuries

COMMENTS:

an argument from ignorance
 IF one can't explain something,
 THEN one appeals to miracles

The End of Catastrophism

S3

classic example of the problem with God-of-the-Gaps
 scientific (geological) knowledge **closes** the gaps
 • the "gap" was a **knowledge gap**

Natural Explanations for Catastrophic Flood Effects (above)

Theory of Glaciation

1. wide U-shaped valleys with small rivers → carved by glaciers S4

evidence: sides of mountains with scraped & polished surfaces S5

2. "erratic" boulders → broke away from mountains & carried by glaciers S6

Earth extremely old & changes radically over time S7

3. gravel beds without rivers
 rivers had disappeared long ago

Catastrophism ends by around 1825 S8

Adam Sedgwick (1785-1873)

Cambridge University geologist → HUGE impact on Darwin

Ordained Anglican minister

President of the Geological Society

Recantation of Catastrophism on retiring from the presidency in 1831: S9

14. "There is, I think, one great negative conclusion now **incontestably established**; that the vast masses of diluvial [flood] gravel, scattered almost over the surface of the earth, do not belong to **one violent** [catastrophic] & **transitory period**.

It was indeed a most unwarranted conclusion, when we assumed the **contemporaneity of all the superficial gravel on the earth**.

We saw the clearest traces of diluvial actions, and we had, in our sacred S10
 histories, the record of a general deluge [Noah's Flood]. On this **double testimony** it was, that we gave a **unity** to a vast succession of phaenomena, **not one of which we perfectly comprehended**, and under the name 'diluvium,' classed them all together...

Our errors were, however, **natural**, and of the same kind which led many S11
 excellent observers of a former century [1700s] to refer all the secondary formations [ie stratified rocks] of geology to the Noachian deluge. Having **been myself a believer**, and, to the best of my power, a propagator of what I now regard as a philosophic [ie, natural philosophy or scientific] heresy, and having more than once been quoted for opinions **I do not now maintain**, I think it right, as one of my last acts before I quit this Chair, thus publicly to read my **recantation**.

A Sedgwick, "Presidential Address," *Proceedings of the Geological Society of London* 20 (18 February 1831), 31

COMMENTS:

S2

Scientific & Historical Concordism were part of scholarship

Two Divine Books → “double testimony”

Nature:

“clearest traces of diluvial actions”

Scripture:

“we had, in our sacred histories, the record of a general deluge”

BUT

CONCORDIST approach to the Two Divine Books

QUESTION

S3

is there a **NON-CONCORDIST** approach to the Two Books?

• a hermeneutic for the Biblical Flood Account (Gen 6-9)

that does not look for scientific & historical facts?

CONCLUSION: The Beginning of Geology

S4

1. Science IMPACTS Religion

around 1700:

geologists believed that the global flood explained all stratified rocks

by 1825:

global flood had NO place in geology

QUESTION

S5

is this an example of science destroying of religion?

OR

is this a call to re-evaluate the hermeneutics of Biblical Flood Account (Gen 6-9)?

2. Age of earth is very old (millions of years)

S6

great amount of time needed for stratification

3. Geology is starting to separate away from theology

S7

scientific & historical concordism with Biblical Flood Account is starting to break down

D. 19TH CENTURY MODERN GEOLOGY (1825-1900)

S8

Charles Lyell & the Principle of Uniformitarianism (1797-1875)

S9

considered the father of modern geology

Principles of Geology 3 vols (1830-1833)

Darwin boarded HMS Beagle in 1831 with Volume 1

HUGE IMPACT on Darwin

Recycles Hutton’s Principle of Actualism (with a subtle qualification)

S10

PRINCIPLE OF UNIFORMITARIANISM

explaining the earth’s past through the processes observed on earth today using the

same forces & **same** intensities

NOTE: Lyell was a deist & an ANTI-EVOLUTIONIST!!!

S11

Darwin was scared to tell him about the theory of evolution

Geological Mapping & Column

S12 H26

quite refined by 1850

basic outline we have today

NB → before *Origin of Species* (1859)

geological map put together by ANTI-EVOLUTIONISTS!!!

Features of Geological Column

S2

- sequential order of the strata across Europe
some layers might be missing → BUT the layers are never out of sequence

GLOBAL FLOOD PREDICTION:

strata should be very asymmetrical & haphazard

- distinctive fossils appear in each strata termed “Index Fossils”
eg dinosaurs are never found in rock layers with humans

S3

GLOBAL FLOOD PREDICTION:

mixing of fossils

eg, dinosaurs & humans should be found in SAME strata

- fossils appear in a progressive pattern from simple organisms in lower strata → to more complex organisms in higher strata
BUT

S4

no gradual change in organisms was noticed (at that time)

Therefore:

most scientists believed in divine interventions for creation of life

Progressive Creation → Science-of-the-Day

☛ most scientists were ANTI-EVOLUTIONISTS

Professionalization of Geology

S5

specialized journals, societies, university departments, etc.

produces a **Fragmentation of Knowledge**

splits academic geological scientists & common amateurs

Theological Responses to 19th Century Geology

S6

two basic responses:

- (1) anti-geologists: untrained amateurs
- (2) harmonisers: professional geologists

1. ANTI-GEOLOGISTS

S7

1st part of 1800s

defend a global flood & a young earth

most were NOT scientists

BUT self-appointed “scientists”

ARGUMENTS:

S8

- *Ad Hominem* Arguments (Latin: against the human)
spiritual: professional geologists practised “infidel science”
intellectual: professional geologists were incompetent

- Science Ignores the Possibility of a Global Flood Argument

S9

BUT they do not appreciate history of geology

150 years earlier the global flood was the geology-of-the-day

☛ IT FAILED

- Appearance of Age Argument

S10

God created world to look old

BUT an admission of age!!!

COMMENTS:

all these arguments are used by Young Earth Creationists today

2. HARMONIZERS

S2

last 2/3s of 1800s
 many of the best geologists of the day
 last chapters of their geology books often have a theological chapter
 accepted scientific concordism & tried to align (harmonize) Geology & Gen 1

Gap Theory

S3

minority position
 millions of years of geological time put in “gap” between Gen 1:1 & 1:3

Gen 1:1 INITIAL CREATION

S4

“In the beginning God created the heavens and the earth”

Gen 1:2 DETERIORATION OF THE EARTH

“The earth BECAME formless and empty ...”

Hebrew language allows for translation “became”

a gap or period of millions of years long

Gen 1:3 SECOND CREATION

“God said, ‘Let there be light.’

re-creation of the world in 6 literal days

Global Flood → only caused surface effects

Day-Age Theory aka Progressive Creation

S5

majority position
 days of Gen 1 = geological periods millions of years long

both Gen 1 & the fossil record have:

living organisms appear from simple to more complex

God created plants & animals progressively & intervened at different points over million of years

WHY?

fossil record sparse & transitory fossils not yet discovered

Local Flood → Mesopotamian Plain

between Tigris & Euphrates Rivers

EG James Dana (1813-1895)

S6-7 H26

by the end of the 1800s harmonisation dies out

geology books no longer have a religious final chapter

CONCLUSION: 19th Century Modern Geology

S8

1. Science IMPACTS Religion

Divine Action

No God-of-gaps in Geology

WHY?

natural processes can explain all the features in the earth’s crust

Biblical Interpretation

S9

No Gap Theory before 1800s

WHY?

the exceedingly old age of the earth was only established in 1800s

No Day Age Theory before 1800s

WHY?

the geological column was only established in the 1800s

2. By the 20th century, Geology is completely free from Religion & the Biblical Flood

S10

IV. CONCLUSION: BRIEF HISTORY OF GEOLOGY & THE BIBLICAL FLOOD	S2
See Summary Chart in handouts page 27	S3-4 H27
1. Science IMPACTS Religion	S5
• Geology <u>shifted</u> the understanding of God’s action in the world	
Interventionism → Providentialism → None (Graph A)	S6 H27
God-of-the-Gaps FAILS	
☛ discovery of natural processes explains the formation of the earth	
• Geology <u>shifted</u> the interpretation of the Biblical Flood Account (Gen 6-9)	S7
Global Flood → Local Flood → NO Flood (Graph B)	S8 H27
Scientific & Historical Concordism FAIL	
☛ Biblical Flood does not align with geological data	
2. Christian geologists tried their best to align geology & the Biblical Flood Account	S9
Geology was not an anti-God movement → a majority of geologists were Christians	
BUT they discovered that Scientific & Historical Concordism FAIL	
3. THE QUESTION: Did Geology DAMAGE Religion? Answer: Yes & No	S10
YES	S11
if one accepts <u>common</u> CONCORDIST hermeneutics	
assumes the Biblical Flood Account features Scientific & Historical Concordism	
EG 60% Americans believe in Global Flood	
NO	S12
if one accepts <u>academic</u> NON-CONCORDIST hermeneutics	
science improves biblical interpretation	
EG Sir Francis Bacon	S13 H78
“the latter [science] is a key unto the former [Scripture]” Principle #11	
Galileo	S14
“physical conclusions [are] appropriate aids to the correct interpretation of Scripture” Q11 N107	
• science assists to identify incidental ancient features in the Bible	S15
EG modern astronomy reveals: there is no 3-tier universe	S16 H6
astronomy in Scripture is ancient	
scientific concordism NOT possible	
Modern Geology reveals: there never was a global flood	S17
scientific & historical concordism NOT possible	
geology improves interpretation of the biblical flood account (Graph C)	S18 H27
☛ biblical flood account must have incidental ancient features	
in the next subsection we will identify some of these features	
• science focusses our attention to the Messages of Faith	S19
NO	S20
geology improves the Intelligent Design Argument (Graph D)	S21 H27
The Rare Earth Theory by Peter Ward & Donald Brownlee	S22
“just right” geological features for life to exist on earth → some listed in SQ 6	

V. WHAT ABOUT NOAH'S FLOOD?

S2

1. Global Flood Theory

S3

Position of Young Earth Creation

Date of Flood: **2344 BC/E**

determined by adding up biblical genealogies

date of creation: 4000 BC/E

period from creation to flood: 1656 yrs (Gen 5 genealogy)

EG John Whitcomb & Henry Morris, *The Genesis Flood* (1961)

S4

☛ this book launched the modern Young Earth Creationist movement

ARGUMENTS FOR A GLOBAL FLOOD

S5

- natural, common sense & traditional (1500 yrs) interpretation of biblical flood account
 - intention of the human authors
 - 300+ flood accounts throughout the world
- evidence for a worldwide flood & it was remembered by those in the ark and then passed on through their descendants who repopulated the entire world

S6 H28

ARGUMENTS AGAINST A GLOBAL FLOOD

S7

- History of Geology & Biblical Flood
 - global flood was the central paradigm of geology around 1700
 - BUT as geological evidence increased it did not support a global flood
 - ☛ a majority of geologists were Christians
 - NOT a conspiracy against religion

- Size of the Ark

S8

not enough room in ark for pairs of all species & their food for 1 year

dimensions of ark:

S9

length: a little longer than a football field

width: inside the numbers on the field

height: 15 ft above the goal posts

EG Brachiosaurs

S10

90 ft long, 20 ft tall at the shoulder, 50 tons

250 lbs of plant matter for food each day

30 species → room for 60 (males & females) on the ark?

food for 1 year?

- Archeological & Historical Records

S11

nations living throughout the world prior to the 2344 BC/E flood date

NO evidence they were completely wiped out

NO evidence of a Global Flood Layer between ancient nations & recent nations

- Geological Record

S12-16 H52

NO evidence of a Global Flood Layer

Fossil Pattern Prediction of a global flood does not align with the fossil record

a worldwide flood should cause the mixing of all creatures

EG humans & dinosaurs bones should be found together in the geological record

2. Local Flood Theory

S2

Position of Progressive Creation

flood was limited to the Mesopotamian Flood Plain between the Tigris & Euphrates Rivers

“all” the earth being flooded = all the earth in a local region

flood water above the “highest” mountains = highest **hills** in local region

Hebrew word *har* can mean either a mountain or a **hill**

EG Hugh Ross, *Navigating Genesis: A Scientist's Journey through Genesis 1-11* (2014) S3

ARGUMENTS FOR A LOCAL FLOOD

S4

• Harmonizes Scripture & Science

concordist hermeneutics is intuitively satisfying for many Christians

☛ concordism is natural & reflects our epistemological category of correspondence

• Geological Evidence for Local Floods in the Southern Mesopotamian Flood Plain S5

one of the flattest places on earth S6 H28

40,000 sq miles & less than 150 ft of vertical elevation

numerous layers of flood sediment between Tigris & Euphrates Rivers S7 H28

many of these layers are between archaeological sites of habitation indicating that local floods have completely destroyed villages/towns:

Ur (12 feet thick)

Uruk (5)

Shuruppak (2)

Kish (1)

Lagash (1)

radiometric dating of sediments not far from literal biblical dates: 3500-2500 BC/E

☛ one massive flood sediment dated to 2800 BC/E

ARGUMENTS AGAINST A LOCAL FLOOD

S8

• Why Build an Ark?

15. “Rain fell on earth for **forty days and forty nights** ... For **forty days** the flood kept coming on the earth.”

Gen 7:12, 17

COMMENT:

IF a local flood takes 40 days to cover hills in the Mesopotamia,

THEN, why bother with building an ark?

☛ GO TO HIGHER GROUND!!!

• Identification of Mountains Covered in the Biblical Flood account S9

16. “For forty days the flood kept coming on the earth they lifted the ark high above the earth ... They rose greatly on the earth, and **all the high mountains under the entire heavens were cover**. The waters rose and covered the mountains to a depth of more than twenty feet ... The ark came to rest on **the mountains of Ararat**. The waters continued to recede until ... **tops of the mountains** became visible.” Gen 7:17, 19; 8:3-5

COMMENT:

S10

Ararat Mountains are like the Rockies (12-16,000 feet)

Therefore: NOT hills in the Mesopotamian flood plain

biblical flood is NOT local → but worldwide

3. Re-Cycled & Re-Interpreted Flood Motif Theory

Position held by a majority of Old Testament scholars

QUESTIONS

- where do civilizations first appear?

ANSWER: on the banks of rivers

EG Mesopotamia (Tigris & Euphrates) Egypt (Nile)

- what do these rivers do?

ANSWER: often flood their banks

deposit sediment rich with nutrients for agriculture

- how would a flood that destroyed a community be perceived by ancient people?

ANSWER: judgment of God/s

EG: how are destructive storms, thunder, and lightning perceived by ancient people?

ANSWER: divine interventions from an upset God/s just overhead

MORE QUESTIONS

- what would happen if ancient people experienced a flood that destroyed their community?

ANSWER 1: survivors would tell flood stories & **interpret** the event

EG survivor stories of 2004 Tsunami

many theological **interpretations** → God saved their life

ANSWER 2: stories would become part of the Oral Tradition of the community

☛ **history-of-the-day**

- how would a worldwide flood be **interpreted** by the **Hebrews**?

ANSWER 1: a releasing of water from the heavenly sea of the “waters above”

17. On the first day of Noah’s flood:

“the floodgates [literally: windows] of the heavens were opened.” Gen 7:11

ie, gates/windows in the firmament

ANSWER 2: return to pre-creative state in Gen 1:2 & reversing of 2nd Day of Creation

when God separated waters above & waters below

☛ **DE-CREATION EVENT**

CONCLUSION:

flood accounts have **REAL HISTORICAL** events behind them of:

(1) an actual destructive flood

(2) actual people who survived & told their story & **INTERPRETATION** of the event

A. ARCHEOLOGICAL & HISTORICAL EVIDENCE

Flood Accounts across the World

300+ accounts in regions susceptible to flooding

EG rivers, tsunamis, flash floods near mountain ranges

Therefore, flood accounts are:

NOT accounts of Noah’s flood passed down through Noah’s three sons

BUT originate from the common experience of flood events throughout the world

Flood Accounts in Ancient Mesopotamia

1. Sumerian Flood (2000-1700 BC/E)*

2. Flood Tablet (1900-1700 BC/E)

3. Epic of Atrahasis (1700 BC/E)*

4. Epic of Gilgamesh (1600 BC/E)*

*the flood hero comes from Shuruppak

SIMILARITIES between Mesopotamian Flood Accounts & Biblical Flood Account: S2
 reason for destroying the world with a flood S3 H29
 warning to build a boat & its construction by the flood hero
 flood destroys all life on earth
 preservation of the hero, his family & animals in the boat
 hero sacrifices to God/s, who smell/s the offering
 use of stylistic numbers 7 & 60

SIMILARITIES more striking between **Epic of Gilgamesh** & Biblical Flood Account: S4 H29
 boat lands on a mountain after the flood
 dove & raven used to determine if the earth is dry
 7 day periods for the bird reconnaissance S5 H30-32

THE QUESTION S6

too many similarities to be coincidental, who borrowed from who?

(1) Mesopotamians borrowed from Hebrews

OR

(2) Hebrews borrowed from Mesopotamians

(1) MESOPOTAMIANS BORROWED FROM HEBREWS S7

position of Christian tradition & Young Earth Creation

ASSUMPTIONS:

#1 global flood required so oral account of flood can descend thru Noah's sons

BUT → NO scientific evidence for a global flood

#2 major civilization (Mesopotamia) would inherit an account from a small S8

insignificant tribe (Hebrews) & then make it a major part of their history

BUT → seems doubtful

EG when Europeans came to North America did they incorporate

the oral traditions of indigenous people in their view of history?

(2) HEBREWS BORROWED FROM MESOPOTAMIANS S9

position of many Old Testament scholars

ARCHEOLOGICAL & HISTORICAL EVIDENCE:

• Mesopotamians **pre-date** the Hebrews by over 2000 years!

1st city (Uruk) population 10,000+ → 3500 BC/E

1st archeological evidence of Hebrews → 1200 BC/E (Merneptah Stele)

• Mesopotamian flood accounts **pre-date** (2000-1600 BC/E) the Biblical S10

Flood Account (composed between 1000 to 500 BC/E; see below)

ASSUMPTIONS: S11

#1 Hebrews borrowed the **Flood Motif** from Mesopotamians

#2 under the **inspiration of the Holy Spirit** they replaced the pagan theology with their Spiritual Truths

#3 Flood Motif is an **incidental vessel** that transports **Messages of Faith**

NB NB NB S12

re-cycling & re-interpreting accounts was common in ancient Near East (ANE)

EG Babylonian creation account *Enuma Elish*

Assyrians replaced Babylonian god Marduk with their god Assur

- B. ORIGIN OF THE BIBLICAL FLOOD ACCOUNT (GEN 6-9)** S2
- (1) Real Destructive Floods & Real Flood Survivors** S3
 floods actually happened in Mesopotamia between Tigris & Euphrates Rivers
 Evidence: numerous flood deposits
 some people survive to tell their story
 these stories become part of the Oral Traditions (oral history) of the community
- (2) Ancient Historiography** Greek *historia* “history” *graphō* “to write” S4
 DEF: the writing of history by ancient people
 ancient understanding of history → history-of-the-day (like the science-of-the-day)
 ☛ history is viewed from an ancient phenomenological perspective
 In writing the history of their community, the Mesopotamians included flood stories drawn from their Oral Traditions
 major destructive floods would have been an important part of their history
 NOTE: ALL histories, both ancient & modern, include metaphysical interpretations S5
 the historical reality of a great flood/s in Mesopotamia was **interpreted** through their pagan theology
- (3) Hebrews Appear LATE in ANE & Inherit the Flood Motif** S6
 most likely in an ORAL form
 worldwide flood is part of the **history-of-the-day** in ANE
- (4) Hebrews RE-CYCLE & RE-INTERPRET the Flood Motif** S7
 under the inspiration of the Holy Spirit the Hebrews remove: S8 H29
- the multiple gods of the Mesopotamians
 - ☛ replace them with the one holy God of the Hebrews
 - the reason of Mesopotamian flood → gods couldn’t sleep because humans too noisy!
 - ☛ replace with the reason for biblical flood → widespread human sin
- IF first in an ORAL form,
 THEN it would have been easy to change & reinterpret
 EG Darwin’s *Origin of Species* (1859) S9
 most Christians have never read it
 BUT there is an oral tradition in churches that it is an atheistic book
- Main Motif:**
 remains intact → biological evolution
- Metaphysics (Theology):**
 changes from deism → atheism
- (5) Hebrews Become Literate & Write TWO Flood Accounts** S10
 archeological evidence for Hebrew literacy roughly about 1200 BC/E
 1st account around 1000 BC/E
 termed: **Jahwist (J) Flood Account**
 2nd account around 500 BC/E
 termed: **Priestly (P) Flood Account**
- (6) Redactor (Editor) Puts J & P Flood Accounts Together to Form Genesis 6-9** S11
 roughly around 500 BC/E

C. EVIDENCE FOR TWO SOURCES IN BIBLICAL FLOOD ACCOUNT (GEN 6-9)

S2

EG conflicts in creation events between Gen 1 & 2

S3 Notes 50

SOLUTION: Gen 1: Priestly (P) Creation Account

Gen 2: Jahwist (J) Creation Account

BUT biblical flood account it is more complicated than juxtaposing two accounts S4-5 H33

Redactor intertwined P & J verses → P verse, then J verse, then P verse, then J verse, etc

• **Event Conflicts**

S6 H34

two different divine orders to load the animals

EG take: “two of every kind of bird”

“seven of every kind of bird”

two different accounts of entering the ark & the beginning of flood

EG enter ark & the flood starts: 7 days later

the same day

• **Chronology Conflicts**

S7 H34

dates of Noah’s age & period of days for events do not align

EG from the start of the flood to the landing on Ararat Mountains

using Noah’s age: 150 days

using days mentioned for events: 340 days

• **Coherence of the J & P Flood Accounts**

S8 H35 (J) H37-38 (P)

REASSEMBLED J & P accounts stand on their own & make perfect sense

NB: a chiasm appears in the P flood account

S9 H37-38 (P) & H47

• **Distinct Linguistic Features in the J Flood Account**

S10 H36

J author → Divine name “Lord” (*Yahweh*)

phrase “never again will I repeat to . . .” (2X)

stylistic numbers 7 & 40

• **Distinct Linguistic Features in the P Flood Account**

S11 H39

P author → Divine name “God” (*’Elōhîm*)

“covenant” (9X)

stylistic number 5

• **Similar Linguistic Features in the J Flood & J Creation (Gen 2) Accounts**

S12 H36 (J)

an indication both were written by the same author

notable terms that are similar: Divine name “Lord” (*Yahweh*)“man/husband” (*’ish*) & “woman/wife” (*’issah*)• **Similar Linguistic Features in the P Flood & P Creation (Gen 1) Accounts**

S13 H39 (P)

an indication both were written by the same author

notable terms that are similar: Divine name “God” (*’Elōhîm*)“male” (*zākār*) & “female” (*neqēbah*)

“according to its/their kind/s”

“Image of God”

SUGGESTION S14

ADVANTAGES OF RECOGNIZING SOURCES IN BIBLICAL FLOOD ACCOUNT

S15

like the conflicts in Gen 1 & 2 → conflicts in the events of Gen 6-9 are INCIDENTAL

conflicts direct our attention away from the events to the Spiritual Truths

☛ J & P Flood Accounts have the same MESSAGES OF FAITH:

(1) God judges humans for sin & (2) God saves the righteous person

VI. THE **BIG** QUESTION: WHO WAS NOAH?

S2

ANSWER: *Noah is the creation of re-cycling & theological re-interpreting* S3

- there were **real** Mesopotamian floods & **real** Mesopotamian flood survivors
- the Mesopotamians interpret these events in light of their pagan theology
- they write their flood accounts & focus on one central flood hero
- Hebrews RE-CYCLE & RE-INTERPRET the Mesopotamian flood accounts
 - the Mesopotamian flood hero is **MORPHED** into the flood hero of the biblical flood account → Noah

NB: Noah is NOT a literary invention or fictional character in an allegory or fictional story S4
 P author, J author & Redactor believed → Noah was a real person

Think like the ancient Hebrews S5

They would have argued:

YES, there really was a worldwide flood, everyone knows that!

BUT NO

it was not launched because noisy humans stopped the gods from sleeping

INSTEAD

it was launched by the God of the Hebrews because humans were sinful

YES, there really was a man, his family & animals saved in an ark S6

BUT NO

it was not the pagan flood heroes Ziusudra, or Atrahasis, or Utnaphishtim

INSTEAD

it was the only righteous man → Noah who was saved by the Hebrew God

Modern Example of Re-Cycling & Re-Interpreting: Evolutionary Creation S7

Evolutionary creationists argue:

YES, living organisms originated through biological evolution, every biologist knows that!

BUT NO

it is not a dysteleological process

INSTEAD

it is a process that was ordained & sustained by God

The Message-Incident Principle: New Application S8

MESSAGE OF FAITH S9 H40

(1) God judges humans for sin

(2) God saves the righteous person

Noah → **Typological** (an example) of a righteous person who obeyed God S10

GREAT FLOOD MOTIF S11 H40

ancient historiography & based on an ancient phenomenological perspective

the history-of-the-day in the ANE

an ancient understanding of history

used as an **incidental** vessel to deliver **Spiritual Truths**

the Holy Spirit **accommodated** & allowed the Mesopotamian flood accounts & their

flood hero to be re-cycled & re-interpreted into the biblical flood account & Noah

THE BOTTOM LINE: *The biblical man Noah never existed!* S12-13

EVOLUTION & DARWIN’S RELIGIOUS BELIEFS S2

I. KEY THOUGHTS S3

1. Darwin offers a great theological story! S4

he **struggled** with God throughout his life

Hebrew word Isra/el: S5

שָׂרָה (sārāh) to struggle, persist

אֱלֹהִים ('ēl) God

1. “Your name will no longer be Jacob, but **Israel**, because you have **struggled with God** and with men and have overcome.” Gen 32:28

COMMENT:

struggle is a good & essential part of the spiritual voyage

Personal: is struggling with God part of your story?

2. Darwin’s story reveals that intellectual baggage from a university education can be a problem S6

UNCRITICALLY, he accepted William Paley’s view of Intelligent Design at Cambridge U

Paley’s interpretation of ID = living organisms are fitted perfectly in nature

Subtle Implication: ID is static (not dynamic/evolutionary) → IMPACTS Darwin for 40 yrs

Personal: what baggage are YOU uncritically accepting in YOUR university education?

acceptance that nature is dysteleological?

rejection of Intelligent Design?

3. A major part of Darwin’s story was his struggling with Intelligent Design S7

nature struck Darwin with “overwhelming force” throughout his life (see Quote 36)

☛ Argument from Nature to Design

I will term this experience the “**Psalm 19 Factor**”

Personal: do “the heavens (& biology) declare the glory of God?” Ps 19:1

OR

is Intelligent Design nothing but an illusion?

4. Richard Dawkins Thesis & Lamoureux Anti-Thesis S8

Dawkins claims: S9

2. “Darwin made it possible to be an intellectually fulfilled **atheist**.”

The Blind Watchmaker, 6.

Lamoureux’s claims: S10

3. “Darwin made it possible to be an intellectually fulfilled **THEIST**.”

“Darwinian Theological Insights” *Perspectives on Science & Christian Faith* (Jun 2012) 108-19 (Sep 2012) 166-78

COMMENTS:

NO attempt to “Christianize” Darwin

INSTEAD:

an attempt to draw **Theological Insights** from Darwin

WHY?

Darwin thought seriously about religion & evolution

Personal: who do YOU believe is correct, Dawkins or Lamoureux?

II. BRIEF HISTORY OF CHARLES DARWIN (1809-1882)	S2
1809	S3
born 12 February at Shrewsbury, England	
<u>Family Life</u>	
raised with a <u>wide</u> variety of beliefs:	
• grandfather Erasmus was a famous deistic evolutionist	
• father Robert & brother Erasmus were religious skeptics	
• mother Susanna (dies when Charles was 8 yrs old) was a Unitarian	
Unitarians do not believe Jesus was God, but only a man	
• sisters were religious & brought Charles to an Anglican church (conservative Christianity)	
• educated in an Anglican day school	
1826	S4
studies medicine at Edinburgh University, but drops out	
1828-1831	S5
studies theology at Christ College in Cambridge University, but decides not to be ordained	
1831	S6
Dec 27 begins 5 year voyage around the world on HMS <i>Beagle</i>	
1836	
returns to England Oct 2	
1837-1838	S7
1st Period of Religious Reflection	
☛ rejects Christianity, but not God	
<i>Notebooks on Transmutation [Evolution] of Species</i>	
outlines his theory of evolution	
1838	
health begins to break down	
can only work 4-5 hrs/day rest of his life	
1839	S8
marries his cousin Emma Wedgewood & they have 10 children → 3 die	
1859	S9
<i>Origin of Species</i>	
Theory of Evolution by Natural Selection	
1860-1861	S10
2nd Period of Religious Reflection	
struggles intensely with intelligent design	
1871	S11
<i>Descent of Man</i>	
public presentation of human evolution	
1876	S12
<i>Autobiography of Darwin</i>	
mature views on religion in section entitled “Religious Beliefs”	
1882	S13
dies 19 April at Down, England & buried in Westminster Abbey	

III. CAMBRIDGE UNIVERSITY (1828-1831)

S2

Charles drops out of medicine & father sends him to theology school
he doesn't want a family disgrace

4. "I did not then in the least doubt the **strict literal truth of every word in the Bible.**" S3

Darwin, *Autobiography of Charles Darwin*
N Barlow, ed (London: Collins, 1958), 57

COMMENT:

Darwin was a biblical literalist

BUT

Did Darwin fully grasp his beliefs & their implications?

OR

Did he simply absorb them uncritically from the religious culture?

William Paley (1743-1805)

S4

- his famed book was required reading:

Natural Theology: Or Evidences for the Existence and Attributes of the Deity, Collected from the Appearances of Nature (1802)

Natural Theology = Natural Revelation = Intelligent Design

a classic example of the Argument from Nature to Design

- stimulates Darwin to start defining his worldview
claims Paley was the best part of his Cambridge U education
☛ Darwin powerfully impacted by ID

- late in life (1876) Darwin confesses:

S5

5. "I did **not** at that time trouble myself about Paley's **premises**; and **taking these on trust**

I was charmed and convinced by the long line of argumentation."

ACD, 59

PALEY'S PREMISES (CATEGORIES) OF NATURE

S6

(1) **Intelligent Design**

nature reflects the purposeful design of the Creator

(2) **Perfect Adaptation**

everything in nature fits together PERFECTLY

again late in life (1871) Darwin confesses:

S7

6. "I was **not** able to annul the influence of my former belief, then **almost**

universal, that **★ each ★ species** had been **purposely created**; and

this led to my **tacit** [silent] **assumption** that **★ every ★ detail** of

structure, excepting rudiments, was of some **special**, though

unrecognized, **service.**"

Darwin, *Descent of Man* (NY:
Appleton, 1886 [1871]), 61

COMMENTS:

S8

- Paley's world is **STATIC**

by definition this is an anti-evolutionary world because
every part in nature fits together perfectly & tightly

- deeply embedded in Darwin's mind

"not able to annul the influence ... my tacit assumption"

- Darwin often uses terms "each" & "every"

indicative of Paley's Perfect Adaptation

(3) **Beneficence**

S9

nature is good throughout

NB Paley's 3 Premises are CONFLATED S2

Darwin will NOT be able to SEPARATE:

(1) Intelligent Design

FROM:

(2) Perfect Adaptation

(3) Beneficence

Categorical Conflict Inevitable in the Mind of Darwin: S3

Paley's View of Nature

static & perfect & happy (anti-evolutionary)

Darwin's Future Theory

dynamic & wasteful & vicious (evolutionary)

THE PROBLEM: S4

Darwin uncritically accepted Paley's CONFLATED Premises

they operate tacitly in his mind for 40 years → CONFLICT

QUESTION:

to use Darwin's words:

What "premises" are YOU not "troubling YOURSELF about" and "taking on trust" in YOUR university education?

☛ this includes my course!

Geology S5

a passion begins

during the last year at Cambridge U

Darwin goes on a geological field trip with Adam Sedgwick

he has an "epiphany"

gripped by how science works:

7. "Nothing before had ever made me thoroughly realize, though I had read S6
various scientific books, that science consists in **grouping facts** so that
general laws or conclusions may be drawn from them." *ACD*, 70

COMMENTS:

- Inductive Method

"grouping facts" → "general laws"

- there is an experiential aspect to science beyond books
scientific discovery is PERSONAL

CONCLUSION: Cambridge University S7

1. Darwin begins to take ownership of his worldview

2. Darwin is steeped in Paley's Natural Theology S8

developing more of a philosophical faith than a religious faith

will lead eventually to deism

3. Darwin is falling in love with science! S9

IV. HMS BEAGLE VOYAGE (27 Dec 1831 to 2 Oct 1836)

S2

5 year voyage around the world

S3 & H40

Geology

S4

Darwin leaves with Charles Lyell's 1st volume of *Principles of Geology* (1830)

in Brazil he has excellent geological field experience

sees the raising of ground 2-10 ft during earthquakes

converts to Lyell's geological **Principle of Uniformitarianism**:

explaining the earth's past through the processes observed on earth today using the same forces & same intensities

8. "When I was starting on the voyage of the Beagle, the sagacious Henslow S5

[Darwin's former professor], who, **like all other geologists** believed at that time**in successive cataclysms**, advised me to get and study the first volume of the*Principles [of Geology]*, which had just been published, **but on no account** to**accept the view therein advocated** ... I am proud to remember that the first place,

namely, St Jago, in the Cape Verde Archipelago, which I geologised, convinced

me of the infinite superiority of **Lyell's view** over those advocated in any other work known to me." ACD, 101COMMENT:

Catastrophism was part of geology around 1800

Biology

S6

PROGRESSIVE CREATION

science-of-the-day in the early 1800s

scientists accepted the age of the earth in the millions of years

BUT living organisms were created by God:

interventionistically & intermittently → God-of-the-gaps

Late in the voyage (Jan 1836) Darwin notes a similarity between the Ant Lion pitfall (trap) in England & Australia S7

9. "Would any two workmen ever hit on so **beautiful**, so simple, & yet so **artificial** S8

a contrivance [Ant Lion pitfall]? It cannot be thought so. The **one hand** has

surely worked throughout the universe. A Geologist perhaps would suggest that

the **periods of Creation** have been distinct & remote the one from the other;that the **Creator** rested in his labor."

Darwin, *Diary of the Beagle in Works of Darwin*
N. Barlow ed (London: Pickering, 1986), I:348

COMMENTS:

S9

- **God is part of Darwin's science!**

"The one hand" & "the Creator"

- Darwin is a Progressive Creationist

"periods of Creation" & periods "the Creator rested in his labor"

- Darwin believes that nature reflects intelligent design

"so beautiful, so simple, & yet so artificial a contrivance"

Contrivance

DEF: something planned & designed

Intelligent Design

S2

Late in the voyage (Sep 1836), Darwin acknowledges the IMPACT of nature:

10. “Amongst the scenes which are **deeply impressed on my mind**, none exceed in **sublimity** the primeval forests [of Brazil] ... [they] are temples filled with the varied productions of the **God of Nature**. **No one can stand unmoved** in these solitudes, without **feeling** that **there is more** in man than the mere breath of his body.”

Diary, 388

COMMENTS:

S3

let’s interpret this passage using Biblical ID Categories (review Notes 92)

The Revelation in Nature:

- Active
“deeply impressed on my mind” & “no one can stand unmoved”
- Intelligible
“feeling that there is more in man”
the ‘Something More’ → teleological reality
- Non-Verbal revelation
use of the word “feeling”
- Universal
“no one can stand unmoved”
- Revelatory
“varied productions” point to “the God of Nature”

S4

PSALM 19 FACTOR

S5

Do the primeval forests of Brazil declare the glory of God?
does nature reflect ID?

OR

Was Darwin experiencing an illusion?
“nothing but” social conditioning from his Cambridge education?

Religion

S6

Christian Faith

little evidence of a firm religious faith during the 5 year voyage in diaries, notes & letters

Natural Theology

strong philosophical faith & even part of Darwin’s science → moving toward deism

CONCLUSION: HMS Beagle Voyage

S7

1. God is part of Darwin’s science
still an anti-evolutionist & progressive creationist

2. Darwin does not sense the tension between his:

S8

Geology

Lyell & Uniformitarianism

- ☛ natural-laws-only

Biology

Paley & Progressive Creation

- ☛ God-of-the-gaps interventions for the creation of living organisms

QUESTION:

S9

IF the formation of the earth is understood only through natural processes,
THEN shouldn’t the formation of living organisms also be understood
only through natural processes?

V. 1ST PERIOD OF RELIGIOUS REFLECTION & FORMULATION OF THEORY OF EVOLUTION (1837 & 1838) S2

Darwin returns to England & begins to analyse scientific evidence collected during his voyage

11. “During these two years [Oct 1836 to Jan 1839] I was led to think much about religion.” S3
ACD, 85

COMMENT:

strong evidence that evolution & religion are intimately related

A. REJECTION OF CHRISTIANITY S4

Darwin rejects:

The Bible

Miracles (Personal Interventionism)

BUT he does not reject God

Rejects the Bible S5

12. “I had gradually come by this time [Oct 1836 to Jan 1839], to see that the Old Testament from its **manifestly** [clear] **false history of the world**, with the Tower of Babel [Gen 11], the rainbow as a sign [Gen 9], etc., etc., and from its attributing to God the feelings of a revengeful tyrant, **was no more to be trusted** than the sacred books of the Hindoos, or any barbarian.” ACD, 85

COMMENTS: S6

Darwin assumes:

HISTORICAL CONCORDISM is a characteristic of Gen 1-11

BUT:

a common concordist hermeneutic

he is not aware of an academic non-concordist approach to Gen 1-11

☛ **Darwin Lacked Hermeneutical Categories**

Rejects Miracles (Personal Interventionism) S7

13. “By further reflecting that the **clearest evidence** would be requisite to make any sane man believe in the **miracles** [ie, Personal Interventionism] by which Christianity is supported,
- [1] that **the more we know of the fixed laws of nature the more incredible do miracles become,**
- [2] that the men at that time were **ignorant and credulous** to a degree almost incomprehensible by us,
- [3] that the Gospels cannot be proved to have been written simultaneously with the events,—that they **differ in many important details**, far too important it seems to me, to be admitted as the **usual inaccuracies of eyewitnesses**;
- by such reflections as these [1-3], which I give not as having the least novelty or value, but as they influenced me, I came to **disbelieve in Christianity as a divine revelation.**”

ACD, 86

COMMENTS: S8

- Darwin rejects Christianity

BUT he does not reject God

in the next 3 quotes → God part of Darwin’s evolutionary science

- Darwin uses 3 common arguments against Divine Action & Christianity S2

[1] Science proves there are no miracles [Personal Interventionism] S3
 “the more we know of the fixed laws of nature the more incredible do miracles become”

COUNTER-ARGUMENT #1 S4

DARWIN’S ARGUMENT

IF no cosmological interventions in origins & operations,
 THEN no personal interventions in the lives of people

NOT necessarily true

it is perfectly reasonable to:

- reject cosmological interventions &
- accept personal divine action, including:
 - dramatic personal interventionism &
 - subtle personal providentialism

COUNTER-ARGUMENT #2 S5

40% of US scientists believe God answers personal prayers that are “more than the subjective psychological effect of prayer”

Larson & Witham, *Nature* (3 Apr 1997), 436 Notes 3

Being scientists, they reject cosmological interventions
 BUT they experience & accept personal divine action

☛ **Darwin Lacked Divine Action Categories** S6

CONFLATES cosmological & personal divine action

[2] Stupid people believe in miracles S7

“men at that time were ignorant and credulous”

COUNTER-ARGUMENT

are the 40% of US scientists mentioned above stupid?

[3] The Bible has significant contradictions S8

“Gospels . . . differ in many important details”

Darwin Qualifies:

not “the usual inaccuracies of eyewitnesses”

COUNTER-ARGUMENT

contradictions can be evidence of authenticity

Excursus: Contradictions in the Bible S9

Women at the Tomb of Jesus: S10

Matt 28:1-7 an angel comes out of heaven & rolls away the rock covering the tomb

Mk 16:1-8 the rock is already rolled away & man in the tomb

Lk 24:1-12 the rock is already rolled away & two men appear

Jn 20:1-9 the rock is already rolled away & two angels and Jesus standing in the tomb

- Forensic Science & Eyewitness Accounts S11

significant contradictions can often appear

EG car accidents

BUT the main event is remembered → Jesus rose from the dead
 instead of undermining Bible:

- ☛ contradictions point to authenticity

- The Gospels had an Oral Phase S2
 memory lapses leading to additions & deletions
 Therefore: contradictions are expected
 BUT oral accounts preserve the main idea → Jesus rose from the dead
 instead of undermining Bible:
 • contradictions point to authenticity

- Women in the Ancient World S3
 women were believed to be untrustworthy
 IF the empty tomb account is a fictional story
 THEN don't have women at the scene
 put the Pharisees, Pilate, the soldiers who crucified Jesus in the story
 • women at the tomb in these accounts points to authenticity

B. FORMULATION OF A TELEOLOGICAL THEORY OF EVOLUTION S4

- source of information: Darwin's notebooks S5
 never intended to be published
 Therefore → NO FUDGING

THEME: Darwin adamantly rejects the God-of-the-gaps
 BUT he still believes in a God who creates through evolution → TELEOLOGICAL

Origin of Life through Laws of Nature S6

14. "Astronomers might formerly have said that **God ordered** [ie, intervened], each planet to move in its particular destiny [eg, retrograde planetary motion]—In the same manner **God orders** each animal with certain form in certain country [ie progressive creation]. But how much more **simple & sublime** power [to] let attraction act according to certain **law**; such are **inevitable** consequences; let animals be **created**, then by the **fixed laws of generation.**"

Darwin, "B Notebook (Feb 1837 to Jan 1838)," G de Beer, ed "Darwin's Notebooks Transmutation of Species," *Bull. Brit. Museum (Nat. Hist.)*, II (1960), 10

COMMENTS: S7

- REJECTS God-of-the-gaps in the origin of living organisms
- ASTRONOMY-BIOLOGY ANALOGY
 IF there is no need for a God-of-the-gaps in astronomy
 THEN there is no need for a God-of-the-gaps in biology

Origin of Humans through Evolution S8

15. "Man in his **arrogance** thinks himself a great work worthy of the **interposition** [ie, a divine intervention] **of a deity**, more humble & I believe truer to consider him created **from animals.**" "B Notebook," 106

COMMENTS: S9

- REJECTS God-of-the-gaps in human origins
- Darwin doesn't make his acceptance of human evolution public for 20-30 yrs
Origin of Species (1859): 1 sentence
Descent of Man (1871): an entire book

Origin of Religion through Evolution S2

16. A scientist is mistaken if he/she “says the **innate knowledge of the creator** has been **implanted** in us (individually or in race?) by a **separate act of God** [ie, by a divine intervention], and not as a necessary integrant part of **his most magnificent laws**, which **we profane** [ie, disrespect] in thinking [that God is] not capable to produce every effect of every kind which surrounds us.” Notebook M (1838), 135-6

COMMENTS: S3

- REJECTS God-of-the-gaps in the origins of “Innate Knowledge of God” it is not “implanted in us by a separate act of God”
- ACCEPTS Teleological Evolution
God creates through “his most magnificent [evolutionary] laws”
- ACCEPTS Natural Revelation S4
acknowledges that humans have an “innate knowledge of creator”
- ACCEPTS humans are “Hard-Wired BY God”
Darwin is the 1st Evolutionary Psychologist & he believed in God!
Darwin is not trapped in the false dichotomy of choosing between:
God & evolutionary psychology

GOD’S HARDWIRING is behind NATURAL REVELATION S5

Darwin would reject EO Wilson’s belief that God “exists” only in the brain see Notes 79

Darwin would be comfortable with “**The 3rd Hypothesis**” N79
Evolutionary Psychology & Evolutionary Creation

PSALM 19 FACTOR S6

Do the “most magnificent laws” of evolution declare the glory of God?

Does the process of evolution reflect ID?

Was Darwin experiencing a real divine revelation in nature?

OR

Was Darwin experiencing nothing but an illusion?

CONCLUSION: 1st Period of Religious Reflection & Formulation of Theory of Evolution S7

1. Rejects Christianity, NOT God S8
2. Rejects the God-of-the-Gaps in origins S9
3. Accepts a Creator S10
4. Accepts teleological evolution S11
5. Accepts natural revelation S12
6. Accepts natural revelation arose through the Creator’s evolutionary process S13
7. **God is part of Darwin’s evolutionary science!** S14

VI. ORIGIN OF SPECIES (1859)

S2

- 20 year writing process S3
- 7 references to the “Creator” (with a capital “C”) all positive & unapologetic
- Key contribution to science providing a mechanism for evolution: **Natural Selection**
 subtitle:
By Means of Natural Selection or the Preservation of Favoured Races in the Struggle for Life

The Creator Creates through the Laws of Nature

S4

17. “**Authors of the highest eminence** [ie, progressive creationists] seem to be fully satisfied with the view that **each** species has been **independently created**. To my mind it accords better with what we know of the **laws impressed on matter** by the **Creator**, that the **production** and extinction of the past and present inhabitants of the world should have been due to secondary causes like those determining the **birth** and death **of the individual**.” Darwin, *Origin of Species* (Harvard U Press, 1964[1859]), 488

COMMENTS:

S5

- REJECTS God-of-the-gaps in the origin of living organisms
- REJECTS Progressive Creation → science-of-the-day
 “Authors of the highest eminence”
- ACCEPTS Teleological Evolution
 “the laws impressed on matter by the Creator”

EMBRYOLOGY-EVOLUTION ANALOGY

S6

IF

God does not use God-of-the-gaps miracles to create **each individual creature** today,

THEN

God did not use God-of-the-gaps miracles to create **all creatures** in the past

IF

God creates **each individual creature** today through natural processes,

THEN

God created **all creatures** in the past through natural processes

Alludes to Human Evolution

S7

18. “In the distant future I see open fields for far more important researches. **Psychology** will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. **Light will be thrown on the origin of man and his history**.” *Origin*, 488

COMMENTS:

S8

- only reference to human evolution
 Darwin very respectful of religious people
- Darwin fully aware of the implications of human evolution
 psychology must become **Evolutionary Psychology**

Famous Last Sentence of *Origin of Species* S2

19. “There is **grandeur** in this [evolutionary] view of life, with its several powers, having been **originally breathed** into a **few forms** or into **one**; and that, whilst this planet has gone on cycling according to the fixed law of gravity, from so simple a beginning endless forms **most beautiful** and **most wonderful** have been, and are being, evolved.” *Origin*, 490

COMMENTS: S3

- 2nd edition (1860) to 6th edition (1872) Darwin changes:
“originally breathed” to “**breathed by the Creator**”

PSALM 19 FACTOR S4

Does the “grandeur” of evolution creating living organisms that are “most beautiful & most wonderful” declare the glory of God? Ps 19
does the process of evolution reflect ID?

Not-So-Well-Known Second Last Sentence S5

20. “Thus, from the **war of nature**, from **famine** and **death**, the most exalted object which we are capable of conceiving, namely, the production of higher animals, directly follows. There is grandeur in this view ...” Ibid.

COMMENTS:

Darwin is fully aware that brutality & violence exists in nature
“war of nature” “famine” “death”

DARWIN’S IMPLICIT THEODICEAN JUXTAPOSITION S6**Theodicy**

DEF: arguments justifying the existence of evil in a world created by an all-loving, all-powerful, and all-knowing God

Key Word: IMPLICIT S7

Darwin never says: “This is my theodicy”

- when faced with the challenge of suffering & evil in nature, Darwin often juxtaposes it against his EXPERIENCE of ID in nature

EG 2nd last sentence of *Origin of Species* (Quote 20) is juxtaposed against last sentence (Quote 19) also **SQ 4**

- for Darwin ID in nature is a response justifying suffering in nature S8
Darwin inspires me to believe:

☛ **Psalm 19 Factor Trumps Suffering**

Book of Job S9

famous biblical book on suffering → uses this argument

Chapters 3 to 37

many attempts offered by his wife & 3 friends to understand Job’s suffering

Chapters 38 to 41

God answers by pointing to nature → an ID argument → God in control

CONCLUSION: *Origin of Species* (1859) S10

1. Accepts a Creator S11
2. Accepts teleological evolution S11
3. **God is part of Darwin’s evolutionary science in his most famous book!** S12

VII. 2ND PERIOD OF RELIGIOUS REFLECTION (1860-1861) S2

Darwin's colleagues raised questions regarding the theological implications of *Origin of Species*
 strong evidence that evolution & religion are intimately related

THE ISSUE S3

Intelligent Design in Nature

THE PROBLEM S4

Darwin tacitly holds Paley's understanding of ID

Remember:

- Paley's Premises of Nature are CONFLATED: (1) Intelligent Design
 (2) Perfect Adaptation
 (3) Beneficence

Therefore:

- Darwin's CONCEPT of Design includes Paley's: (2) Perfect Adaptation
 (3) Beneficence

Paley's Perfect Adaptation: S5

each & every detail in nature fit together PERFECTLY
 deeply ingrained at a tacit level

Darwin is NOT fully aware of this until late in life (1870s) Notes 140-1

Problem with Conflation: S6

"Package Deal" Problem

IF you reject one premise,

THEN you reject them all

conflation → always leads to conflict

THE CONFLICT S7

Between:

- Darwin's CONCEPT of Design
 conflated with Paley's Perfect Adaptation & Beneficence → he will reject BOTH
 ☛ REJECT design
- Darwin's EXPERIENCE of Design
 impacted by the Non-Verbal Revelation in Nature (Ps 19 Factor)
 ☛ ACCEPT design

THE RESULT S8

leads to frustration, confusion & fluctuation

THE QUESTION S9

Did Darwin have a correct CONCEPT of Design? **NO**

The Traditional & Biblical view of ID has nothing to do with Paley's CONCEPT of Design
 it does not deal with Perfect Adaption

The Traditional & Biblical view of ID deals with the IMPACT of nature on humans S10

- ☛ **Psalm 19 Factor**

May 1860 Letter to Asa Gray S2

Harvard botanist & committed evangelical Christian
 1st North American scientist to promote Darwin's theory of evolution

Frustration & Confusion S3

21. “With respect to the **theological** view of the question. This is always **painful** to me.
 I am **bewildered**. I had no intention to write **atheistically** [in the *Origin of Species*].

Suffering in Nature #1 → REJECTS Design S4

But I own I cannot see as plainly as others do, and as I should wish to do, evidence of
 [1] **design** and [2] **beneficence on all sides of us**. There seems to me too much **misery in the world**. I cannot persuade myself that a **beneficent and omnipotent God** would have designedly created the Ichneumonidae [a wasp that lays eggs in caterpillars] with the express intention of their feeding within the bodies of caterpillars, or that a cat should play with mice. Not believing this, I see no necessity in the belief that the eye was expressly designed.

Psalm 19 Factor → IMPACTED by Nature S5

On the other hand, I cannot anyhow be contented to view this **wonderful universe**, and especially the **nature of man**, and to conclude that everything is the result of **brute force**.

Design Theory #1 → ACCEPTS Design DESIGNED LAWS OF NATURE & CHANCE S6

I am inclined to look at everything as resulting from **designed laws**, with the **details**, whether good or bad, left to the working out of what we may call **chance**. Not that this notion *at all* satisfies me.

Frustration & Confusion S7

I feel most deeply that the whole subject is **too profound** for the human intellect. A dog might as well speculate on the mind of Newton. Let each man hope and believe what he can. Certainly I agree with you that my views are **not at all necessarily atheistical**.

Suffering in Nature #2 S8

The lightning kills a man, whether a good one or a bad one, owing to the excessively complex action of natural laws. A child (who may turn out an idiot) is born by the action of even more complex laws, and

Design Theory #2 → ACCEPTS Design DESIGNED LAWS OF NATURE & GOD'S OMNISCIENCE S9

I can see no reason why a man, or other animal, may not have been aboriginally produced by other laws, and that all these **laws** may have been **expressly designed** by an **omniscient** [all-knowing] **Creator**, who foresaw every future event and consequence.

Frustration & Confusion S10

But the more I think the more **bewildered** I become; as indeed I have probably shown by this letter.”

Darwin to Gray (22 May 1860) F Darwin, ed *Life & Letters of Darwin* (London: John Murray, 1888), II: 311-312

COMMENTS: S11

- Evolution is NOT inherently **atheistic**
 “no intention to write atheistically” “not at all necessarily atheistical”

- The universe is NOT **dysteleological** S12
 “wonderful universe” is not “the result of brute force”

• Fluctuation	S2
REJECTS Design	
because of suffering in nature	
“too much misery in the world”	
ACCEPTS Design	
Impacted by Nature & Ps 19 Factor	
“wonderful universe” & “nature of man”	
<u>Proposes Two Design Theories:</u>	S3
(1) Designed Laws & Details to Chance	
“Not that this notion <i>at all</i> satisfies me.”	
WHY? Paley’s baggage → details part of ID	
(2) Designed Laws & God’s Omniscience	S4
humans cannot fully understand all aspects of nature	
• <u>DARWIN’S IMPLICIT THEODICEAN JUXTAPOSITION</u>	S5
AFTER presenting the problem of suffering in nature & rejecting ID (2 times)	
Darwin JUXTAPOSES these with his EXPERIENCE of ID in nature	
☛ for Darwin ID is a response to suffering	
• Frustration, Confusion & Fluctuation	S6
beginning, middle & end of the letter	
“painful” “bewildered” “too profound”	
QUESTION:	S7
Is this a categories problem? YES	
Darwin has a <u>bad</u> CONCEPT of ID → Paley’s view of ID	
ID conflated with Perfect Adaption & Beneficence	
EG “evidence of [1] design and [2] beneficence on all sides of us ”	
November 1860 Letter to Gray	S8
22. “I grieve to say that I cannot honestly go as far as you do about Design . I am conscious	S9
that I am in an utterly hopeless muddle . I cannot think that the world, as we see it, is	
the result of chance ; and yet I cannot look at ★each★ separate thing as the result of	
Design ... Again, I say I am, and shall ever remain, in a hopeless muddle. ” LLD, II:353	
<u>COMMENTS:</u>	S10
• REJECTS Design	
BUT this is Paley’s view of ID → conflation of ID & Perfect Adaptation	
“★each★ separate thing”	
• REJECTS Dysteleology	S11
“cannot think that the world ... is the result of chance”	
• Frustration, Confusion & Fluctuation	S12
“hopeless muddle” “utterly hopeless muddle”	
	SQ 5-10 Darwin & ID
CONCLUSION: 2nd Period of Religious Reflection	S13
1. Darwin is <u>not</u> an atheist & his theory of evolution is <u>not</u> by necessity atheistic	
2. Darwin’s Science-Religion relationship is in Conflict	S14
Darwin’s <u>CONCEPT</u> of Design (Paley’s Conflated Premises of Nature, including ID)	
Clashes Against	
Darwin’s <u>EXPERIENCE</u> of Design in nature (Psalm 19 Factor)	

- VIII. DESCENT OF MAN (1871)** S2
comprehensive book on human evolution S3
- Embryology-Evolution Analogy** S4
23. “I am aware that the conclusions arrived at in this work will be denounced by some as **highly irreligious**; but he who denounces them is bound to shew why it is more irreligious to explain the **origin of man** as a distinct species by descent from some lower form, through the laws of variation and natural selection, than to explain the birth of the individual through the laws of ordinary reproduction. The birth both of **the species** and of **the individual** are equally parts of that **grand** sequence of events, which **our minds refuse** to accept as the result of **blind chance**. *Descent*, 613
- COMMENTS: S5
- EMBRYOLOGY-EVOLUTION ANALOGY
- IF
God does not use God-of-the-gaps miracles to create **each human** today,
but instead uses natural embryological processes
- THEN
God did not use God-of-the-gaps miracles to create **all humans** in the past,
but instead used natural evolutionary processes
- IMPACTED by Nature (Ps 19 Factor) S6
embryology & evolution “equally parts of that grand sequence of events”
 - REJECTS Dysteleology S7
“our minds refuse to accept [embryology & evolution] as the result of blind chance”
- QUESTION: S8
Was our brain hardwired this way BY God?
- OR**
Was it hardwired by blind chance only?
- Natural Selection & Survival of the Fittest** S9
24. “In earlier editions of my ‘Origin of Species’ I perhaps **attributed TOO MUCH** to the action of **natural selection** and **survival of the fittest** ... We know not what produces the numberless slight differences between the individuals of each species.” *Ibid*, 61; my capitals
- COMMENT: S10
natural selection & survival of the fittest are important evolutionary mechanisms
BUT they are NOT the only mechanisms driving evolution
25. “There is **almost complete unanimity** amongst Biologists about Evolution, tho’ there is still considerable difference as to **the means** [ie, the mechanisms] such as how far [1] natural selection has acted & how far [2] external conditions, or whether there exists some [3] **mysterious innate tendency to perfectibility**.” *To HN Ridley*, 28 Nov 1878 S11
- COMMENTS: S12
• most biologists are evolutionists in just 20 yrs after *Origin of Species* (1859)
- QUESTIONS: S13
Does evolution have a “mysterious innate tendency to perfectibility”?
an intelligently-designed teleological feature in genes causing life to evolve?
- OR**
Is biological variability due to blind chance only?

Morality & Evolutionary Psychology

S2

Darwin saw two evolutionary psychological forces in humans:

- (1) “social instincts” → altruistic behaviour
- (2) “lower impulses” → selfish behaviour

Darwin argued that our sense of right & wrong arose through evolution

S3

26. “The **social instincts** which no doubt were acquired by man as by the lower animals for the good of the community ... [would] have served him at a very early period as a **rude rule of right and wrong** ... The **social instincts** ... naturally lead to the **golden rule**, ‘As ye would that men should do to you, do ye to them likewise’ [Jesus in Luke 6:31] and this lies at the **foundation of morality**.”

Descent, 168COMMENTS:

S4 H2

- consistent with the Christian belief in Moral Revelation

27. “Indeed, when Gentiles, who do not have the law, do **by nature** things required by the law, they are a law for themselves, even though they do not have the law, since they show that the requirements of the **law** are **written on their hearts**, their **consciences** also bearing witness, and their thoughts now accusing, now defending them.” Rom 2:14-15

- everyone has a sense of morality
evolution selected those with moral sense over those without it
- populations with moral sense were more successful
 - survival of the morally fittest

S5

IX. AUTOBIOGRAPHY OF CHARLES DARWIN (1876)

S6

mature views on religion are presented in a section entitled “Religious Belief”

Preamble

S7

Rejects Christianity
Intelligent Design a central issue

Arguments For & Against God’s Existence

S8

Argument Pattern:

Darwin gives an Argument & then a Rebuttal to it → stalemate leads him to **Agnosticism**

28. “The mystery of the beginning of all things is **insoluble** by us; and I for one must be content to remain an **Agnostic**.”

ACD, 94

term coined by Thomas Henry Huxley in 1869

Darwin does not express frustration, confusion & fluctuation

1. ARGUMENT AGAINST GOD’S EXISTENCE—PROBLEM OF SUFFERING

S9

29. “A being so powerful and so full of knowledge as a God who could create the universe, is to our finite minds **omnipotent** and **omniscient**, and **it revolts** our understanding to suppose that his **benevolence** is not unbounded, for what advantage can there be in the suffering of millions of lower animals throughout almost endless time? This very old argument from the existence of suffering AGAINST [my capitals] the existence of an **intelligent first cause** seems to me a **strong one**.”

ACD, 90COMMENT:

S10

classic argument against the personal God of theism & Christianity

why is there suffering if God is all-loving, all-powerful, and all-knowing?

REBUTTAL

S2

30. “According to my judgment **happiness** decidedly prevails ... all sentient [feeling & aware] beings have been formed so as to enjoy, as a general rule, **happiness** ... I can hardly doubt, to most sentient beings an **excess of happiness** over misery, although many occasionally suffer much.” *ACD, 88, 89-90*

COMMENTS:

S3

“happiness decidedly prevails” “general rule” “an excess over misery”
 • therefore suffering is not an argument against God’s existence

DARWIN’S IMPLICIT THEODICEAN JUXTAPOSITION

S4

Suffering in Nature **juxtaposed against** Happiness in Nature

2. ARGUMENT FOR GOD’S EXISTENCE—1ST DESIGN ARGUMENT (PSYCHOLOGICAL)

S5

31. “At the present day the **most usual argument** FOR [my capitals] the existence of an intelligent God is drawn from the **deep inward conviction** and **feelings** which are **experienced by most persons** ... Formerly I was led by **feelings** such as those referred to, ... to the firm conviction of [1] the existence of God, and of [2] the immortality of the soul ... whilst standing in the midst of the **grandeur** of a Brazilian forest.” *ACD, 91*

COMMENTS:**The Revelation in Nature:**

S6

- Active
 impact of the “grandeur of a Brazilian forest”
- Universal
 “experienced by most persons”
- Intelligible
 use of word “feelings” (2X) → **non-verbal** revelation
 leads Darwin to understand two “firm convictions” (next)
- Revelatory
 nature convicts Darwin of: [1] “the existence of God”
 [2] “the immortality of the soul”

S7

PSALM 19 FACTOR

S8

Does the “grandeur of a Brazilian forest” declare the glory of God?
 does nature point to the “existence of God” & “immortality of the soul?”
 OR

Was Darwin experiencing an illusion?

“nothing but” social conditioning from his Cambridge education?

REBUTTAL

S9

32. “But now [1876] the **grandest** scenes would not cause any such convictions and feelings to rise in my mind. It may be truly said that I am like a man who has become **colour-blind**.” *ACD, 91*

QUESTION:

Can you become “colour-blind” to Impact of Nature?
 see Darwin’s view in the last year of his life

3. ARGUMENT FOR GOD’S EXISTENCE—2ND DESIGN ARGUMENT (RATIONAL) S2

33. “Another source of conviction in the existence of God, connected with the **reason** and not with the feelings, impresses me as having **much more weight**. This follows from the **extreme difficulty** or rather **impossibility** of conceiving this immense and **wondrous** universe, including man with his capacity of looking backwards and far into futurity, as a **result of blind chance** or **necessity**. **When thus reflecting** I feel compelled to look to a **First Cause** having an **intelligent mind** in some degree analogous to that of man; and I deserve to be called a **Theist**.” ACD, 92-93 my underlines

COMMENTS: S3

- REJECTS dysteleology
the universe is not the result of “blind chance or necessity”
☛ that’s an “impossibility”
- NOTE the present tense of last sentence:
“When thus reflecting I feel compelled ... I deserve to be called a **Theist**.”
1876 → Darwin at times believed in God

The Revelation in Nature: S4

- Active
impact of the “wondrous universe” → “compelled to look”
- Intelligible
“connected with the reason”
- Revelatory
nature points to “First Cause having an intelligent mind”

REBUTTAL S5

immediately following Quote 33:

34. “This conclusion was **strong** in my mind about the time, as far as I can remember, when I wrote the *Origin of Species*; and it is since that time that it has very gradually with **many fluctuations** become **weaker**. But then arises the **horrid doubt**—can the mind of man, which has, as I fully believe, been developed from a mind as low as that possessed by the lowest animal, **be trusted** when it draws such **grand conclusions**?”

ACD, 93

COMMENTS: S6

Darwin was a **theist** & believed in **design** when he wrote *Origin of Species*
NOT a so-called “Darwinist”!!!

DARWIN’S EPISTEMOLOGICAL DILEMMA: “THE HORRID DOUBT” S7

Darwin states he can’t trust his mind: (1) on the subjects of ID & God
(2) to make “grand conclusions”

BUT what did Darwin just do?

he trusted his mind to make a “grand conclusion” about not being able to trust his mind!!!

☛ **Self-Referential Incoherence**

ASSESSMENT S8

Did Darwin rebut his “Rational Argument” for God’s existence? **NO**

Therefore, ID remains a POWERFUL rational argument for belief in a:

“First Cause having an intelligent mind in some degree analogous to that of man”

X. THE FINAL YEARS

S2

some “softening” with regard to agnosticism (had deistic periods) & intelligent design (wasn’t so “colour blind”) → and fluctuation between beliefs returns

John Fordyce Letter (1879)

S3

35. “It seems to me **absurd to doubt** that a man may be an **ardent theist & an evolutionist** ...

I may state that my judgment often **fluctuates** ... In my most **extreme fluctuations** I have **never been an Atheist** in the sense of denying the existence of a God. I think that generally (and more & more as I grow older), **BUT NOT ALWAYS** [my capitals], that an **Agnostic** would be the more correct description of my state of mind.” To Fordyce (7 May 1879) *LLD*, I:304

COMMENTS:

S4

- DESTROYS the Origins Dichotomy in one short sentence!
 - ☛ it is a perfectly reasonable to be “an ardent theist & an evolutionist”
- Up to **1879** Darwin was NEVER AN ATHEIST (he dies in 1882)
- **Agnostic** the “more correct description”
- The “not always” periods → likely a deist

S5

S6

THE “NOT ALWAYS” ARGUMENT:

- Darwin “never” an **atheist**,
- Darwin “generally but not always” an **agnostic**

Therefore: Darwin in the “not always” periods had a belief in some sort of deity or teleological reality

WHY?

Darwin still IMPACTED by nature (Ps 19 Factor)

Conversation with the Duke of Argyll

S7

during the last year of Darwin’s life

36. “In the course of that conversation I said to Dr. Darwin, with reference to some of his own remarkable works on the ‘Fertilization of Orchids’ and upon ‘The Earthworms,’ and various other observations he made of the **wonderful contrivances** for certain purposes in nature—

I said it was **impossible** to look at these without seeing that they were the **effect** and the **expression of mind**. I shall never forget Mr. Darwin’s answer. He looked at me very hard and said, ‘Well, that **often** comes over me with **overwhelming force**; but at other times,’ and he shook his head vaguely, adding, ‘**it seems to go away**.’” *LLD*, I:316

S8

COMMENTS:

S9

The Revelation in Nature

- Active
 - impact of living organisms “comes over me with overwhelming force”
- Intelligible
 - “the effect and the expression of mind”
- Incessant
 - “often comes over me” → renders doubtful 1876 “color-blind” comment
- Revelatory
 - “impossible” not to see the work of a Mind

S10

PSALM 19 FACTOR

S11

Was Darwin’s experience in biology declaring the glory of God?

OR

Was Darwin suffering from an illusion?

XI. CONCLUSION: EVOLUTION & DARWIN’S RELIGIOUS BELIEFS	S2
1. Darwin was <u>Never</u> an Atheist or a Darwinist!	S3
during the writing of <i>Origin of Species</i> (1859):	
Darwin claimed he: was a theist	
believed in Intelligent Design	
2. Darwin Struggled with Intelligent Design throughout his Life	S4
nature impacted Darwin powerfully & often	
TO ASK THE QUESTION ONE LAST TIME:	S5
Did Darwin experience an illusion of ID caused by 19 th century religious conditioning?	
OR	
Is the Psalm Factor 19 a reality?	
3. Pastoral Lessons & Implications from Darwin’s Story	S6
Christians gave Darwin:	
• mistaken view of origins:	
Progressive Creation	
• mistaken view of design:	
Paley’s Conflation of Intelligent Design, Perfect Adaptation & Beneficence	
• mistaken view of the hermeneutics of Genesis 1-11:	
<u>common</u> concordist hermeneutic	
literalism & historical/scientific concordism	
TO ASK SOME PROVOCATIVE QUESTIONS:	S7
Were Christians a stumbling block between Darwin & the God of Christianity?	
TODAY:	
Are anti-evolutionists & ID Theorists creating a similar situation?	
<hr/>	
Excursus: Lamoureux’s Intellectual Fulfilment Anti-Thesis	S8
Dawkins:	S9
“Darwin made it possible to be an intellectually fulfilled atheist .”	
Lamoureux:	S10
“Darwin made it possible to be an intellectually fulfilled THEIST .”	
NOTE: I am NOT saying that Darwin was a theist.	
BUT	
I am saying that Darwin offers valuable THEOLOGICAL INSIGHTS:	
Central Theological Insight	S11
Science vs. Religion & Evolution vs. Creation Dichotomies are <u>ABSURD</u>	
“It seems to me absurd to doubt that a man may be an ardent theist & an evolutionist ”	
Quote 35	
Embryology-Evolution Analogy	S12
an excellent way to understand God’s creative action in both embryology & evolution	
in Darwin’s most important books: <i>Origin of Species</i> (1859) Q 17	
<i>Descent of Man</i> (1871) Q 23	
Psalm 19 Factor	S13
nature IMPACTED Darwin throughout his life	
last year → “often comes over me with overwhelming force” Q 36	

Toward a Model of Evolutionary Intelligent Design	S2
“designed laws” & “details to what we may call chance” Q 21	
“laws may have been expressly designed by an omniscient Creator” Q 21	
Darwin’s Epistemological Dilemma	S3
“The Horrid Doubt” about ID Q 34	
☛ Darwin’s rebuttal against rational ID argument suffers from Self-Referential Incoherence	
Therefore:	
ID a very reasonable <u>argument</u> (NOT a proof) for the existence of God	
Darwin’s Implicit Theodicean Juxtaposition	S4
Intelligent Design in nature is a response to suffering in nature Q 19, 20, 21, 29	
☛ Psalm 19 Factor Trumps Suffering	
living organisms enjoy “happiness” most of the time	
Natural Revelation & Evolutionary Psychology	S5
human brain hardwired through evolution BY God	
“innate knowledge of the creator” is the result of “his most magnificent [evolutionary] laws”	
	Q 16
Morality & Evolutionary Psychology	S6
“social instincts ... naturally lead to the golden rule” Q 26	
☛ consistent with “the law written on human hearts” (Rom 2:15) Q 27	
Criticism of the Bible	S7
“false history of the world” Q 12	
assumed historical concordism in Genesis 1-11	
☛ poor hermeneutics?	

ONLINE PAPERS ON CHARLES DARWIN:

Denis O. Lamoureux, “Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism—Part I Divine Creative Action & Intelligent Design in Nature” *Perspectives on Science & Christian Faith* 64:2 (Jun 2012), 108-119.

http://www.ualberta.ca/~dlamoure/p_darwin_1.pdf

Denis O. Lamoureux, “Darwinian Theological Insights: Toward an Intellectually Fulfilled Christian Theism—Part II Evolutionary Theodicy and Evolutionary Psychology” *Perspectives on Science & Christian Faith* 64:3 (Sep 2012), 166-178.

http://www.ualberta.ca/~dlamoure/p_darwin_2.pdf

GENESIS 1-11: BIBLICAL ACCOUNTS OF ORIGINS S2**I. KEY THOUGHTS** S3**1. Literary Genre** S4

CENTRAL QUESTION: What is the literary genre of Gen 1-11?

- a strict literal word-for-word scientific & historical record of HOW the universe & life, including humans, ACTUALLY originated

OR

- a complex literature featuring: S5

Spiritual Truths → 1st & foremost
 ancient poetry (structured writing)
 ancient story & allegory
 ancient science
 ancient historiography

2. Ancient Historiography Greek *historia*: history *graphō*: to write S6

DEF: the writing of history by ANCIENT people

similar to the way ancient people conceptualized the science-of-the-day, they also conceptualized the **history-of-the-day**

THEIR understanding of history from THEIR Ancient Phenomenological Perspective

NOTE: S7

ALL Historical Accounts (both ancient & modern) include:

- Historical Facts
 as conceptualized from the perspective of the historian
- Metaphysical (Religious) Interpretations of the Historical Facts
 EG ancient: Hebrew interpretation of worldwide flood S8
 modern: religious interpretations of September 11 S9

Message-Incident Principle: 1st New Application S10 H42

Ancient Historiography in Gen 1-11 is an incidental vessel that delivers inerrant Messages

Therefore → SEPARATE DON'T CONFLATE

3. Ancient Accounts of Origins S11

Feature Four Components:

ANCIENT COSMOGONY Greek *cosmos*: universe *gonos*: birth, creation
 origin of the universe & life → science-of-the-day

ANCIENT HISTORIOGRAPHY

origin of humans & the first communities → history-of-the-day

ANCIENT STORY & ALLEGORY S12

accounts of origins are often cast in a story-like or allegory-like format

RELIGIOUS (METAPHYSICAL) INTERPRETATION

spiritual truths & values of a community or civilization

Message-Incident Principle: 2nd New Application S13 H42

Ancient Account of Origins in Gen 1-11 is an incidental vessel that delivers inerrant Messages

Therefore → SEPARATE DON'T CONFLATE

4. Genesis 11-12 REAL HISTORY “Boundary”

Conservative Christian Theologians see real history in the Bible beginning to “phase in”

ROUGHLY around Gen 12 with Abraham

the “boundary” is not sharply defined

Common Concern:

S6

IF Gen 1-11 is not historical,

THEN the New Testament & Jesus are not historical

Academic Response:

S7

Gen 1-11 is a COMPLETELY DIFFERENT LITERARY GENRE than the New Testament

• NT is based on eyewitness accounts

see **SQ 1-3**

Genre of NT → **Eye Witness Testimony**

See Richard Bauckham, *Jesus & the Eyewitnesses* (2006)

THEREFORE:

S8-9

**DON'T USE GENESIS 1-11 HERMENEUTICS
FOR NEW TESTAMENT!**

**DON'T USE NEW TESTAMENT HERMENEUTICS
FOR GENESIS 1-11!**

II. ANCIENT ACCOUNTS OF ORIGINS: INTRODUCTORY CATEGORIES

S10

ETIOLOGY Greek *aitia* “cause or reason for this”

S11

DEF: the cause or reason for something/one

ALL accounts of origins (ancient & modern) ask the basic etiological question:

What is the cause or reason for the existence of the universe, life, & us?

ANCIENT MAJOR MOTIFS OF ORIGINS

S12

DEF: scientific & historical **paradigms**-of-the-day in the ancient world

appear in a majority of origins accounts throughout the world

both explicitly & implicitly

NOT literary devices as the term “motif” is often used today

S13

BUT

Ancient Cosmogony & Ancient Historiography

• origin of the world & origin of humans

(1) *De Novo* Creation Motif

S14

quick & complete origin of the universe & life, including most times a 1st man & 1st woman

Etiological Question:

What is the cause or reason for the origin of the world & people?

(2) Lost Idyllic Age Motif

S15

a something-went-wrong-in-the-world account

points back to the disruption of an original harmony in the world

negative effects of this event continue into the present

Etiological Question:

What is the cause or reason for the **bad things** in the world?

(3) Tribal Formation Motif S2

origin of a people or nation from a single founding male individual

Etiological Questions:

What is the cause or reason for the origin of our people? And our enemies?

(4) Great Flood Motif S3

destruction of life thru a flood and the survival of a few humans & some animals in a boat
often found in communities living in regions susceptible to flooding

Etiological Question:

What is the cause or reason for the great flood?

Message-Incident Principle: 3rd New Application S4 H42

Ancient Major Motifs in Gen 1-11 are an incidental vessel that deliver inerrant Messages

Therefore → SEPARATE DON'T CONFLATE

ANCIENT MINOR MOTIFS S5

DEF: reappearing regional/local symbols, characters, etc. that add detail to major motifs

EG many ANE creation accounts begin with a dark, watery, chaotic pre-creative state

ANCIENT STORY & ALLEGORY S6

The Bible sometimes uses non-historical stories & allegories to reveal Spiritual Truths

☛ Jesus' use of Parables S7

DEF: earthly stories with heavenly messages

The Parable of the Good Samaritan (Luke 10:33-36) S8

Story → INCIDENTAL

Be Merciful → MESSAGE OF FAITH

NB the story & characters can be updated for today, preserving the message

See "The Parable of the Good Atheist" **SQ 7 & 8** S9

Book of Job S10

Could this be a God inspired story to reveal inerrant Spiritual Truths about suffering?

IF this is a historical account, (Job Chapters 1 & 2)

THEN it means that:

- Satan can just walk into God's presence & bait him to prove a point
- God allows Satan to murder Job's 10 children & servants
- God allows Satan to inflict Job with a debilitating disease

QUESTION: S11

Does this sound like something that God would allow?

OR

Is this a story that is used to reveal inerrant Spiritual Truths?

Garden of Eden Account in Genesis 2-3 S12

Features: • fast-talking snake (3:1-5)

- mystical tree that imparts eternal life (2:9; 3:22, 24)
- mystical tree that imparts knowledge of good & evil (2:9, 17; 3:5, 7)
- mystical creatures → cherubim (composite creatures like Egyptian Sphinx) 3:24
- flaming sword flashing back & forth to protect the garden (3:24)

QUESTION: S13

Does this sound like a **historical account** about real & actual events?

OR

Is this a **story or allegory** intended primarily to offer Spiritual Truths?

HISTORICIZATION

S2

DEF: the transformation of a non-historical account into a historical account

IF Gen 2-3 is an story or allegory

THEN the redactor of the Book of Genesis turned Gen 2-3 into a historical account

The Redactor (or Editor)

S3 H33 N 136

his intention was to write an account of the origin of: (1) universe (Cosmogony)

S4

(2) humanity (Historiography)

10X he adds the subtitle: “This is the account of ...” in the Book of Genesis

6X in Gen 1-11: Gen 2:4, 5:1, 6:9, 10:1, 11:10, 11:27

NB Gen 2:4

“This is the account of the heavens & earth”

III. ORIGIN OF GENESIS 1-11:

S5

RE-CYCLED & RE-INTERPRETED ANE MOTIFS OF ORIGINS THEORY

(1) Mesopotamians & Egyptians Conceive the Motifs of Origins

S6

1st in an oral form

ancient conceptualizations of the origin of the universe, life & their community

☛ include some actual historical events

EG real floods & real flood survivors

(2) Mesopotamians & Egyptians Write Down their Accounts of Origins

S7

roughly over a period from 3000-1500 BC/E

(3) Hebrews Appear Late in ANE & Inherit Motifs of Origins

S8

1st archeological evidence for the existence of Israel 1200 BC/E

most likely in an oral form

(4) Hebrews Re-Cycle & Re-Interpret ANE Motifs of Origins

S9

inspired by God, they replace pagan theology with inerrant Spiritual Truths

☛ they include some actual people & actual historical events remembered in oral traditions

EG some people in genealogies

(5) Hebrews Become Literate & Write Down Two Accounts of Origins

S10

1st archeological evidence for literacy roughly **1200 BC/E**

Jahwist (J) Account of Origins about 1000 BC/E

Priestly (P) Account of Origins about 500 BC/E

(6) Redactor Puts J & P Accounts of Origins Together to Form Genesis 1-11

S11-12 H43

probably around 500 BC/E

COMMENTS:

• Divine Inspiration of the Bible:

S13

interactive process between human authors & the Holy Spirit

human authors are NOT simply passive secretaries

God allowed them to use their motifs of origins → ACCOMMODATION

• Parallel between the Two Divine Books

S14

Origin of the BOOK OF GOD’S WORKS:

an ordained & sustained natural evolutionary process

Origin of BOOK OF GOD’S WORDS:

an ordained & sustained **ancient literary process** → literary evolution

IV. AN EXEGESIS OF GENESIS 1-11

S2

1. Genesis 1:1-3 & the Pre-Creative State

S3

Translation Debate

S4 H44

- translation of the 1st two words of the Bible is uncertain!
vowel pointing (dots & dashes) in Hebrew is debated

בְּרֵאשִׁית *b^erē'shît*

S5

בְּ *b^e* (1) in
(2) when

רֵאשִׁית *rē'shît* beginning & first

- two possible grammatical arrangements:

S6

Genesis 1:1 is a Title

¹ IN THE BEGINNING GOD CREATED THE HEAVENS AND THE EARTH

² Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters.

³ And God said, “Let there be light” and there was light. Gen 1:1-3

Genesis 1:2 is a Parenthesis

S7

¹ When God began to create the heavens and the earth,

² (*Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters.*)

³ God said, “Let there be light” and there was light. Gen 1:1-3

COMMENTS:

S8

- **opening scene** in BOTH translations is Gen 1:2
☛ a dark, watery, chaotic earth is already there
- termed the “**Pre-Creative State**”
NO mention it was created → seems to be eternal
science-of-the-day for Mesopotamians, Egyptians & Greeks

QUESTION

S9

Does this challenge Christian Doctrine of Creation-Out-of-Nothing?

☛ NO

Ancient Epistemology

S10

creation-out-of-nothing is NOT part of ANE mind-set

Biblical Revelation is Progressive

S11

idea 1st in 2 Mac 7:28 & echoed in Col 1:15-17 & Heb 11:3 **SQ 4-6**

Doctrines Develop over Time

S12

EG Doctrine of Trinity appeared in late 4th century AD/CE

☛ creation-out-of-nothing developed in 2nd century AD/CE

- verb traditionally translated to “create”

S13

בָּרָא *bārā'* to create, form, separate, divide, split, fashion by cutting

ANE creation accounts feature creation by separation of opposites
EG heaven/earth, earth/water → Gen 1

Etiology

What about the chaotic pre-creative state?

Answer: God is in total control of it

Minor Motif

Dark Watery Pre-Creative State

ANE creation accounts → the gods arise out of it

Author

S4

P Author

he uses divine name

אלהים

'*Elōhîm* God, gods

appears 35 times in Gen 1 (5 X 7)

• P author often uses 5s & 7s and their multiples

Origins Debate Implications

S5

YOUNG EARTH CREATION

loses temporal marker from which to date earth

NO mention of when the earth was created in Gen 1 → **destroyed Lamoureux's YEC**

PROGRESSIVE CREATION

attempts to align Gen 1:1 with the Big Bang

BUT Gen 1:2 is the opening scene

water, earth & time already present → NO mention of their creation

NB by only the second verse of the Bible → Scientific Concordism FAILS

Messages of Faith

S6

God is in total control of the pre-creative state (Re-Cycle & Re-Interpret)

NO hint that God arises out of it

NO hint any other gods arise out of it

NO hint God battles other gods as seen in some other ANE creation accounts

S7-8 H66

2. Genesis 1: The Six Day Creation

S9

Etiology

S10

What caused the origin of the heavens, earth, plants, animals & humans?

Answer: God created all of them

Major Motif

De Novo Creation

quick & complete → typical of ancient accounts of origins

Minor Motif

Vegetarianism. For both humans (v. 29) and animals (v. 30)

Author

P author. Often uses a Poetic format → very structured writing style

Parallel Panels

S11 H45

• built off Gen 1:2 & the two rhyming Hebrew words:

תָּהוּ *tōhu* formless

בְּהוּ *bōhu* empty

- God solves the problem of the formless & empty earth
 - 1st three days he forms the world (creation by separation of opposites → typical in ANE)
 - 2nd three days he fills the world

- forming & filling days are parallel to each other

Classic “Contradiction” in the Bible

S5

1st Day: creation of light

4th Day: creation of the sun

IF Gen 1 is a scientific account, THEN there’s a problem

BUT

IF poetic license/freedom, THEN no problem

☛ P author certainly knew that light comes from the sun!

Creation Day Formula

S6

highly structured & repetitious → typical of P author’s style

Introduction: God said, “. . .”

Command: “Let it be . . .”

Completion: It was so.

Judgment: God saw it was good.

Time Reference: “There was evening & there was morning—the nth day”

Debate over the Word “Day”

S7

יוֹם *yōm* (1) 24 hour day
(2) period of time

ημερα *ēmera* (1) 24 hour day
(2) period of time

In the Old Testament:

when the word “day” is with a number → 24 hour day

Genesis 1:

- uses numbers → first day, second day, etc
- each day ends with: “There was evening & there was morning—the nth day”

THEREFORE:

Days of Gen 1 are 24 hour days

S8-9 H 67- 68

Origins Debate Implication

S10

PROGRESSIVE CREATION (Day-Age Theory)

The days of Gen 1 are NOT 100s of millions of years long

☛ Scientific Concordism FAILS

Messages of Faith

S11

- There is only one God who is the Creator of the universe & life
- Polemic against astral religion → sun, moon & stars are NOT gods
- Affirms the Sabbath Commandment (4th Commandment → Day of Rest)
- God created humanity in the **Image of God**

S12

Term “Image of God” was used in ANE for kings

kings were believed to be the representatives of the gods on earth

In Gen 1 the term is TRANSFORMED (MORPHED) (Re-Cycle & Re-Interpret)

ALL humans are God’s “kings” & representatives on earth

3. Genesis 2: The Creation of Adam & Eve

S2

Traditional interpretation: Gen 2 offers details of the events on the 6th day in Gen 1

Adam & Eve are REAL HISTORICAL PEOPLE

☛ most Christians accept **Historical Concordism**

Etiology

S3

Where do humans come from?

Answer: God created them

Major Motif

De Novo Creation

Adam & Eve are created quick & complete → typical of ancient accounts of origins

Author

S4

J author → uses free flowing narrative & word play (NOTE: Gen 2-4 is one literary unit)

אָדָם 'ādām man, human, humankind & personal name “Adam”
 אֲדָמָה 'ādāmāh earth, ground, land → 1st 'ādām was made from 'ādāmāh earthling

Creation Order Conflicts Between Genesis 1 & 2

S5

Genesis 1 (P)		Genesis 2 (J)	
vegetation (fruit to eat)	3 rd Day	man	v. 7
birds	5 th Day	vegetation (fruit to eat)	v. 8-9
land animals	6 th Day	land animals & birds	v. 19
man & woman	6 th Day	woman	v. 22

Stylistic Differences Between Genesis 1 & 2

S6-7

	Genesis 1 (P)	Genesis 2 (J)
Literary Style	Poetic Structured & Repetitive	Narrative Free-Flowing
Scene Setting	Cosmic	Rural (No Sea)
Divine Name Hebrew	God 'Elōhîm	Lord God Yahweh 'Elōhîm
Creative Action	Verbal Commands	Hands-On
Divine Being	Transcendent & Heavenly	Immanent & Earthy
Relationship to Humans	Regal	Personal
Food Commands	Without a Prohibition Focus on Sustenance	With a Prohibition Focus on Obedience

EVIDENCE of two original sources: (1) Priestly source (500 BC/E) → Gen 1

S8

(2) Jahwist source (1000 BC/E) → Gen 2

Juxtaposition of two different, yet complementary creation accounts

S9

results in the revelation that God is BOTH: **Transcendent** (Gen 1) & **Immanent** (Gen 2)

Origins Debate Implication

S2

Creation event conflicts between Gen 1 & Gen 2 indicate some events definitely:

DID NOT HAPPEN

- ☛ Scientific Concordism FAILS

Messages of Faith

S3

- God created humanity to be relational with him
ANE: humans are inconsequential & slaves of the gods (Re-Cycle & Re-Interpret)
- God created humanity to be relational among themselves → Marriage
- God set limits on human freedom
- Humans are accountable to God

Excursus: Story, Allegory & Historicization

S4

To repeat:

S5

Garden of Eden Account in Genesis 2-3

Features: • fast-talking snake (3:1-5)

- mystical tree that imparts eternal life (2:9; 3:22, 24)
- mystical tree that imparts knowledge of good & evil (2:9, 17; 3:5, 7)
- mystical creatures → cherubim (composite creatures like Egyptian Sphinx) 3:24
- flaming sword flashing back & forth to protect the garden (3:24)

Now add Story/Allegorical type names:

- a man named “earthling”
- a woman named “life” or “mother of life”

J Author

he is using Story/Allegory & **Archetypes**

S6

Archetype Greek *arché*: first, beginning *tipos*: type, model, example

DEF: an original type or model from which similar things/beings are patterned

EG Adam & Eve are the archetypally human sinners

- ☛ Adam & Eve are YOU & ME

BUT REMEMBER:

S7

J author is also casting the Story & Archetypes within the framework of:

Ancient Cosmogony & Ancient Historiography

EG *de novo* creation of a 1st man & a 1st woman

The Redactor

S8

his intention in Gen 1-11 is to offer an account of real events in the origin of the world & people

- ☛ he is writing a: Cosmogony of the world

Historiography of humanity & the Hebrews

he takes the Story/Allegory & Archetypes in Gen 2-3 (J) and **HISTORICIZES** them

MY SPECULATION:

he probably did so unintentionally

like most people today & thru history → he read Gen 2-3 as an account of real events

BUT REMEMBER:

S9 H42

Redactor's Ancient Cosmogony & Ancient Historiography → INCIDENTAL

Redactor keeps J author's spiritual truths → MESSAGES OF FAITH

4. Genesis 3: The Fall

Adam & Eve eat the forbidden fruit & as a consequence sin enters the world

S2

(1) Humans Sin

S3

termed the ‘**Fall of Humanity**’

accepted as HISTORICAL by most Christians

(2) God Judges Humans for Sin → Suffering & Death Enter the World

S4

termed the ‘**Cosmic Fall**’

accepted as HISTORICAL by most Christians

PHYSICAL CHANGES IN NATURE:

- snake loses its legs
- birth pain increases for women
- ground is cursed → thorns & thistles appear → human work becomes painful
- physical death

Etiology

S5

Where does sin come from?

Answer: Adam & Eve

Where do suffering & death come from?

Answer: God’s judgment of Adam & Eve

Major Motif

S6

Lost Idyllic Age

a something-went-terribly-wrong-in-the-world account

a disruption of an original harmony in the world

the continuing effects of this past event into the present

Author

J author → Gen 2-4 is one literary unit

Origins Debate Implications

S7

YOUNG EARTH CREATION

claims that the Cosmic Fall is historical

this claim can be tested scientifically:

Prediction

IF true,

THEN suffering & death should appear AFTER humans in fossil record

Evidence

suffering & death are on earth 100s of millions of years BEFORE humans

S8 H52

Conclusion

Cosmic Fall is NOT HISTORICAL

PROGRESSIVE CREATION

S9

claims that Gen 3 refers to the **spiritual** death of humans

BUT God’s judgment deals with **physical** death:

“For dust you are and to dust you will return” Gen 3:19

Messages of Faith

S10

• Humanity’s greatest problem:

SIN against God → NOT obeying his Commands

• Sin has consequences

• God judges sin

Excursus: Genesis 3 & Theodicy S2

Theodicy

DEF: arguments justifying the existence of suffering & evil in a world created by all-loving, all-powerful, and all-knowing God

QUESTIONS: S3

- Is Gen 3 the FIRST STAGE of biblical revelation on the topic of theodicy, cast in ANE motifs?

Attempts to Answer:

why do we suffer?

why do we die?

Answer at this Stage:

1st man & 1st woman sinned & God judged them → God launches Cosmic Fall

- Does the Bible have Stages of Revelation? YES S4

Old Testament → New Testament

animal sacrifice → sacrifice of Jesus on the Cross

IMPLICATION: S5

more revelation on theodicy to come in the Bible after Gen 3

- ☛ Does Jesus offer the Final Stage of biblical revelation on the topic of theodicy? more anon

5. Genesis 4: 1st Family, 1st Murder & 1st Genealogy S6
(Non-Hebrews BEFORE the Flood)

Adam & Eve give birth to Cain & Abel S7

- Cain murders Abel
over a sacrifice to God → theological jealousy!

- Cain marries S8

Classic Problem in the Bible:

Where did he get his wife?

Answer: Cain married a sister

Eve was named “Eve” because “she was the mother of **ALL** the living” Gen 3:20

Therefore, the children of Adam & Eve married each other

Why is this not mentioned in Scripture? S9

Answer: incest is strictly forbidden in the Old Testament (Lev 18:6-17) **SQ 9**

- ☛ J author doesn’t want to set up an incestuous **Archetype**

Etiology S10

Where do the Non-Hebrews come from before the Flood?

Answer: the murderous line of Cain

- ☛ spiritual & political polemic!

Major Motif

Tribal Formation

origin of a people or nation from a single founding male individual → Cain

ADAM-TO-CAIN GENEALOGY (NON-HEBREWS) S11 H45

embedded in a free-flowing narrative, BUT highly structured & stylised with 7, 10 & 14 (7 X 2)

vicious murderer Lamech → 7th person from Adam

perfect number 7 used to emphasize the perfectly evil person

Author

S2

J author → uses free flowing narrative (Gen 2-4 is one literary unit)

Origins Debate Implications

S3

ORIGIN OF CULTURAL ADVANCES

S4 H45

APPEAR in ONE generation & in ONE family

animal domestication (v. 20)

harps & flutes (v. 21)

bronze & iron tools (v. 22)

BUT ARCHEOLOGICAL RECORD:

S5

flutes 30,000 BC/E

animal domestication 9000

bronze after 3200

harps 3000

iron after 1200

Conclusion:

Gen 4 is NOT historical

origin of cultural advances reflects ancient *de novo* type thinking → quick & complete

TEMPORAL REFERENT

S6

DEF: reference to something/one in an undated text that marks a time period

EG an undated letter referring to a laptop computer → date of letter after 1985

Gen 4:22 “Tubal-Cain forged all kinds of tools out of bronze & **IRON**”

Iron Age begins 1200 BC/E

☛ J author of Gen 4 lived **AFTER 1200 BC/E**

Messages of Faith

S7

• Humanity’s 2nd greatest problem:

SIN against humans

• J author echoes the two parts of the Ten Commandments: Gen 3: sin against God (Cs #1-4)

Gen 4: sin against humans (Cs #5-10)

Excursus: Origin of the 1st Genealogies

S8

Two Basic Components:

(1) RETROJECTION & DE NOVO CREATION

S9

• ancient people **OBSERVED** that humans were immutable (they did not change):

a human gives birth to a human, who gives birth to a human, who ... etc

• they **RETROJECTED** this observation backward thru time to the creation of the world:

S10

a human today descends from an older human, who comes from an even older human, ... etc

• they reasonably **CONCLUDED**:

S11

there must have been a 1st human/s who God/s created *de novo* (Quick & Complete)

(2) GENEALOGIES IN ORAL TRADITION

Notes 47 S12

ancient oral communities remembered important people in their oral tradition

☛ these genealogies include some real people

BUT human memory limits these genealogies to only about 5-10 generations

Gen 4 & 5 are short → reflecting their origin from oral tradition genealogies

The 1st Genealogies are a Combination of:

S13

(1) individuals who are a product of retrojection (like the 1st human) and who did not exist

(2) some real people from the community who did exist

6. Genesis 5: Genealogy of the Hebrews <u>BEFORE</u> the Flood	S2
Etiology	S3
Where do we [the Hebrews] come from? Answer: the Chosen Line of Seth	
Major Motif	
Tribal Formation origin of a people/nation from a single founding male individual → Seth	
Minor Motif	
Increased longevity BEFORE the Great Flood (Sumerian King Lists, Handouts 11 & 46) average age of individuals in Gen 5: 912 yrs	
Author	S4
P author he often uses a Poetic format → very structured writing style	
<u>Symmetrical 10 Individuals</u> same as Gen 11 (also by P author)	
<u>Repetitive Formula</u> X lived A years and fathered Z X lived B more years & had other sons & daughters X lived a total of C years [A + B] X DIED	
<u>Stylistic Numbers</u>	S5 H46
15/20 multiples of 5 subtract 7 from non-multiples of 5 → results in multiple of 5	
Why 5? MY speculation: to emphasize the Hebrews are people of the 5 Books (Pentateuch)	
Origins Debate Implication	S6
<u>YOUNG EARTH CREATION</u> ages/periods in genealogy are stylistic numbers & NOT real temporal numbers Therefore: can't be added up to date the age of the earth	
Messages of Faith	S7
• God created the Hebrews • The Hebrews are special → God's chosen people	
7. Genesis 6-9: Noah's Flood	S8
Etiology	S9
What caused the great flood? Answer: God's judgment for all the sin in the world ANE Etiology of great flood: divine judgment → the gods couldn't sleep because humans were too noisy!	
Major Motif	
Great Flood destruction of life and the survival of a few humans and some animals in a boat	

Two Authors

S2

P & J authors. Redactor intertwines P & J flood accounts

Poetic Structure of P Flood:

S3 H47

Chiasm

common ANE literary device featuring mirror images of topics

focuses readers to the centre & main message → **Gen 8:1** “God remembers Noah”

stylistic numbers

S4 H47

P author often uses 5s & 7s

word “God” (*’Elōhīm*) is used 15 times (3 X 5) in P flood

7X before chiasmic centre & 7X after it

150 day periods to increase & decrease the flood waters (3 X 50)

Origins Debate Implications

S5

YOUNG EARTH CREATION

claims Noah’s flood was global

BUT Geology & Archeology → NO evidence for a global flood

Noah’s Global Flood never happened

PROGRESSIVE CREATION

S6

claims Noah’s flood was local

BUT Biblical Flood (Gen 6-9) → flood covered Ararat Mts (16,000 ft) Gen 8:4

According to the Bible, Noah’s Flood was not local

RECYCLED & REINTERPRETED FLOOD MOTIF THEORY

S7

claims real Mesopotamian flood/s & flood hero/s were MORPHED into biblical flood & Noah

Noah’s flood never happened & Noah never existed

Messages of Faith

S8

- Humans are sinners
- Sin has consequences
- God judges sin
- God remembers the righteous person & saves them from his judgement

8. Genesis 10: The Table of Nations

S9

After the worldwide flood of Noah, the world was repopulated thru his 3 sons

ALL the nations are ANE nations

S10 H47

☛ Ancient Phenomenological Perspective of the origin of nations

Etiology

S11

- Where do all the nations come from?

Answer: they descend from Noah’s 3 sons → **Japheth, Ham & Shem**

“from them [3 sons] came the people who were scattered over all of the earth” Gen 9:19

- Where does our Hebrew community come from?

Answer: we descend from God’s chosen descendants of **Shem**

- Where do our enemies come from?

S12

Answer: they descend from that sexual pervert **Ham**

Ham “saw Noah’s nakedness” Gen 9:20-27

euphemism for having sex with his mother! (see Lev 18:7-8)

☛ Spiritual & Political Polemic

Major Motif

S2

Tribal Formation

origin of a people or nation from a single founding male individual → Noah

Two Authors

S3 H48

P & J authors. Redactor intertwines P & J post-flood table of nations accounts

P TABLE OF NATIONS

S4 H48

- very structured & uses very few words
like P author's Gen 5 & 11 genealogies
- repetitive formula → like P's Gen 1 creation account and his Gen 5 & 11 genealogies
A Son of Noah
Their Sons
Their Grandsons
Summary & reference to DIFFERENT LANGUAGES

WHY?

P author does not have a Tower of Babel account & confusion of languages

- stylistic numbers S5 H48
P author often uses 5s & 7s
 $15 \text{ (Japheth \& descendants)} + 10 \text{ (Ham \& desc.)} + 10 \text{ (Shem \& desc.)} = 35 \text{ (5 X 7)}$

J TABLE OF NATIONS

S6 H49

- wordy & free-flowing with little structure
Canaan & 11 sons → foreshadows the 12 tribes of Israel
- NO reference to DIFFERENT LANGUAGES

WHY?

J author has a Tower of Babel account & confusion of languages

Origins Debate Implications

S7

NO evidence ancient civilizations were wiped out by a flood & repopulated afterward

NO evidence that ALL the nations of the world descend from Noah's 3 sons around 2500 BC/E
archeology reveals civilizations living continuously throughout the world:

Mesopotamia	from 5000 BC/E
Egypt	5000
India	3000

TEMPORAL REFERENTS

S8

appearance in archeological record:

Hebrews (v. 22-25)	1200 BC/E
Philistines (v. 14)	1200
Calah "a great city" (v. 12)	1200
Meshech (v. 2)	1100
Tiras (v. 2)	1000
Sheba & Dedan (v. 7)	1000

J & P authors lived AFTER 1000 BC/E

EG reference to Canaan in an undated document
would indicate the document was written AFTER 1867

Messages of Faith

S9

- Unity of humanity
we are all part of one family
- Uniqueness of the Hebrews
God chose the Hebrews to be his people

9. Genesis 11:1-9. The Tower of Babel

S2

Humans build a tower in an attempt to reach heaven → they want to be divine S3

☛ only makes sense in a 3-tier universe with heaven just above our head

Gen 11:1, 9: “Now the whole world had one language and a common speech ... the Lord confused the language of the whole world.” → construction of tower stopped

Etiology

S4

Where do all the languages come from?

Answer: God confused an original language

Minor Motif

Sumerians (S. Mesopotamia) had a confusion of language account (Re-Cycle & Re-Interpret)

Author

J author. NOTE: J Table of Nations made no mention of DIFFERENT LANGUAGES

Origins Debate Implication

S5

God confuses an original language in many languages at one point in time

ARCHEOLOGICAL & HISTORICAL RECORDS

ANE languages evolved over a long period of time

BUT into Semitic Cognates (related languages)?

S6 H50

Why confuse an original language to look like languages had evolved?

☛ appearance of different languages at one point in time → NOT historical

Messages of Faith

S7

- Humans can't make themselves divine
- God judges such arrogance as sinful

10. Genesis 11:10-32. Genealogy of the Hebrews AFTER the Flood

S8

Etiology

S9

Where does our Hebrew community come from?

Answer: after the flood we descended from God's chosen descendants of Shem

Major Motif

Tribal Formation

origin of a people or nation from a single founding male individual → Shem

Minor Motif

Decrease in longevity AFTER the Great Flood

from 912 yrs (average in Gen 5) to 333 yrs

S10-11 H46

Echoes the Sumerian Kings Lists AFTER the flood

from 31,150 yrs (average Before Flood) to 530 yrs

S12-13 H46

Author

S14

P author. Often uses a Poetic format & stylistic 5s & 7s

Symmetrical 10 Individuals

same as Gen 5 (also by P author)

Repetitive Formula

X lived A years and fathered Z

X lived B more years & had other sons & daughters

Stylistic Numbers

S15 H46

12/20 multiples of 5 (15/20 in Gen 5) → emphasize the Hebrews accept 5 Books (Pentateuch)

Origins Debate Implication

S2

ages/periods are stylistic numbers & NOT real temporal numbers
Therefore
can't be added up and used to date the age of the earth

TEMPORAL REFERENT

S3

Abraham came from Ur of the Chaldeans (Gen 11:28, 31)
Ur not called "of the Chaldeans" until 1000 BC/E
☛ P author lived AFTER 1000 BC/E

Messages of Faith

S4

- Hebrews are special → God's chosen people
- Through Abraham → Hebrews will bless the ENTIRE world (Gen 12:2-3)

11. Genealogical Framework of the Hebrews

S5

based on Gen 5 & 11 genealogies & includes Isaac from Gen 21

P author uses Poetic format & stylistic numbers 5s & 7s for important people

SEVENS:

S6 H50

Enoch (godly man & did not die) #7 (7 X 1)
Eber (root of word "Hebrew") #14 (7 X 2)
Isaac (son promised by God) #21 (7 X 3)

FIVES:

S7 H50

Noah #10 (5 X 2)
Abraham #20 (5 X 4)

Total Number: 25 (5 X 5) → to emphasize Hebrews accept 5 Books (Pentateuch)

Origins Debate Implications

S8

real genealogies DO NOT unfold in such a symmetrical way

Gen 11 genealogy is at the Gen 11-12 Beginning of REAL History "Boundary"

IF Abraham is historical (Conservative Position)

THEN some people in the Gen 11 genealogy are probably historical

V. CONCLUSION: WHAT IS THE LITERARY GENRE OF GENESIS 1-11?

S9

ANSWER:

S10

Genesis 1-11 is *the Ancient Account of Origins of the Hebrews* [Incidental],
inspired by the Holy Spirit & revealing inerrant Spiritual Truths [Messages of Faith]

INCIDENTAL FEATURES

S11

Ancient

ancient cosmogony → science-of-the-day

ancient historiography → history-of-the-day & historicization of story/allegory

ancient story/allegory → fast-talking snake, mystical trees, cherubim

ancient motifs: (1) *De Novo* Creation (2) Lost Idyllic Age (3) Tribal Formation (4) Great Flood

ancient poetry → parallel panels, chiasm, genealogical frameworks

ancient stylistic numbers → 5s & 7s and their multiples

ancient methods of redaction → J & P sources

S12

ancient oral traditions → limited by memory & expect some incompleteness

ancient epistemology → "pre-logical" mentality & expect some contradictions

ancient notion of causality → divine *de novo* action (quick & complete)

ancient phenomenological perspective → perfectly logical considering the level of knowledge

Account S2

etiology → offer causes & reasons for origins
 explains & justifies the existence of the heavens, earth, living organisms, humans & Hebrews

of Origins S3

origin of universe & life
 origin of humans
 origin of suffering & death
 origin of Hebrews
 origin of other tribes & nations
 origin of enemies of the Hebrews → Babylonians, Egyptians, Canaanites
 origin of languages
 origin of **sin** → BIG problem of ALL humans → MAJOR THEME

of the Hebrews S4

after roughly 1000 BC/E → temporal referents in Gen 1-11

MESSAGES OF FAITH S5

Inspired by the Holy Spirit

- Foundations of Christian Faith
 Gen 1-11 sets the theological base for the rest of the Bible
- Accommodated to the level of Ancient People
 uses re-cycled ANE motifs of origins as a vessel & re-interprets with spiritual truths
- Sufficiency of Genesis 1-11
 reveals who God is & who we are
- Proficiency of Readers
 everyone in every generation is capable of understanding the spiritual truths

Revealing Inerrant Spiritual Truths S6

- (1) God created the universe & life (Gen 1 & 2)
- (2) the creation is very good (Gen 1)
- (3) God created humans in the Image of God (Gen 1)
- (4) humans are **sinful** (Gen 3, 4, 6-9, 10, 11) → MAJOR THEME
- (5) God judges humans for their **sinfulness** (Gen 3, 4, 6-9, 10, 11) → MAJOR THEME
- (6) God chose Israel to bless the entire world (Gen 12)

THE BOTTOM LINE: S7

- Gen 1-11 includes poetic, allegorical, & stylistic “dressing up” of the ancient accounts of origins
 BUT

Authorial Intentionality of P author, J author, and especially the Redactor
 was to write a: (1) Cosmogony &
 (2) Historiography

- Gen 1-11 DOES NOT align with the facts of science or the facts of history S8

at best: real local flood event/s with Mesopotamians
 some real Hebrew ancestors in the genealogies

SUGGESTION → SEPARATE DON'T CONFLATE S9 H42

separate the incidental Ancient Cosmogony & Ancient Historiography in Gen 1-11
 from the inerrant Spiritual Truths

EG Pope John Paul II (Roman Catholic) & JI Packer (Evangelical Protestant) **SQ 10-12** S10

MODERN ORIGINS DEBATE

I. KEY THOUGHTS	S2
1. Anti-evolutionism is alive & well in the United States & Canada	S3
<u>GALLUP POLL</u> (1982-2014) conducted 12X	S4
43-47% of Americans accept: “God created man pretty much in his present form at one time within the last 10,000 years”	
<u>ANGUS REID POLL</u> (2012)	S5
39% of Canadians reject or are uncertain that: “Human beings evolved from less advanced forms over millions of years”	
<u>ANGUS REID POLL</u> (2007)	S6
42% of Canadians accept “dinosaurs & humans co-existed” 21% not sure	
2. Factors Contributing to Anti-Evolutionism:	S7
• Problem with Public Education rarely deals with evolutionary biology or the hermeneutics of Gen 1-11	
• American Fundamentalist & Evangelical Protestant Tradition Concordist Hermeneutics	S8
<u>ABC PRIME TIME POLL</u> (2004)	S9
87% of US evangelicals believe 6 Day Creation (Gen 1) & Global Flood of Noah (Gen 6-9) are “literally true, meaning it happened that way word-for-word”	
Aggressive & Politically Powerful long history of attempting to put anti-evolutionism in public schools	S10
3. Anti-Evolutionism fuels the Origins Dichotomy	S11
most people believe that there really is an Evolution vs. Creation Debate	
 II. CATEGORIES ON THE ORIGIN OF THE UNIVERSE & LIFE	 S12
<u>THE CHART:</u>	S13 H51
• 5 basic origins positions	
• 14 categories on left margin	S14-15 H51
• Christian bias → but applicable to other religions	S16 H51
• Choose & Combine different categories → you create a new position!	S17 H51
• could add Agnostics: Religious Agnostics → uncertain about the existence of God Scientific Agnostics → uncertain about evolution	
 <u>THE KEY CATEGORICAL CONCEPT</u>	 S18 H51
SEPARATE DON'T CONFLATE:	
(1) God's Activity in the Origins of the Universe & Life cosmological divine action in origins	
FROM	
(2) God's Activity in the Lives of Men & Women personal divine action in relationships	

1. Young Earth Creation

common understanding of the “creationist” position

Scientific Issues

S7

- conflicts with every evolutionary science:

cosmological evolution, geological evolution & biological evolution

PEW RESEARCH CENTER (2009)

97% of US scientists accept: “humans and other living things have evolved over time”

QUESTION

are 97% of scientists wrong?

YEC Henry Morris claims they are “blinded by Satan” **SQ1**

is that reasonable?

- YEC Fossil Pattern Prediction

S8 H52

bones of every living organism should be at the bottom of the fossil record

EG humans & dinosaurs should be together

see Episode 131 & S12-16

BUT

S9 H52

☛ fossil record does not align with YEC prediction

shows an evolutionary sequence: fish → amphibians → reptiles → mammals

Hermeneutical Issues

S10

- accepts strict & literal scientific concordism & historical concordism in Gen 1-11

BUT to be consistent concordists, YECists need to accept a 3-tier universe

BUT

scientific concordism throughout the entire Bible → FAILS

S11 H53

scientific concordism & historical concordism in Gen 1-11 → FAILS

S12 H53

2. Progressive Creation (Day-Age Theory)

S13-17 H51

view of origins often held today by university educated Christians

Scientific Issues

S18

- creates a dichotomy between: (1) cosmological & geological evolution (accepted by PC)
(2) biological evolution (rejected by PC)

BUT

97% of US scientists accept biological evolution and cosmological & geological evolution

☛ they would reject this false dichotomy

- PC Fossil Pattern Prediction

S19 H52

claims the order of fossils aligns with the order plants & animals are created in Gen 1

BUT

S20

☛ fossil record does not align with PC prediction

EG Gen 1: birds are created on 5th Day/Age BEFORE land animals on 6th Day/Age

Fossil Record: land animals appeared 200 million yrs BEFORE birds

Hermeneutical Issues

S21

- accepts that the days in Gen 1 are periods that are millions of years long

BUT

in the Old Testament when the word “day” is with a number → 24 hr period

Gen 1 uses numbers: first day, second day, etc

each day ends with: “There was evening & there was morning—the nth day”

THEREFORE:

days of Gen 1 are 24 hr days

EG: PC Chart of Geologist Don Daee

S22 H54

3. Evolutionary Creation

minority view of origins in conservative Christianity

Greatest Issue

S7

- conflicts with 2000 yrs of Christian tradition
most Christians throughout history have been anti-evolutionists & concordists in Gen 1-11

Hermeneutical Solution

S8 H42

- accept Message-Incident Principle
cosmogony & historiography in Gen 1-11 is ancient → INCIDENTAL

- reject scientific & historical concordism in Gen 1-11

S9 H52

The Bible is not a book of science

- ☛ cannot be used to make fossil pattern predictions

Embryology-Evolution Analogy

S10

EC believes BOTH are teleological natural processes

information is loaded at conception (DNA) for a person to develop

information is loaded at the Big Bang (fine-tuning of physical constants) for the world to evolve

EC believes BOTH feature cosmological providentialism

S11

divine action is through **Ordained & Sustained** natural processes

EC believes BOTH reflect Intelligent Design

S12

self-assembly of humans in the womb

“You [God] knit me together in my mother’s womb.

I praise you because I am fearfully and wonderfully made” Ps 139:13-14

self-assembly of the universe & life

EC believes BOTH feature manifestation of Spiritual Realities

S13

during human embryology → Image of God & human sin appear in everyone

during human evolution → Image of God & human sin enter the world more anon

Key Categorical Concept

S14 H51

direct challenge to the Origins Dichotomy

SEPARATE DON’T CONFLATE:

God’s activity in origins **FROM** God’s activity in lives of men & women

4. Deistic Evolution

S15-19 H51

deism also called “God without Religion”

Comments

S20

- Why would an impersonal God create such personal & relational creatures like humans, and not have a relationship with them?

- ☛ deism provides a God with no accountability to him/her/it

BUT are humans accountable to Someone/Something greater than themselves?

- Deism is intellectually titillating for intellectuals

S21

BUT fails to meet spiritual needs of most people & transform lives

EG deism did not give birth to any church, school, hospital, etc

- Deism is in effect Practical Atheism

S22

No Lordship & No Worship of the deistic God

Ethics = Humanism

5. Dysteleological Evolution

S2-6 H51

common understanding of the “evolutionist” positionComments

S7

• Mass Delusion Problem?

are most people delusional because they believe in God?

EG **90%** of Americans believe in “God or a universal spirit”

Notes 30

40% of US scientists believe God answers prayer

N3

• Epistemological Problem?

S8

can we trust our brain regarding metaphysical topics if it has evolved thru **nothing but** 4Fs?

EG Plantinga’s 4 Fs Brain Argument

N14-16

Darwin’s Epistemological Dilemma & “Horrid Doubt”

N156

☛ self-referential incoherence

• Personal & Practical Problem?

S9

who can say to someone they love:

“I love you, but in reality I believe that love is **nothing but** a herd response”?• Personal Problem with 1st Commandment?

S10

nothing but a personal preference?**Summary of Chart**

S11

4 “creationist” positions (YEC, PC, EC, DeE)

S12 H51

3 “evolutionist” positions (EC, DeE, DysE)

2 positions that are BOTH “creationist” & “evolutionist” (EC, DeE)

THEREFORE: The Origins Dichotomy is a FALSE DICHOTOMY**Other Features:**

S13 H51

5% of US & Canada dysteleological

2 positions accept God created life through evolution (EC, DeE)

2 positions reject biological evolution (YEC, PC) → CONCORDISM in Gen 1-11

3 positions accept Conservative Christianity (YEC, PC, EC)

S14 H51

Accept:

- teleology
- intelligent design
- God created the universe & life
- personal God & divine action (dramatic & subtle)
- Bible is Word of God inspired by Holy Spirit
- Spiritual Correspondence → inerrant Spiritual Truths
- humans created in Image of God & humans are sinful
- Incarnation & Physical Resurrection of Jesus
- Biblical ethics

Suggestion:

S15 H51

let origins be a **difference** between Christians & NOT a reason for a **division** between Christians**Supplement: Lamoureux’s Personal Story of Coming to Terms with Evolution**

S16

Audio-Slide Episode

with diary entries

Handouts 55-57

Book chapter from *Evolutionary Creation: A Christian Approach to Evolution* (2008)online: www.ualberta.ca/~dlamoure/p_story.pdf

III. HUMAN ORIGINS: THE FINAL FRONTIER

This is the most challenging issue for Christians today

THE BIG QUESTION:

Was Adam a real person?

1. Biblical Texts on Human Origins

Genesis 2 & 3

- *de novo* creation of Adam & Eve
- Adam & Eve sin
- God judges Adam & Eve
 - ☛ God launches suffering & death into the world → COSMIC FALL

Jesus

- refers to Adam & Eve
- quotes Gen 1:27 & Gen 2:24

MATTHEW 19:4-6

1. “Haven’t you read that at the beginning the Creator ‘made them male and female’ [Gen 1:27], and said, ‘For this reason a man will leave his father and mother and be united to his wife, and the two will become one flesh’ [Gen 2:24]? So they are no longer two, but one. Therefore what God has joined together, let man not separate.”

Apostle Paul

- refers to Adam
- accepts that sin & death entered the world because of Adam’s sin

ROMANS 5:12, 14

2. “Just as sin **entered** the world through **one man**, and death through sin, and in this way death came to all men, because all sinned ... Death reigned from the time of **Adam**.”

1 CORINTHIANS 15:21-22

3. “For since death came through **a man**, the resurrection of the dead comes also through a man. For as in **Adam** all die, so in Christ all will be made alive.”

QUESTION

Christians believe in Christ, why not believe in Adam as well?

- accepts the COSMIC FALL

ROMANS 8:20-21

4. “The **creation** was **subjected to frustration**, and not of its own choice, but by the will of the One [God] who subjected it ... the creation itself will be liberated from its **bondage to decay** ... We know that the WHOLE creation has been **groaning** as in the pains of childbirth right up to the present time.”

Conclusion: Biblical Texts on Human Origins

1. The Bible accepts **Monogenism** Greek *monos*: one *genesis*: beginning

DEF: humanity arose from a ONE individual

Polygenism Greek *polus*: many

DEF: humanity arose from a GROUP of individuals

2. The Bible accepts Adam & Eve are historical

3. The Bible accepts the COSMIC FALL is historical

death, suffering & decay enter the world because God judged Adam & Eve for their sins

2. Western (Catholic & Protestant) Theological Tradition on Human Origins S2

St. Augustine S3

- accepts Adam is historical
- main formulator of the **Doctrine of Original Sin**:
 - (1) 1st sin ever committed by 1st man Adam
 - (2) sin transferred from Adam to all humans
 - ☛ all humans descend from Adam → Monogenism

Doctrine of Original Sin & a historical Adam appear in the most important Christian Creeds S4

Council of Carthage (418) Catholic Church SQ 2-5

Augsburg Confession (1530) Lutheran Church

Thirty-Nine Articles (1571) Anglican Church

Westminster Confession (1646) Presbyterian Church

- accepts the 1-Seed Theory (Preformatism) S5

5. “When the first couple were punished by the judgment of God, the **whole human race**, which was to become Adam’s posterity through the first woman, **was present in the first man.**”

St. Augustine, *City of God* (c. 426) 16.7

G. Walsh, et al (NY: Doubleday, 1958), 271

6. “God, the Author of all natures but not of their defects, created man good; but man S6
corrupted by choice and condemned by justice, has produced a progeny that is both corrupt and condemned ... For **we all existed in that one man** [Adam] since, taken together we were the one man who fell into sin ... our nature was already present in **the seed** from which we were to spring.” Ibid. 279

Pope Pius XII *Humani Generis* (1950) S7

- possible to accept evolution of body, but God creates souls by divine intervention S8

7. “The teaching authority of the Church **does not forbid** ... the doctrine of evolution, in as far as it inquires into the origin of the human body as coming from pre-existent and living matter—for Catholic faith obliges us to hold that **souls** are immediately [interventionistically] created by God.”

“*Humani Generis*” C. Carlen, ed., *Papal Encyclicals 1939-1958*

(USA: McGrath Publishers, 1981), 181

- firmly rejects polygenism because of Doctrine of Original Sin S9

8. “There is question of another conjectural opinion, namely **polygenism**, the children of the Church by **no** means enjoy such liberty. For the faithful **cannot** embrace that opinion which maintains either:

- that after **Adam** there existed on this earth true men who did not take their origin through natural generation from him as from the first parent of all **or**
- that **Adam** represents a certain number of first parents [polygenism].

Now it is in **no way apparent** how such an opinion [polygenism] can be S10-11

reconciled with that which the sources of revealed truth [Bible] and the documents of the Teaching Authority of the Church [St. Augustine] propose with regard to **original sin**,

[1] which proceeds from a sin actually committed by an individual **Adam** and

[2] which through generation is **passed on to all** and is in everyone as his own.”

Ibid. 182

QUESTION

S2

is a door being left open regarding the hermeneutics of Gen 2 & 3?

“it is no way apparent **HOW** such an opinion [polygenism] can be reconciled with” the Bible & the Tradition introduced by St. Augustine

HOW?

S3

- recognize the Bible has an **Ancient Biology**

- ☛ *de novo* creation of Adam

- recognize St. Augustine had an **Ancient Biology**

S4

- ☛ *de novo* creation of Adam

REMEMBER:

St. Augustine was a Scientific & Historical Concordist in Gen 1-11

he accepted:

- geocentricity, firmament & waters above Handouts, 79 & 88
- worldwide flood Notes, 120-121
- spontaneous generation Ibid.
- origin of life through seed principles Ibid.

HOW?

S5

- let the Ancient Biology (*De Novo* Creation of Adam & 1-Seed Theory) be **INCIDENTAL & NOT the MESSAGE OF FAITH**

- apply the Message-Incident Principle to the Western Christian Tradition **SEPARATE** Augustine’s ancient biology from his theology

S6

Pope John Paul II “On Evolution” (1996)

S7

- affirms the scientific theory of evolution

9. “Today, nearly half a century after the publication of the encyclical [i.e., Pius XII], new knowledge leads to the recognition of the theory of evolution as **more than a hypothesis.**”

JP II, “Message to Pontifical Academy of Sciences on Evolution,”
Origins: CNS Documentary Service 26 (5 Dec 1996), 415

- affirms the spiritual uniqueness of humans from our pre-human evolutionary ancestors

S8

10. “With man, then, we find ourselves in the presence of an **ontological** difference, an **ontological** leap ... an “**ontological** discontinuity.”

Ibid.

- ☛ humans have the Image of God & are sinful

- **NO MENTION OF ADAM**

S9

is the silence speaking volumes & reflecting pastoral sensitivity to people in the pews?

Conclusion: Western (Catholic & Protestant) Theological Tradition on Human Origins

S10

1. Based on the Bible

accepts Monogenism

Adam is historical

all humans descend from him

accepts Scientific & Historical Concordism in Gen 1-11

do you see a hermeneutical problem?

2. Deeply impacted by St. Augustine

S11

accepts the Doctrine of Original Sin

- ☛ doctrine depends on Adam being historical

QUESTION:

S12

DOES CHRISTIANITY DEPEND ON A HISTORICAL ADAM?

IV. EVOLUTIONARY CREATION: TOWARD A CHRISTIAN HYPOTHESIS ON HUMAN ORIGINS

1. Human Origins & Metaphysics-Physics Principle

METAPHYSICS

God created humans

God ordained, sustained, and intelligently designed the creation of humans

humans have spiritual realities: (1) Image of God

(2) sinful

PHYSICS

human evolutionary sciences offer overwhelming evidence that humans evolved from pre-humans

COMPLEMENTARY RELATIONSHIP:

God ordained, sustained, and intelligently designed a teleological evolutionary process to create

humans, and during this process humans arose manifesting the Image of God and sinful behavior

2. Human Origins & Manifestation of Spiritual Realities

NOTE: humans DO NOT evolve from monkeys or chimpanzees!!!

humans & chimps descend from a Last Common Ancestral Population (6 mya)

☛ 6000 transitional fossils between LCAP & humans

Anatomically Modern Humans

look like us & appear about 200,000 ya

Behaviorally Modern Humans

act like us & appear about 50,000 ya → 1st appearance of the Image of God & sinful behavior

Theories on Manifestation of Spiritual Realities in Behaviorally Modern Humans:

(1) EVOLUTIONARY MONOGENISM

a pair of pre-humans are given Image of God & moral responsibility quickly at one specific point in time & they soon sin

☛ Adam & Eve

(2) PUNCTILIAR POLYGENISM

a group of pre-humans are given Image of God & moral responsibility quickly at one specific point in time & they soon sin

☛ many Adams & many Eves

(3) GRADUAL POLYGENISM → Evolutionary Creation

spiritual realities are manifested slowly & MYSTERIOUSLY over an extended period of time & over many generations of individuals

☛ **NO** Adam/s & **NO** Eve/s

COMMENTS:

- (1) Evolutionary Monogenism & (2) Punctiliar Polygenism:

BOTH accept SCIENTIFIC CONCORDISM

they tack on Adam/s and Eve/s on the tail end of biological evolution

- BUT this is categorically inappropriate

BOTH CONFLATE: ancient science (*de novo* creation of Adam & Eve)

&

modern science (human evolution)

- This is the same as tacking on the tail end of cosmological evolution a 3-tier universe does anyone want to do that?

THE BIG QUESTION

S2

Was Adam a real person?

TECHNICAL ANSWER

S3

Adam is the retrojective conclusion of ancient biology (immutability of living organisms)Retrojection Latin *retro*: backward *jacere*: to throw, cast

DEF: taking present experience & casting it backward in time to explain the past

THINK LIKE AN ANCIENT PERSON:

S4

- ancient people observed that humans are immutable (never change) & only give birth to humans:
humans birth → humans birth → humans birth

- they retrojected “humans birth humans” observation back in time to creation of the world:
← humans birth ← humans birth ← humans birth

S5

- they reasonably concluded:

S6

(1) there must have been an original 1st human(2) this human was created *de novo* (quick & complete) → Adam

S7

THE BOTTOM LINE:

S8

Adam never existed!

Adam was created by retrojecting (extrapolating) the ancient observation of human immutability

HUGE IMPLICATIONS:

S9

- challenges Christian Tradition & the Doctrine of Original Sin

S10

NO 1st man to commit the 1st sinNO 1st man from which sin is transferred to all humans

- challenges the COSMIC FALL

S11

NO 1st man to causally connect to the origin of death

BUT solves the problem with the Fossil Record

S12 H52

Bible: death appears **after** humansFossil Record: death appears 100s of millions of years **before** humans☛ no problem because there is no 1st man to causally connect to the origin of death(3) **GRADUAL POLYGENISM** → Evolutionary Creation

S13

- rejects SCIENTIFIC CONCORDISM

de novo creation of Adam is ancient science

- accepts spiritual realities of Image of God & human sinfulness

EMBRYOLOGY-EVOLUTION ANALOGY

S14-18 H60

BOTH manifest the Image of God & sinfulness during a natural process

BUT questions arise on when or how spiritual realities appear

According to Gradual Polygenism:

WHEN?

S19 H59

roughly 50,000 yrs ago → Behaviorally Modern Humans

buried their dead with items suggesting a religious belief in an afterlife

HOW?

gradual & Mysterious manifestation over many generations

3. Human Origins & Message-Incident Principle

S2

MESSAGE

S3 H60

Inerrant Spiritual Truths

- God created humans
- humans bear the Image of God
- humans are sinful
- God judges humans for sin

INCIDENT

S4 H60

Ancient Biology & Ancient Historiography

ORIGIN OF LIFE

De Novo Creation Motif1st human created quick & complete → **Adam**

Tribal Formation Motif

1st tribal head from which all humans descend → **Adam**

ORIGIN OF DEATH

S5 H60

Lost Idyllic Age Motif

death enters the world because God judges 1st human sinner → **Adam**

☛ God launches the COSMIC FALL

curses & binds the whole creation with death, suffering & decay**Re-Cycled & Re-Interpreted Motifs of Origins Theory**

S6 H43

- motifs of origins are the scientific & historical paradigms-of-the-day

Hebrews: (1) re-cycled ANE motifs of origins

(2) re-interpreted these motifs by replacing pagan theology with Hebrew theology

this literary process was inspired by God

☛ DIVINE ACCOMMODATION

- motifs are incidental vessels that deliver spiritual truths

Lost Idyllic Age Motif: The Etiology of Origin of Death & Cosmic Fall

S7

- this ancient motif is a something-went-wrong-in-the-world account
 - points back to the disruption of an original harmony in the world
 - negative effects of this event continue into the present

Answers the Etiological Question:What is the cause or reason for the **bad things** in the world?

- Gen 3 explains how death & the Cosmic Fall entered the “very good” creation (Gen 1:31)

S8

Adam sinned and God: (1) cursed the earth (v. 18) → Cosmic Fall

(2) condemned Adam to die (v. 19) → Origin of Death

BUT the Lost Idyllic Age Motif is Ancient Historiography

S9

an ancient understanding of history

like ancient science → ancient historiography does not align with historical reality

THEREFORE

S10

the causal connection in the Bible between the sin of Adam and the origin of death & the Cosmic Fall is based on ancient historiography

☛ NO causal connection between sin and death, suffering & decay

NO COSMIC FALL → confirmed by the Fossil Record

S11 H52

4. Human Origins & the Apostle Paul

S2

Paul believed:

S3

- Adam was a real person (Rom 5 & 1 Cor 15)
- Death entered the world because of Adam's sin (Rom 5:12)
- WHOLE creation is in bondage to decay (Rom 8:21) → COSMIC FALL

Quotes 2-4

THEREFORE

S4

Paul accepted a causal connection between sin of Adam & origin of death and Cosmic Fall

QUESTION 1

S5

does Paul's belief in Adam & the Cosmic Fall make both PHYSICAL REALITIES?

QUESTION 2

S6

what else did Paul believe regarding the PHYSICAL world?

KENOTIC HYMN Phil 2:10-11

S7 H6 Notes 17-18

Jesus is Lord: (1) in heaven

(2) on earth

(3) IN THE UNDERWORLD

QUESTION 3

S8

does Paul's belief in the 3-tier universe make it a PHYSICAL REALITY? **NO!**

this is also the case with Paul's belief in Adam & the Cosmic Fall

☛ his belief DOES NOT make them PHYSICAL REALITIESCONSISTENCY ARGUMENT

S9

Paul accepted Ancient Astronomy & Ancient Geography (3-tier universe)

THEREFORE

consistency argues Paul also accepted **Ancient Biology**

- an ancient view of the ORIGIN OF LIFE

de novo creation of Adam

- an ancient view of the ORIGIN OF DEATH

entrance of death into the world through Adam

CONCLUSION

S10

Paul's belief in the origin of death is based on **Ancient Biology**

- NO causal connection between sin & the origin of death
- NO COSMIC FALL

S11

Message-Incident Principle & the Kenotic Hymn (Phil 2:10-11)

S12 H5

SEPARATE

Message of Faith → Jesus is Lord over the creation

FROM

Incidental Ancient Science → 3-Tier Universe

DON'T CONFLATE!

SEPARATE

SPIRITUAL TRUTHS (Message of Faith)

Humans are sinful

God judges humans for sin

*Jesus died for sinful humans**THE GOSPEL**Jesus rose physically from death**Jesus offers the hope of eternal life*

FROM

ANCIENT BIOLOGY & ANCIENT HISTORIOGRAPHY (Incident)

S3 H61

ORIGIN OF LIFE

De novo creation of Adam

ALL humans descend from Adam

**PRINCIPLE OF
ACCOMMODATION**

ORIGIN OF DEATH

Death & COSMIC FALL appeared because of Adam

DON'T CONFLATE!

THE CHALLENGE:

S4

- messages are seamlessly interwoven with incidental Ancient Biology & Ancient Historiography easy to CONFLATE
- messages include the Gospel → “By this Gospel you are saved ...” 1 Cor 15:1-8 **SQ 6**
most Christians CONFLATE Adam & the Gospel → reason most reject human evolution

CONCLUSION

S5

Evolutionary Creation: Toward a Christian HYPOTHESIS on Human Origins

1. Christian Tradition has:

S6

CONFLATED Spiritual Truths with Incidental Ancient Biology & Ancient Historiography (Adam)

- ☛ mistakenly turned an incidental element (Adam) into a Doctrinal Truth

2. The Bottom Line on Evolutionary Creation:

S7-9

***The Image of God & human sin entered the world,
but NOT through Adam.***

Christianity is NOT dependent on a historical Adam.

NOT easy! Requires an academic understanding of hermeneutics

3. Most Christians perceive human evolution as a threat to the Bible and to human dignity

S10

BUT a final thought for all Christians:

S11 H59

God has evolved a creature (the chimp) which is physically almost identical to humans (about 99% of the same genes), but can't you see that:

WE ARE “SOMETHING MORE” THAN OUR PHYSICAL FLESH!!!

We are creators like our Creator

because we have been created in the Image of God

Lamoureux

THE PROBLEM OF EVIL

I. KEY THOUGHTS

1. The existence of evil is the greatest challenge for theism.

1. “There is little doubt that the **problem of evil** is the most serious **intellectual** difficulty for **theism**.”

Stephen Davis, *Encountering Evil* (Knox Press, 1981), 2

THE PROBLEM

IF God is all-knowing,

THEN he must know about evil

IF God is all-loving,

THEN he must want to abolish evil

IF God is all-powerful,

THEN he must be able to abolish evil

BUT evil exists

THEREFORE

God is not all-loving & not all-powerful

OR

God does not exist

THE SOLUTION

Theodicy θεος (theos) God δίκη (*dikē*) justice

DEF: arguments justifying the existence of evil in a world created by an all-loving, all-powerful, and all-knowing God

2. ALL theodicies include the notion of “Greater Good”

God allows evil because it serves an ultimate purpose in bringing overall good into the world

EG selling of Joseph by his brothers → he ends up in Egypt & his family is saved from famine

2. “You [his brothers] **intended to harm me**, but **God intended it for good** to accomplish what is now being done, the saving of many lives.”

Gen 50:20

3. Christian Theodicies have been intimately connected to Gen 3 & the Fall

☛ especially the COSMIC FALL

Protestant Reformer John Calvin

3. “The earth was **cursed** on account of **Adam** [Gen 3:18] ... the **whole** order of nature was

subverted by the **sin of man** ... Moses does not enumerate all the disadvantages in which man, by sin, has involved himself; for it appears that all the **evils** of the present life, which experience proves to be innumerable, have proceeded from the same fountain.

The inclemency of the air, frost, thunders, unseasonable rains, drought, hail, and whatever is disorderly in the world, are the **fruits of sin**. Nor is there any other primary cause of **diseases** ... For if the **stain of sin** had not polluted the world, no animal would have been addicted to prey on blood [ie predation], but the fruits of the earth [plants] would have sufficed for all, according to the method which God had appointed [Gen 1:30].”

Commentaries on Genesis (Baker, 1554) I:114, 117; *Isaiah* (Ethereal Library, 1559) I:296

COMMENTS:

- Calvin steeped in scientific & historical concordism

BUT Gen 3 is built on the Lost Idyllic Age Motif → ancient historiography

- Fossil Record falsifies Cosmic Fall

inclemency of weather, diseases & predation appear before humans

IRENÆAN THEODICY

S2

Irenaeus the Bishop of Lyons (130-202)

BASIC PRINCIPLE:

Original Innocence

- God created the original creation innocent & immature
- claims that morally free & spiritually mature people cannot be created instantaneously
- people need to experience moral evil & horrid natural realities
- moral evil & horrid natural realities are essential in the process of spiritual development

NOT a downward fall from an originally perfect creation

BUT an upward development toward spiritual maturity

COMMENTS:

S3

Pedagogical (Educational) Theodicy

moral evil & horrid natural realities are “teaching tools”

BUT little impact on Western Church

Irenaeus a child of his time → accepted a historical Adam & Eve

Modern Theodicies

S4

JOHN HICK’S IRENÆAN-EVOLUTIONARY THEODICY

S5

recasts Irenaeus’s pedagogical theodicy in an evolutionary context

BASIC PRINCIPLE:

Soul-Making Universe

- the purpose of the world is to create people: (1) to know God
(2) to love God
- requirement of the universe → Epistemic Distance from God
for humans to have true freedom to develop an uncoerced relationship with God,
the world must appear **religiously ambiguous**
- moral evil & horrid natural realities contribute to this ambiguity

4. “In order to be a person, exercising some measure of **genuine freedom**, the creature must be brought into existence, not in the immediate divine presence, but at a ‘distance’ from God. This ‘distance’ cannot of course be spatial; for God is omnipresent. It must be an **epistemic distance**, a distance in the cognitive dimension. And the Irenaean hypothesis is that this ‘distance’ consists, in the case of humans, in their existence within and as part of a world which functions as an autonomous system and from within which **God is not overwhelmingly evident**. It is a world ... [that] is **religiously ambiguous**, capable **both** of being seen as **purely natural phenomenon** and of **being seen as God’s creation** and experienced as mediating his presence. In such a world one can exist as a person over against the Creator.”

S6

S7

Hick, “Irenaean Theodicy,” *Encountering Evil*, 43COMMENTS:

S8

a distancing or hiddenness of God is necessary for us to have true freedom

☛ what would the world be like if God was directly in-our-face?

Star Trek Jesus

S9

beamed down for our every whim & problem

Biblical Jesus

5. Jesus: “For where two or three come together in my name, there am I with them.” Matt 18:20

- Hick employs the traditional theological concepts:

S2

Deus Absconditus Latin: God who hides

DEF: the hidden character of God

the world → “as purely natural phenomenon”

“as an autonomous system”

Deus Revelatus Latin: God who reveals

DEF: the revealing character of God

the world → “as mediating his [God’s] presence”

“being seen as God’s creation”

QUESTION

S3

is the natural world “**religiously ambiguous**” as Hick states?

is there a balance between *Deus Absconditus* & *Deus Revelatus*?

OR

is the natural world **religiously unambiguous**?

Natural Revelation

Romans 1 & Wisdom 13 state that the world points to God’s existence

humans are accountable & “without excuse” regarding this revelation

- **Theodicean Juxtaposition**

Notes 149 S4

DEF: the impact of Intelligent Design in nature is an overpowering response to the

existence of both moral evil & horrid natural realities

☛ *Deus Revelatus* trumps *Deus Absconditus*

ID is a incessant “voice” in the world declaring:

(1) God is in complete control of the world

(2) God is completely knowledgeable of moral evil & horrid natural realities

PROCESS THEODICY aka Theology of Nature

S5

reformulates traditional Christian doctrines

BASIC PRINCIPLE:

God & humans are in a never-ending process of “becoming”

God is grovelling along through time just like humans

Panentheism

S6

NOT pantheism (everything is God)

Dipolar God

belief that the world and God are inseparable realities, yet distinct realities

the world as God’s body & God as the world’s mind or soul

REJECTS:

traditional view of God’s omniscience → God is not all-knowing

traditional view of God’s omnipotence → God is not all-powerful

THEREFORE:

S7

God cannot do anything about moral evil & horrid natural realities

☛ God is NOT in control of the world

COMMENT:

DEFLECTS responsibility away from God

III. TOWARD A CHRISTIAN HYPOTHESIS ON THEODICY

S2-3

1. Biblical Considerations

S4

HERMENEUTICS OF GENESIS 3 & THE FALL

S5

- Gen 1-11 features ancient cosmogony & ancient historiography (recycled ancient motifs)
scientific & historical concordism NOT possible
- Cosmic Fall in Gen 3 falsified by the fossil record
suffering & death have been in the world 100s of millions of years before humans appear
 - ☛ we need to move beyond Augustinian (Western) Theodicy

BASIC PRINCIPLE:

S6

The Bible reveals the topic of theodicy in stages

Revelatory Development in the Bible

S7

foundational to Christianity → OLD Testament develops into NEW Testament

6. Jesus: “Do not think that I have come to abolish the Law or the Prophets [Old Testament];
I have not come to abolish them but to **fulfill** them.” Matt 5:17

Examples of Revelatory Development/Fulfilment:

S8

Food Laws

OT: some foods are unclean (Lev 19)

NT: Jesus declares all foods clean (Mk 7:19)

Ethical Laws

OT: adulterers were stoned to death (Deut 22:22)

NT: Jesus tells adulterers not to sin again (Jn 8:11)

Atonement for Sin (making amends for sin)

OT: animal sacrifice (Lev 4)

NT: sacrifice of Jesus on the Cross (Heb 10:4, 10)

COMMENTS:

S9

developments in Ethics & Atonement for Sin → **RADICAL** shifts!!!

☛ **PRECEDENT** for revelatory development with theodicy

THREE STAGES OF THEODICY IN THE BIBLE

S10

Stage 1: The Fall (Gen 3)

S11

Sin **causally connected** to suffering & death

Adam & Eve sin → God launches suffering & death into the world (Cosmic Fall)

Stage 2: The Book of Job

S12

BEGINS to challenge the notion that sin is **causally connected** to suffering

Chapters 1-3

Job loses all possessions, his children are killed & he is stricken by a debilitating disease

Chapters 4-37

Job’s “friends” are still in Stage 1 → Job’s suffering is **causally connected** to his sin

Chapters 38-41

S13

God enters & points to the Creation & asks Job: (ID Argument)

- where were you when the foundations of the earth were set? Job 38:4
- do you know the laws of the heavens? 38:33
- do you feed the lions? 39:39

Chapter 42: The Conclusion

S14

Job is humbled by the Creation & God’s ID Argument

7. “Surely I spoke of things I did not **understand**, things too wonderful for me to **know**.”

Job 42:3

COMMENTS:

S2

- Book of Job is structured on the **Theodicean Juxtaposition**
Job's suffering (chap 1-37) is answered by design in nature (chap 38-41)
☛ ID trumps suffering & reveals that God is in complete control
- God does NOT give a **verbal** response S3
eg, God does not say: "This is how theodicy works ..."
God gives a **non-verbal** response → ID argument
Message: "I'm God & I'm in control of the world, including your suffering"
- **Mystery** is a part of theodicy S4
Job: "things I did not **understand**, things too wonderful for me to **know**"
☛ humans will never fully understand the issue of theodicy

Stage 3: Jesus & the New Testament

S5

Theodicy is fulfilled by Jesus (Matt 5:17) Quote 5

sin **DISCONNECTED** from suffering & death

☛ **RADICAL** revelatory development → suffering & death have purpose (teleology)!!!

Teleology (Purpose) of Suffering & Death

S6

- suffering is used to display the work of God
- 8. "As Jesus went along, he saw a **man blind from birth**. His disciples asked him, 'Rabbi, who sinned, this man or his parents, that he was born blind?' [Stage 1 Theodicy]. Neither this man nor his parents sinned,' said Jesus, "but this happened so that the **work of God might be displayed in his life.**" John 9:1-3

COMMENTS:

S7

Jesus had the perfect opportunity to say:

"Neither this man nor his parents sinned, but it's because in Gen 3 Adam & Eve sinned and suffering entered the world"

Jesus **DISCONNECTS** sin from suffering

by implication, he also disconnects sin from death

- death is used to glorify God S8
- 9. At the tomb of Lazarus: "Then Jesus said, 'Did I not tell you that if you believed, you would see the **glory of God**? ... Jesus called in a loud voice, 'Lazarus, come out!' The **dead man** came out, his hands and feet wrapped with strips of linen, and a cloth around his face.'" John 11:40, 43
- suffering & death of Jesus are used for eternal salvation S9
- 10. "Although he [Jesus] was a son, he **learned** obedience from what he **suffered** and, once made perfect, he became the source of **eternal salvation**" Heb 5:8

COMMENTS:

pedagogical theodicy extends to Jesus → he learned from suffering!!!

Intelligent Design, Goodness of Creation & Horrid Natural Realities

S10

Jesus' fulfilment of theodicy sheds a **RADICAL** new light on suffering & death

horrid natural realities can be seen as purposeful & **TELEOLOGICAL**:

- (1) another component of God's design in nature
they complement traditional design arguments N90
- (2) another component of God's "very good" creation (Gen 1:31) S11

2. Logical Considerations

S2

Theodicy includes rational justifications in responding to the intellectual problem in Key Thought #1

NOTE: cold, hard, academic arguments rarely help people who are suffering

BASIC PRINCIPLES

S3

• Human Sin

we are the greatest source of moral evil in the world

☛ **Don't blame God, blame us!!!**

• Faith

S4

faith is needed to believe:

God is ultimately in complete control of the world

God is fully aware of people suffering from moral evil & horrid natural realities

God will hold people accountable for their moral evil acts at the Final Judgment

• Mystery

S5

we will never fully understand why God allows moral evil & horrid natural realities

this is due to the limits of our creaturely epistemology

SPECIFIC PRINCIPLES

S6

• Fulfilment by Jesus (Matt 5:17) Quote 5

don't go to Gen 3 for theodicy, but to the teaching & example of Jesus

☛ moral evil & horrid natural realities are opportunities to display the work of God

& glorify him in our life

• Greater Good

S7

moral evil & horrid natural realities are used by God for the greater good of creating humans:

(1) to love God

(2) to love other humans

(3) to enjoy eternity with God & other humans who love him

• Pedagogy

S8

moral evil & horrid natural realities are “teaching tools” in spiritual development

contribute to discipline, testing of faith & spiritual awakening

• Theodicean Juxtaposition

S9

ID in nature ultimately trumps moral evil & horrid natural realities

moral evil & horrid natural realities contribute to divine hiddenness (*Deus Absconditus*)

☛ creates a world with genuine freedom and which requires faith

EXAMPLES

S10

PERFECT SOUL-MAKING UNIVERSE

S11

- 11.** “Honestly now, if you were God, could you possibly dream up any more **educational**, contrasty, thrilling, beautiful, tantalizing world than Earth to **develop spirit** in? If you think you could, do you imagine you would be outdoing Earth if you designed a world free of germs, diseases, poisons, pains, malice, explosives and conflicts so its people could relax and enjoy it? Would you, in other words, try to make the world nice and safe—or would you let it be provocative, dangerous and exciting? In actual fact, if it ever came to that I'm sure you would find it **impossible to make a better world than God has already made.**”

Guy Murchie, *Seven Mysteries of Life* (Houghton Mifflin, 1978), 622

COMMENTS:

S12

a pedagogical theodicy

moral evil & horrid natural realities part of God's “very good” creation (Gen 1:31)

GREATER GOOD FROM AN ETERNAL PERSPECTIVE

S2

12. “I consider that our present **sufferings** are not worth comparing to the glory that will be revealed in us ... For our light and momentary troubles are **achieving** for us an eternal glory that far outweighs them all ... **all things** work together for **good** to those who love God.”

Rom 8:18, 28; 2 Cor 4:17

COMMENTS:

“all things” → include moral evil & horrid natural realities

IF there is eternal life,

THEN our complaints in this life will look quite insignificant

S3

SPIRITUAL DEVELOPMENT & HOPE OF ETERNITY

S4

13. Letter by Emma Darwin to Charles (1861): “I am sure you know I love you well enough to believe that I mind your suffering nearly as much as I should my own and I find the only relief to my mind is to take it as **from God’s hand**, and to try to **believe** that all suffering and illness is **meant** to help us to exalt our minds and to look forward with **hope** to a **future state**.”

*Autobiography of Darwin, 237-8*COMMENTS:

a pedagogical theodicy that reflects the importance of faith in theodicy

Emma Darwin was very religious

SPIRITUAL DEVELOPMENT & TESTING OF FAITH

S5

14. “Consider it **pure joy**, my brothers, whenever you face **trials** of many kinds, because you know that the **testing** of your faith **develops** perseverance. Perseverance must finish its work so that you may be **mature and complete**, not lacking anything.”

James 1:2-4

COMMENTS:

radicality of Christian theodicy!

how often to we consider our trials PURE JOY?

GOODNESS OF DISCIPLINE

S6

15. “God **disciplines** us for our **good** that we may share in his holiness. No **discipline** seems pleasant at the time, but painful. Later on, however, it produces a harvest of righteousness and peace for those who have been trained by it.”

Heb 12:10-11

16. “Before I was **afflicted** I went astray, but now I obey your [God’s] word. You are **good** and what you do is **good**; **teach** me your decrees ... It was **good** for me to be **afflicted** so that I might **learn** your decrees ... In your faithfulness you have **afflicted** me.”

Ps 119:67-8, 71, 75

COMMENTS:

Christians are notorious in praising God for toys—cars, careers, homes, etc

S8

☛ ever hear Christians praising God for disciplining them?

SPIRITUAL AWAKENING

S9

17. C.S. Lewis: “God whispers to us in our pleasures, speaks in our conscience, but **shouts in our pains**: it is his megaphone to rouse a deaf world.”

Problem of Pain (Macmillan, 1962), 93COMMENTS:

pain forces most people to think seriously about the largest questions in life

☛ is there a God? is there life after death? is eternal life attainable?

3. Experiential Considerations

S2

Theodicy also includes a personal component that is “meta-rational” or “supra-rational”

NOTE: our lives are not limited to just logic & math

we are also shaped by “messy” personal experiences

messy personal experience has it’s own “logic” that transcends rationality

EG popular aphorism: “The heart has its own reasons”

BASIC PRINCIPLES

S3

- justification for moral evil & horrid natural realities includes “understanding” they have purpose by **personally living** through them

to appreciate this principle often comes with time & many experiences such as these

QUESTION:

S4

have you ever had a really **evil** or **horrid** experience, and now you look back and say:

“I’m glad that happened because it was **good** for me?”

IF you can,

THEN your **theodicy** includes an experiential (personal) component

- personal struggles are GOOD!!!

S5

struggling with God is an essential part of the human spiritual voyage

- questioning God’s goodness & even his existence because of moral evil & horrid natural realities is spiritually healthy

remember the meaning of the word “Isra/el”

S6

שָׂרָה (sārāh) to struggle, persist

אֵל (’ēl) God

18. “Your name will no longer be Jacob, but **Israel**, because you have **struggled with God** and with men and have overcome.” Gen 32:28

Alexander Solzhenitsyn

S7

political prisoner in a Russian prison & an Orthodox Christian.

19. “It was only when I lay there on rotting prison straw that I sensed within myself the first stirrings of **good**. Gradually it was disclosed to me that the line separating **good** and **evil** passes not through states, nor between classes, nor between political parties either—but right through every human heart—and through all **human hearts** ... That is why I turn back to the years of my imprisonment and say, sometimes to the astonishment of those about me: “Bless you, prison!”... **I nourished my soul** there, and I say without hesitation:

S8

“Bless you, prison, for having been in my life!”

Gulag Archipelago

II:615-617

QUESTION:

S9

can you take the most morally evil experience or horrid natural reality in your life and say:

“Bless you, _____, for having been in my life.”

- CONCLUSION: Toward a Christian HYPOTHESIS on Theodicy** S2
- 1. All theodicies are Limited** S3
- they only provide some reasonable justifications for moral evil & horrid natural realities
BUT they are never completely satisfying
 - Why?**
 - mystery & faith are essential components
 - messy personal experience is also a component → not everyone has the same experience
 - logical arguments are rarely helpful when someone is suffering
- 2. Pedagogical & Greater Good arguments are common in theodicies** S4
- many people acknowledge that moral evil & horrid natural realities often teach them valuable insights and lead to good
 - personal experience of moral evil & horrid natural realities in retrospect (usually a long time afterward) seems to offer one of the best justifications for their presence in a world created by an all-loving, all-powerful, and all-knowing God
- 3. Our universe appears to be the Perfect stage for soul-making** S5
- the central purpose of this existence is to understand & experience LOVE: (1) to love God
(2) to love one another
 - to fully understand love, we need to know & experience what lacking love is → moral evil
- 4. Christian theodicies find their Fulfilment in Jesus** S6
- IF Jesus “learned obedience from what he suffered” (Heb 5:8)
THEN Christians should as well
- IF Jesus through death “became a source of eternal salvation” (Heb 5:8)
THEN death has an ultimate purpose & Christians should be grateful
- 5. The Creation Heals us in times when we face suffering & death** S7
- Book of Job:
ID in nature declares that God is in complete control of the world, including suffering & death
- 6. Theodicy & Evolution: Why did God create through evolution?** S8
- to maintain God’s epistemic distance & his *Deus Absconditus* character
- IF the fossil record were like the YEC & PC fossil pattern predictions, S9-10 H52
THEN God would be like the “Star Trek Jesus”
this would be scientific proof for the existence of God & concordism
BUT this would totally disrupt the world as we know it
completely destroy the need of faith
- S11 H52
- to provide a “very good” world (Gen 1:31) with real freedom to develop a real relationship with God
 - ☛ an uncoerced & truly loving relationship
- God has given us the freedom to believe whether evolution is:
- (1) dysteleological → NO plan, purpose & design → NO God
- OR**
- (2) teleological → planned, purposeful & designed → ordained & sustained by God

COURSE CONCLUSIONS

- S1
- 1. Science & Religion can be in a Peaceful & Fruitful Relationship** S2
- In fact, there are many different relationships
- EG John Haught → Contrast, Contact & Confirmation S3
- Ian Barbour → Independence, Dialogue & Integration S4
- Lamoureux → Compartment, Border & Complementary S5 H18
- BUT Richard Dawkins** states: S6
1. “Are science and religion converging? No ... Convergence? Only when it suits.
To an **honest** judge, the alleged marriage between religion and science is a shallow,
empty, spin-doctored sham.” “Snake Oil & Holy Water: Illogical Thinking Is the Only Thing Joining
Science & Religion Together” *Forbes ASAP* (4 Oct 1999), 235, 237
- QUESTION: is Dawkins correct?
- 2. Problems with Science & Religion Warfare** S7
- Dichotomies S8 H1
Science vs. Religion; Evolution vs. Creation
 - Conflations
Science & Atheism; Religion & Young Earth Creation
 - Concordism S9
The Bible is not a book of modern science → Scripture features ancient science
- Warfare Relationship Fails** S10 H1
- 3. Toward A Solution** S11
- METAPHYSICS-PHYSICS PRINCIPLE S12 H5
- Charles Darwin:** S13
2. “It seems to me **absurd to doubt** that a man may be an **ardent theist**
& an **evolutionist**.” Fordyce (1879)
☛ crushes Dichotomies & Conflations
- MESSAGE-INCIDENT PRINCIPLE S14 H5
- Galileo** (Cardinal Baronio): S15
3. “The intention of the Holy Spirit is to teach us **how one goes to heaven**,
and **not how heaven goes**.” Christina (1615)
☛ crushes Concordism
- THE KEY: Non-Concordist Hermeneutic** S16 H71, 86
God ACCOMMODATED
- 4. Toward a Two Divine Books Complementary Relationship in an Evolutionary World** S17-18
- INTEGRATES Metaphysics-Physics Principle & Message-Incident Principle S19 H61
- reciprocal exchange of information between Scripture & Evolutionary Sciences
- Scripture reveals Spiritual Truths:
God created the universe & life → ordained, sustained & intelligently designed
 - Evolutionary Sciences reveal scientific facts:
the universe & life evolved → self-assembling natural process
- Evolutionary Creation:** God created the universe & life through teleological evolution
- 5. Pastoral & Pedagogical Sensitivity** S20
- PLEASE do not drop in Sunday school the “NO ADAM BOMB!”
encourage & up lift people
- 6. THANK YOU!** S21

SUPPLEMENTARY QUOTES

CATEGORIES & PRINCIPLES

SPECIAL REVELATION:

SQ 1. 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. . . . The Word became flesh and lived for a while among us. John 1:1-3, 14

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

SQ 3. They [Jews] have been entrusted with the very words of God. Rom 3:2

GENERAL REVELATION:

SQ 4. The heavens declare the glory of God; the firmament proclaims the work of His hands. Day after day they pour forth speech; night after night they display knowledge. They have no speech, they use no words; no sound is heard from them. Yet their voice [or line] goes out into all the earth, their words to the ends of the world. Ps 19:1-4

SQ 5. 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. Rom 1:19-20

SQ 6. Indeed, when Gentiles, who do not have the law, do by nature things required by the law, they are a law for themselves, even though they do not have the law, since they show that the requirements of the law are written on their hearts, their consciences also bearing witness, and their thoughts now accusing, now defending them. Rom 2:14-15

GOD'S SPECIFIC ATTRIBUTES:

SQ 7. Holy, holy, holy is the Lord God Almighty, who was, and is, and is to come. Rev 4:8

SQ 8. O Lord . . . for you alone are Holy. Rev 15:4

SQ 9. Whoever does not love does not know God, because God is love.

1 Jn 4:8

SQ 10. God is love. Whoever lives in God lives in love, and God in him.

1 Jn 4:16

SQ 11. God is just: He will pay back trouble to those who trouble you, and give relief to you who are troubled, and to us as well. 1 Thess 1:6

SQ 12. For the Lord is a God of justice. Blessed are all who wait for him.

Is 30:18

SQ 13. For the Lord your God is a merciful God. Deut 4:31

SQ 14. The Lord our God is merciful and forgiving, even though we have rebelled against Him. Dan 9:9

EPISTEMOLOGICAL CATEGORIES

SQ 15. He [God] will be the sure foundation for your times, a rich store of salvation and wisdom and knowledge; the fear of the Lord is the KEY to this treasure. Is 33:6

BIBLICAL PASSAGES ON MYSTERY

SQ 16. 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? Their measure is longer than the earth and wider than the sea. Job 11:7-9

SQ 17. Beyond all question, the mystery of godliness is great: He [God] appeared in a body, was vindicated by the Spirit, was seen by angels, was preached among the nations, was believed on in the world, was taken up into glory. 1 Tim 3:16.

SQ 18. If I have the gift of prophecy and can fathom all mysteries and all knowledge, . . . but have not love, I am nothing. 1 Cor 13:2

SQ 19. “The God of the Old Testament is arguably the most unpleasant character in all fiction; jealous and proud of it; a petty, unjust, unforgiving control-freak; a vindictive, bloodthirsty ethnic cleanser; a misogynistic, homophobic, racist, infanticidal, genocidal, filicidal, pestilential, megalomaniacal, sadomasochistic, capriciously malevolent bully.”

Richard Dawkins, *The God Delusion* (New York, NY: Houghton Mifflin, 2006), 31.

KENOTIC HYMN

SQ 20. Your attitude should be the same as that of Christ Jesus:

Who, being in very nature God,
did not consider equality with God
something to be grasped,
but made himself nothing [κενωω (*kenoō*)],
taking the very nature of a servant,
being made in human likeness.
And being found in appearance as a man,
he humbled himself and became obedient to death—
even death on a cross!

Therefore God exalted him to the highest place
and gave him the name that is above every name,
that at the name of Jesus every knee should bow,
[1] in heaven and
[2] on earth and
[3] UNDER THE EARTH,
and every tongue confess that Jesus Christ is Lord,
to the glory of God the Father.

Phil 2:6-11

SPIRITUAL STATEMENTS

SQ 21. The master of the banquet tasted the water that had been turned to wine.
John 2:9

SQ 22. Moses thought that his own people would realize that God was using him to rescue them, but they did not. Acts 7:25

SQ 23. For this is what the Lord says: “I will make you a terror to yourself and all your friends; with your own eyes you will see them fall by the sword of their enemies. I will hand Judah over to the king of Babylon, who will carry them away to Babylon or put them to the sword.” Jer 20:4-6

SQ 24. Jesus: “This man [Paul] is my chosen instrument to carry my name before the Gentiles and their kings and before the people of Israel.” Acts 8:15

SQ 25. God causes his sun to rise on the evil and the good, and sends rain on the righteous and unrighteous. Matt 5:45

SQ 26. For you [God] created my inmost being; you knit me together in my mother’s womb. Ps 139:13

SQ 27. God saw all that he had made, and it was **very good**. Gen 1:31

SQ 28. God created man in his own image, in the **image of God** he created him; male and female he created them. Gen 1:27

SQ 29. For all have sinned and fall short of the Glory of God. Rom 3:23

HISTORICAL STATEMENTS

SQ 30. Many have undertaken to draw up an **account** of the things [ministry of Jesus] 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 1:1-4

SQ 31. These are the names of the sons of Israel who entered Egypt with Jacob, each according to his family. Exo 1:1

SQ 32. The war between the house of Saul and the house of David lasted a long time. 2 Sam 3:1

SQ 33. In the time Herod the king of Judea . . . Luke 1:5

SQ 34. 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. Gen 2:7

WHAT IS RELIGION?

SQ 1. **Oxford English Dictionary** definition of “Religion”

- 1a. a state of life bound by monastic vows; the condition of one who is a member of a religious order, especially in the Roman Catholic Church.
- 3a. action or conduct indicating a belief in, reverence for, and desire to please, a divine ruling power; the exercise or practice or observances implying this.
- 4a. a particular system of faith and worship.
- 5a. recognition on the part of man of some higher unseen power as having control of his destiny, and as being entitle to obedience, reverence, and worship; the general acceptance of this feeling as a standard of spiritual and practical life.
- 6a. devotion to some principle; strict fidelity or faithfulness; conscientiousness; pious affection or attachment.

SQ 2. James Fowler's Stages of Faith Development

Stage 1. Intuitive-Projective Faith (3 to 7 years)

- Imagination and fantasy-filled.
- Unfettered by logic (little deductive & inductive ability).
- Cannot see from other perspectives (the 1st narcissism).
- Awareness of life and death.
- God is 'magical,' anthropomorphic and highly personal. [Seen in ancient/primitive peoples]

Stage 2. Mythic-Literal Faith (7-12 years)

- Beliefs, stories and symbols are literal. These have only one meaning which is defined by others (family).
- Deductive and inductive ability begins. Thinking is 'concrete operational.'
- Still has difficulty stepping 'outside' own perspective to reflect upon it.
- Moral sense develops but is legalistic.
- God is a monarchical king.

Stage 3. Synthetic-Conventional Faith (12-20 years. Adults with limited education)

- World expands beyond family to encounter societal influences.
- Strong conformism to society evident. Attempt to balance and synthesize both influencing factors.
- Self-consciousness develops and the ability to see oneself through other people's eyes.
- Thinking is 'formal operational.' Beliefs held in a loose cluster. Few apparent contradictions, intellectual tensions or paradoxes perceived.
- Adolescent 'identity crisis' occurs.
- Utter vastness of the world results in a sense of awe and mystery.
- God is more abstract and transcendent, yet also remains immanent and is pictured as ruler, teacher, physician, *etc.*

Stage 4. Individuative-Reflective Faith (Young Adult. Not reached by all adults)

- Most forced into making choices—lifestyle, career, beliefs. Development of a personal worldview.
- Disillusion of traditional authorities.
- Recognition of cultural and societal relativism in determining values.
- Opinion of others less valued (the 2nd narcissism).
- Thinking is 'critical.' Extreme confidence in power of critical reasoning.
- Apparent contradictions, intellectual tensions and paradoxes in life are recognized but forced into simple dichotomies ('either/or' understanding).
- Literalism of inherited stories, symbols and myths rejected.
- Some re-enforce the faith tradition, others break from it completely.

Stage 5. Conjunctive Faith (Middle Age)

- Ability to live with apparent contradictions, intellectual tensions and paradoxes in life.
 - Recognition that these offer meaningful truths through a dialectical process. Appreciation of the power of stories, symbols and myths.
 - Affirms other religious views while remaining grounded in own tradition.
 - Transcends faith boundaries and leans toward ecumenicity.
 - Avoids relativism and accepts universal values.
 - Genuine openness to change.
 - Weakness of this stage is that these middle-aged individuals are usually trapped between an untransformed world and their transforming vision.
 - God pictured in dynamic relationships typical of parents, spouses or friends.
- ### Stage 6. Universalizing Faith (Late in Life. Only 1-2% of Adults)
- Love God unselfconsciously. Total trust and loyalty.
 - Intense revelatory and transcendent experiences.
 - Every aspect of life integrated into faith.
 - Activist incarnation of beliefs—selfless commitment to the transformation of the world into a transcendent actuality.
 - Become leaders and models of society.
 - Will die for beliefs and frequently have been martyrs.

James W. Fowler, *Stages of Faith: The Psychology of Human Development and the Quest for Meaning* (San Francisco: Harper & Row, 1981)

WHAT IS SCIENCE?

SQ 1. Oxford English Dictionary definition of "Science"

- 1a. the state of fact of knowing; knowledge or cognizance of something specified or implied; also wider reference, knowledge (more or less extensive) as a personal attribute. . . . *Philosophy*: in sense of 'knowledge' as opposed to 'belief' or 'opinion.'
- 2a. knowledge acquired by study; acquaintance with or master of any department of learning.
- 3a. a particular branch of knowledge or study; a recognized department of learning.
- 4a. **in a more restricted sense**: a branch of study which is concerned either with a connected body of demonstrated truths or with observed facts systematically classified and more or less colligated by being brought under general laws, and which includes trustworthy methods for the discovery of new truth within its own domain.

4b. **in modern use**, often treated as synonymous with ‘**Natural and Physical Science**,’ and thus restricted to those branches of study that relate to the phenomena of the material universe and their laws.

MOSES & 1ST REFERENCES TO WRITING IN THE BIBLE

SQ 2. Then the Lord said to Moses, “**Write** this on a **scroll** as something to be remembered and make sure that Joshua hears it, because I will completely erase the memory of the Amalekites under heaven.” Exo 17:14.

SQ 3. Moses then **wrote down** everything the Lord had said. . . . Then he [Moses] took the **Book** of the Covenant and read it to the people. Exo 24:4, 7

SQ 4. [Moses to the Lord]: But now, please forgive their sin—but if not, then blot me out of the **book** you have **written**. The Lord replied, “Whoever has sinned against me I will blot out of my **book**.” Exo 32:32-33.

SQ 5. At the Lord’s command Moses **recorded** the stages in their journey. Num 33:2

SQ 6. So Moses **wrote** down this law and gave it to the priests, the sons of Levi, who carried the ark of the Lord, and to all the elders of Israel. . . . After Moses finished writing in a **book** the words of this law from beginning to end, he gave this commandment to the Levites who carried the ark of the covenant to the Lord.: “Take this **Book of the Law** and place it beside the ark of the covenant of the Lord your God.” Deut 31:9, 24-26

JESUS & ANCIENT MEDICINE

SQ 7. A man approached Jesus and knelt before him. “Lord, have mercy on my son,” he said. “He is an **epileptic** and is suffering greatly. He often falls into the fire or into the water. . . . After calling the boy to Him, “Jesus rebuked the **demon**, and it came out of the boy, and he was healed from that moment” Matt 17:14-16, 18.

SQ 8. Jesus was driving out a **demon** that was **mute**. When the demon left, the man who had been mute spoke. Lk 11:14.

SQ 9. Then they brought him a demon-possessed man who was **blind** and **mute**, and Jesus healed him, so that he could both talk and see” Matt 12:22.

SQ 10. When Jesus saw that a crowd was running to the scene, he rebuked the **evil spirit**. ‘You **deaf** and **mute spirit**,’ He said, ‘I command you, come out of him and never enter him again.’” Mk 9:25

SQ 11. On a Sabbath Jesus was teaching in one of the synagogues, and a woman was there who had been **crippled by a spirit** for eighteen years. She was bent over and **could not straighten up** at all. When Jesus saw her, he called her forward and said to her, “Woman, you are set free from your

infirmity.” Then he put his hands on her, and immediately she straightened up and praised God. . . . [Jesus said], “Should not this woman, a daughter of Abraham, whom **Satan has kept bound** for eighteen long years, be set free on the Sabbath day from what bound her?” Lk 13:10-13, 16.

SQ 12. Einstein at 16 yrs old: “From the very beginning it appeared to me **intuitively clear**, that judged from the standpoint of such an observer [a person pursuing and keeping pace with a light signal sent out by him], everything would have to happen according to the same laws as for an observer who, relative to the earth, was at rest.” Albert Einstein, *Albert Einstein: Philosopher-Scientist* (Evanston, 1949), 53.

MODELS ON THE RELATIONSHIPS BETWEEN SCIENCE & RELIGION

John Haught’s Criticism of the Multiple Worlds Hypothesis

SQ 1. “Although the SAP [**Strong Anthropic Principle**] may not be purely scientific, it may nonetheless be explanatory. Of course, in order to accept the possibility of there being non-scientific ways of explaining phenomena, one would have to give up the **scientistic belief system** [scientism] that rules out all other ways of arriving at knowledge.”

John F. Haught, *Science & Religion* (NY: Paulist Press, 1995), 138.

SQ 2. “We cannot help suspecting, therefore, that the speculation about numerous, and perhaps an infinite number of, “worlds” often has **nothing whatsoever to do with science**. Rather it is a **desperate conflationist** attempt by a materialist belief system to ally itself with science in such a way as to diminish the plausibility of any non-materialist, religious interpretation of the cosmos. Beneath the multiple worlds hypothesis there is an implicit, though **very telling**, confession that if our present big bang universe is in fact the only world-phase that has ever existed, materialist and reductionist explanations would be in **serious trouble**. For the existence of only this one fine-tuned universe would not provide a **statistically broad enough base** to allow for the **purely random** origin of life and mind that **skepticism requires**.”

Ibid., 133-134.

Paul Davies’ Criticism of the Multiple Worlds Hypothesis

SQ 3. “Is it easier to **believe** in a Cosmic Designer than the **multiplicity of universes** necessary for the **Weak Anthropic Principle** to work? It is hard to see how either hypothesis could ever be tested in the strict scientific sense. If we cannot visit the other universes or experience them directly, their possible existence must remain just as much a **matter of faith** as **belief in God**.”

Perhaps future developments in science will lead to more direct evidence for other universes, but until then, the **seemingly miraculous** concurrence of numerical values that nature has assigned to her fundamental constants must remain the most **compelling evidence** for an element of cosmic design. . . . “The **numerical coincidences** could be regarded as evidence of design. The **delicate fine-tuning** in the values of the constants, necessary so that the various different branches of physics can dovetail so felicitously, **might be attributed to God**. It is hard to resist the impression that the present structure of the universe, apparently so sensitive to minor variations in the numbers, has been rather **carefully thought out**. Such a conclusion can, of course, only be **subjective**. In the end it boils down to a question of **belief**.”

Paul W.C. Davies, *God and the New Physics*
(London: Penguin Books, 1983), 189.

EXAMPLES OF THE STRONG ANTHROPIC PRINCIPLE

SQ 4. John Barrow & Frank Tipler:

“Over many years there had grown up a collection of largely unpublished results revealing a series of **mysterious coincidences** between the numerical values of the fundamental constants of Nature. The possibility of our existence seems to hinge precariously upon these coincidences. These relationships and many other peculiar aspects of the Universe’s make-up appear to be necessary to allow the evolution of carbon-based organisms like ourselves. Furthermore, the twentieth-century *dogma* that human observers occupy a position in the Universe that must not be privileged in any way is strongly challenged by such a line of thinking. Observers will reside only in places where conditions are conducive to their evolution and existence: such sites may well turn out to be **special**.”

John D. Barrow and Frank J. Tipler, *The Cosmological Anthropic Principle*
(Oxford: **Oxford University Press**, 1986), xi.

SQ 5. Paul Davies:

“The universe is thus the product of a competition between the explosive vigour of the Big Bang, and the force of gravity which tries to pull the pieces back together again. In recent years, astrophysicists have come to realize just how **delicately** this competition has been balanced. Had the Big Bang been weaker, the cosmos would have soon fallen back on itself in a Big Crunch. On the other hand, had it been stronger, the cosmic material would have dispersed so rapidly that galaxies would not have formed. Either way, the observed structure of the universe seems to depend very sensitively on the precise matching of explosive vigour to gravitating power.

Just how sensitively is revealed by calculation. At the so-called Planck time (10^{-43} seconds) (which is the earliest moment at which the concept of space

and time has meaning) the matching was accurate to a staggering one part in 10^{60} . That is to say, had the explosion differed in strength at the outset by only one part in 10^{60} , the universe we now perceive would not exist. To give meaning to these numbers, suppose you wanted to fire a bullet at a one-inch target on the other side of the universe, twenty billion light years away. Your aim would have to be accurate to that same part in 10^{60} .”

Paul W.C. Davies, *God and the New Physics*, 189.

SQ 6. Roger Penrose:

“In order to produce a universe resembling the one in which we live, the Creator would have to aim for an absurdly tiny volume of the phase space of possible universes—about $1/10^{123}$ of the entire volume. . . . This is an extraordinary figure. One could not possibly even *write down the number in full*, ordinary denary [base-10] notation: it would be ‘1’ followed by 10^{123} successive ‘0’s! Even if we were to write a ‘0’ on each separate proton and on each separate neutron in the entire universe—and we could throw in all the other particles for good measure—we should fall far short of writing down the figure needed.

Roger Penrose, *The Emperor’s New Mind: Concerning Computers, Minds, and The Laws of Physics* (Oxford: **University Press**, 1989), 343-344.

SQ 7. Alister McGrath:

Fine tuning of fundamental cosmological constants immediately following the Big Bang:

(1) If the **strong coupling constant** was slightly smaller, hydrogen would be the only element in the universe. Since the evolution of life as we know it is fundamentally dependent on the chemical properties of carbon, that life could not have come into being without some hydrogen being converted to carbon by fusion. On the other hand, if the strong coupling constant were slightly larger (even by as much as 2 percent), the hydrogen would have been converted to helium, with the result that no long-lived stars would have been formed. In that such stars are regarded as essential to the emergence of life, such a conversion would have led to life as we know it failing to emerge.

(2) If the **weak fine constant** was slightly smaller, no hydrogen would have formed during the early history of the universe. Consequently, no stars would have been formed. On the other hand, if it was slightly larger, supernovae would have been unable to eject the heavier elements necessary for life. In either case, life as we know it could not have emerged.

(3) If the **electromagnetic fine structure constant** was slightly larger, the stars would not be hot enough to warm planets to a temperature sufficient to maintain life in the form in which we know it. If smaller, the stars would have burned out too quickly to allow life to evolve on these planets.

(4) If the **gravitational fine structure constant** were slightly smaller, stars and planets would not have been able to form, on account of the gravitational constraints necessary for coalescence of their constituent material. If stronger, the stars thus formed would have burned out too quickly to allow the evolution of life (as with the electromagnetic fine structure constant).”

Alistair E. McGrath, *The Foundations of Dialogue in Science and Religion* (Oxford: Blackwell, 1998), 113.

SQ 8. Michael Denton:

“I believe the evidence strongly suggests that the cosmos is uniquely fit for only one type of biology—that which exists on earth ...

Even more radically, I believe that there is a considerable amount of evidence for believing that the cosmos is **uniquely fit** for only **one** type of advanced intelligent life—beings of design and biology very similar to our own species, *Homo sapiens* ...

If the properties of water were not almost **precisely** what they are, carbon-based life would in all probability be impossible. Even the viscosity of ice is **fit**. If it were any greater, then all the water on earth might be trapped in vast immobile ice sheets in the poles ...

The **fitness** of carbon compounds for life is maximal in the same temperature range that water is a fluid. Both the strong covalent and the weak bond are of maximal utility in this same temperature range. Such coincidences are **precisely** what one might expect to see in a cosmos specially adapted for carbon-based life ...

Oxygen is a very reactive atom and it can only be utilized by biochemical systems because of a number of adaptations, including: the attenuation of its reactivity below about 50° C; its low solubility; the fact that the transitional atoms such as iron and copper have just the right chemical characteristics to manipulate the oxygen atom; that the end product of oxidation of carbon is carbon dioxide, an innocuous gas. Moreover, the reaction of carbon dioxide with water provides living things with a buffer—the bicarbonate buffer which has just the right characteristics to buffer organisms, especially air-breathing organisms, against increases in acidity. The **chain of coincidences** in the nature of things which permit higher forms of life to utilize oxygen provides further evidence of the **unique fitness** of nature for carbon-based life.”

Michael J. Denton, *Nature's Destiny: How the Laws of Biology Reveal Purpose in the Universe* (NY: Free Press, 1998), xiii, 19, 101, 117.

SQ 9. Simon Conway Morris:

“The central theme of this book depends on the realities of evolutionary convergence: the recurrent tendency of biological organization to arrive at the same ‘solution’ to a particular ‘need.’” . . . [The book’s] main, but not ultimate, aim is to argue that, contrary to received wisdom, **the emergence of human intelligence is a near-inevitability.**”

Simon Conway Morris, *Life's Solution: Inevitable Humans in a Lonely Universe* (Cambridge: University Press, 2003), xii.

MICHAEL BEHE & INTELLIGENT DESIGN THEORY

SQ 10. “By **irreducibly complex** I mean a single system composed of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of the parts causes the system to effectively cease functioning. An irreducibly complex system cannot be produced directly (that is, by continuously improving the initial function, which continues to work by the same mechanism) by slight, successive modifications of a precursor system, because any precursor to an irreducibly complex system that is missing a part is by definition nonfunctional. An irreducibly complex biological system, if there is such a thing, would be a powerful challenge to Darwinian evolution. Since natural selection can only choose systems that are already working, then if a biological system cannot be produced gradually it would have to arise as an integrated unit, **in one fell swoop**, for natural selection to have anything to act on.”

Michael J. Behe, *Darwin's Black Box: The Biochemical Challenge to Evolution* (New York: Free Press, 1996), 39.

LIVING WATERS

SQ 11. “When a Samaritan woman came to draw water, Jesus said to her, ‘Will you give me a drink?’ The Samaritan woman said to Him, ‘You are a Jew and I am a Samaritan woman. How can you ask me for a drink?’ (For Jews do not associate with Samaritans) Jesus answered her, ‘If you knew the gift of God and Who it is that asks you for a drink, you would have asked him and he would have given you **living waters**. . . . whoever drinks the water I give him **will never be thirsty again**. Indeed, the water that I give him will become in him a spring of water welling up at eternal life. John 4:7-10, 14.

INTELLIGENT DESIGN & NATURAL REVELATION

PRESUPPOSITIONAL APPROACH IN THEOLOGY

SQ 1. “I believe in Christianity as I believe that the Sun has risen—not only because I see it, but because by it, I see everything else.”

C.S. Lewis, “Is Theology Poetry?” in *Essay Collection and Other Short Pieces* (London: HarperCollins, 2000), 21.

FLEW COMMENTS ON DAWKINS

SQ 2. “The God Delusion, by the atheist writer Richard Dawkins, is remarkable in the first place for having achieved some sort of record by selling more than a million copies. But what is much more remarkable than the economic achievement is that the contents—or **rather lack of contents**—show Dawkins himself to have become what he and his fellow secularists typically believe to be an impossibility: **a secularist bigot**. (Helpfully, my copy of the Oxford English Dictionary defines a bigot as “an obstinate or intolerant adherent of a point of view.”)

The fault of Dawkins as an academic (which he still was during the period he composed this book, although he has since retired) was his **scandalous** and apparently deliberate refusal to present the doctrine that he appears to think he has refuted in its strongest form. Thus, we find in his index four references to Einstein. But I find it hard to write with restraint about the **obscurantist refusal** on the part of Dawkins to make any mention of Einstein's most relevant report—that there must be a Divine Intelligence behind the physical world. (I myself think it obvious that if this argument is applicable to the world of physics then it must be hugely more powerful if it is applied to the immeasurably more complicated world of biology.)”

Antony Flew, “A Reply to Richard Dawkins” *First Things* 188 (Dec 2008), 21.

ASTRONOMY & THE GALILEO AFFAIR

JOSHUA’S MIRACLE OF STOPPING OF THE SUN

SQ 1. “On the day the Lord gave the Amorites over to Israel, Joshua said to the Lord in the presence of Israel: ‘**O sun, stand still** over Gibeon, O moon, over the Valley of Aijalon.’ So **the sun stood still**, and the moon stopped, till the nation avenged itself on its enemies, as it is written in the Book of Jashar. The **sun stopped in the middle of the sky** [or heavens] and delayed going down about a full day. There has never been a day like it before or since, **a day when the Lord listened to a man**. Surely the Lord was fighting for Israel.”

Jos 10:12-14

POPE JOHN PAUL II’S COMPLEMENTARY RELATIONSHIP BETWEEN SCIENCE & RELIGION

SQ 2. “The **Bible does not concern** itself with the details of the **physical world**, the understanding of which is the competence of human experience and reason. There exist **two realms of knowledge**,

[1] one that has its source in revelation [religion] and

[2] one that reason can discover by its own power [science].

To the latter belong especially the experimental sciences and philosophy. The **distinction** between the two realms is **not** to be understood as **opposition**. The two realms are not altogether foreign to each other; they have points of **contact**. . . . [In particular], **intelligibility**, attested to by the marvellous discoveries of science and technology, lead us, in the last analysis, to that transcendent and primordial **Thought imprinted** on all things.”

John Paul II, “Lessons of the Galileo Case,” *Origins: CNS Documentary Service* 22 (1992), 373.

GEOLOGY & THE BIBLICAL FLOOD

SQ 1. “He [God] 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 Pet 2:5

SQ 2. “He [Christ] was put to death in the body but made alive by the Spirit, through whom also he went and preached to the spirits in prison who disobeyed long ago when God waited patiently in the **days of Noah** while the **ark** was being built. In it **only a few people, eight in all, were saved** through water, and this water symbolizes baptism that now saves you also—not the removal of dirt from the body but the pledge of a good conscience toward God.”

1 Pet 3:18

SQ 3. “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 with water. By water also the world of that time was deluged and destroyed. By the same word the present heavens & earth are reserved for fire, being kept for the day of judgment and destruction of ungodly men.” 2 Pet 3:3-7

SQ 4. “By faith Noah, . . . built an ark to save his family.” Heb 11:7

SQ 5. In the Genealogy of Jesus: “the son of Noah” Luke 3:36

THE RARE EARTH HYPOTHESIS

Peter Ward & Donald Brownlee:

SQ 6. “The most distant known galaxies are too young to have enough metals for the formation of Earth-size inner planets. Hazards include energetic quasar-like activity and frequent supernova explosions. . . . Although [globular clusters] contain up to a million stars they are too metal-poor to have inner planets as large as Earth. Solar-mass stars have evolved to giants that are too hot for life on inner planets. . . . [Elliptical galaxies and small galaxies] are too metal-poor. . . . Energetic processes [at the centres of galaxies] impede complex life. . . . Many stars [at the edges of galaxies] are too metal-poor.”

Peter D. Ward and Donald Brownlee, *Rare Earth: Why Complex Life Is Uncommon in the Universe* (New York: Copernicus Springer-Verlag, 2000), xxv.

[COMMENT: *In other words, most of the stars in the universe do not have planets suitable for life. The importance of the earth's abundant metal content cannot be over emphasized. In the core of the planet, it produces magnetic fields necessary to deflect damaging radiation from outer space. Radioactive metals also provided an internal source of heat that caused volcanoes to spew out water and gases, forming the oceans and atmosphere. And iron, zinc, copper and other metals are essential elements in the biological pathways of living organisms.*]

In contrast to most of the universe, **Ward and Brownlee** assert that the earth is “**extraordinarily rare**” since it is a “**habitable zone**.” To mention but a few “**Rare Earth Factors**” for a life-sustaining planet, they recognize: The earth is in the “**right** kind of galaxy,” producing enough heavy elements for life. It is also at the “**right** position in the galaxy,” providing a stable environment without great energy fluctuations in heat, cold, gamma rays, X-rays, *etc.* Similarly, the sun is the “**right** mass,” not emitting too much life-damaging ultraviolet radiation. The earth is the “**right** distance” from the sun, allowing for liquid water, which is absolutely necessary for living organisms. The earth is the “**right** planetary mass” to retain an atmosphere, but allow harmful gases to escape. The moon is the “**right** distance” from the earth and stabilises the “**right** tilt” of the planet, resulting in seasons that are not too severe. The earth also has the “**right** amount” of carbon, not too much to cause excessive heating through a runaway greenhouse effect, but not too little, which would inhibit the development of life.

Ibid., xxvii, xxviii, 16 & 275

EVOLUTION & DARWIN'S RELIGIOUS BELIEFS

SQ 1. Emma Darwin: “May not the **habit** in scientific pursuits of believing nothing till it is proved [ie, positivism], **influence your mind too much** in other things [like religion] **which cannot be proved in the same way**, and which if true are likely to be **above comprehension** [ie, mystery]. I should say also there is a danger in **giving up** [Biblical] **revelation** which does not exist on the other side [science]; that is, the fear of ingratitude in casting off what has been done for your benefit as well as for that of all the world and which ought to make you more careful, perhaps even fearful lest you should not have taken all the pains you could to judge truly. I do not know whether this is arguing as if **one side were true** and **the other false**, which I meant to avoid, **but I think not.**”

Autobiography of Charles Darwin, 236.

Autobiography of Charles Darwin, 236.

EPIGRAPHS OF THE ORIGINS OF SPECIES

SQ 2. "But with regard to the material world, we can at least go so far as this—we can perceive that events are brought about not by **insulated interpositions of Divine power**, exerted in each particular case, but by the establishment of general laws."

William Whewell *Bridgewater Treatise*

SQ 3. "To conclude, therefore, let no man out of a weak conceit of sobriety, or an ill-applied moderation, think or maintain, that a man can search too far or be too well studied in the book of God's word, or in the book of God's works; divinity or philosophy; but rather let men endeavour an endless progress or proficiency in both."

Francis Bacon, *Advancement of Learning* (1605)

DARWIN'S IMPLICIT THEODICEAN THEODICY

SQ 4. The last sentence in Chapter 3 “Struggle for Existence”

“When we **reflect** on this **struggle** [ie, the struggle for life], we may **console** ourselves with the full **belief**, that the **war of nature** is not incessant, that no fear is felt, that death is generally prompt, and that the **vigorous**, the **healthy**, and the **happy** survive and multiply.”

Darwin, *Origin of Species*, 79

DARWIN & INTELLIGENT DESIGN

SQ 5. "I remember well the time when the thought of the eye made me cold all over, but I have got over this stage of the complaint, and now small trifling particulars of structure often make me very uncomfortable. The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick!"

Darwin to Gray, 3 April 1860, *LLD*, II, 296.

SQ 6. "With respect to **design**, I feel more inclined to show a white flag than to fire my usual long-range shot. . . . If anything is **designed**, certainly man

must be: one's "inner consciousness" (though a false guide) tells one so; yet I cannot admit that man's rudimentary mammae . . . were **designed**. If I was to say I believed this, I should believe in the same incredible manner as the orthodox believe the Trinity in Unity. You say that you are in a haze; I am in thick mud; the orthodox would say in fetid, abominable mud; yet I cannot keep out the question. My dear Gray I have written a deal of nonsense."

Darwin to Gray, 11 December 1861, *LLD*, II, 382.

SQ 7. "The point which you raise on **intelligent design** has perplexed me beyond measure. I am in a complete jumble on the point. One cannot look at this Universe with all living productions & man without believing that all has been **intelligently designed**; yet when I look to **★each★** individual organism I can see no evidence of this."

Darwin to J.F. Herschel, 23 May 1861

SQ 8. "The mind refuses to look at this universe, being what it is without having been **designed**; yet, where one would most expect design, viz. in the structure of a sentient being, the more I think on the subject, the less I can see proof of design. Asa Gray and some others look at each variation (which A. Gray would compare with the rain drops which do not fall on the sea, but on to land to fertilize it) as having been providentially designed."

To Julia Wedgewood, 11 July 1861, *LLD*, I, 313-4

SQ 9. "But with regard to the use to which the fragments may be put, their shape may be strictly said to be accidental. And here we are led to face a great difficulty, in alluding to which I am aware that I am travelling beyond my proper province. An omniscient Creator must have foreseen every consequence which results from the laws imposed by Him." Charles Darwin, *The Variation of Animals & Plants under Domestication* (1868), II: 427.

SQ 10. "[B]ut how difficult not to speculate! **My theology** is a simple **muddle**; I cannot look at the universe as the result of **blind chance**, yet I can see no evidence of **beneficent design**, or indeed of **design** of any kind, **in the details**. As for **★each★** variation that has ever occurred having been preordained for a special end, I can no more believe in it than that the spot on which **★each★** drop of rain falls has been specially ordained."

Darwin to Hooker (12 Jul 1870) in Francis Darwin, ed., *More Life and Letters of Charles Darwin*, 2 vols. (London: John Murray, 1888), I:321

GENESIS 1-11: BIBLICAL ACCOUNTS OF ORIGINS HISTORICITY OF THE NEW TESTAMENT

Apostle John—Eyewitness

SQ 1. "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." 1 John 1:1–3

Apostle Peter—Eyewitness

SQ 2. "We did not follow cleverly invented stories when we told you about the power and coming of our Lord Jesus Christ, but we were eyewitnesses of his majesty. For he received honor and glory from God the Father when the voice came to him from the Majestic Glory, saying, "This is my Son, whom I love; with him I am well pleased." We ourselves heard this voice that came from heaven when we were with him on the sacred mountain." 2 Peter 1:16–18

Historian Luke

SQ 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 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 with certainty of the things you have been taught." Luke 1:1-4

PASSAGES ON CREATIO EX NIHILO

SQ 4. I beg you, my child, to look at the heaven and the earth and see everything that is in them, and recognize **that God did not make them out of things that existed.** 2 Maccabees 7:28

SQ 5. He is the image of the invisible God, the firstborn of all creation; for in him all things in heaven and on earth were created, things visible and invisible, whether thrones or dominions or rulers or powers--all things have been created through him and for him. He himself is before all things, and in him all things hold together. Col 1:15-17

SQ 6. 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. Heb 11: 3

SQ 7. The Parable of the Good Samaritan

Luke 10:25-37

- ²⁵ On one occasion an expert in the law stood up to test Jesus. “Teacher,” he asked, “what must I do to inherit eternal life?”
- ²⁶ “What is written in the Law?” he replied. “How do you read it?”
- ²⁷ He answered, “‘Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind;’ and, ‘Love your neighbor as yourself.’”
- ²⁸ “You have answered correctly,” Jesus replied. “Do this and you will live.”
- ²⁹ But he wanted to justify himself, so he asked Jesus, “And who is my neighbor?”
- ³⁰ In reply Jesus said: “A man was going down from Jerusalem to Jericho, when he was attacked by robbers. They stripped him of his clothes, beat him and went away, leaving him half dead.
- ³¹ A priest happened to be going down the same road, and when he saw the man, he passed by on the other side.
- ³² So too, a Levite, when he came to the place and saw him, passed by on the other side.
- ³³ But a Samaritan, as he travelled, came where the man was; and when he saw him, he took pity on him.
- ³⁴ He went to him and bandaged his wounds, pouring on oil and wine. Then he put the man on his own donkey, brought him to an inn and took care of him.
- ³⁵ The next day he took out two denarii[e] and gave them to the innkeeper. ‘Look after him,’ he said, ‘and when I return, I will reimburse you for any extra expense you may have.’
- ³⁶ “Which of these three do you think was a neighbor to the man who fell into the hands of robbers?”
- ³⁷ The expert in the law replied, “The one who had mercy on him.” Jesus told him, “Go and do likewise.”

SQ 8. The Parable of the Good Atheist

Updating Luke 10:25-37 for Today

- ²⁵ On one occasion an expert in the law stood up to test Jesus. “Teacher,” he asked, “what must I do to inherit eternal life?”
- ²⁶ “What is written in the Law?” he replied. “How do you read it?”
- ²⁷ He answered, “‘Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind;’ and, ‘Love your neighbor as yourself.’”
- ²⁸ “You have answered correctly,” Jesus replied. “Do this and you will live.”
- ²⁹ But he wanted to justify himself, so he asked Jesus, “And who is my neighbor?”
- ³⁰ In reply Jesus said: “A man was going down from **New York City** to **Washington DC**, when he was attacked by robbers. They stripped him of his clothes, beat him and went away, leaving him half dead.
- ³¹ A **Roman Catholic priest** happened to be going down the same road, and when he saw the man, he passed by on the other side.
- ³² So too, a **Evangelical Protestant pastor**, when he came to the place and saw him, passed by on the other side.
- ³³ But an **atheist**, as he travelled, came where the man was; and when he saw him, he took pity on him.
- ³⁴ He went to him and bandaged his wounds, pouring on oil and wine. Then he put the man on his own donkey, brought him to an inn and took care of him.
- ³⁵ The next day he took out **five hundred dollars** and gave them to the innkeeper. ‘Look after him,’ he said, ‘and when I return, I will reimburse you for any extra expense you may have.’
- ³⁶ “Which of these three do you think was a neighbor to the man who fell into the hands of robbers?”
- ³⁷ The expert in the law replied, “The one who had mercy on him.” Jesus told him, “Go and do likewise.”

OLD TESTAMENT LAWS AGAINST INCESTUOUS RELATIONSHIPS

SQ 9. ⁶ “No one is to approach any close relative to have sexual relations. I am the LORD.

⁷ “Do not dishonor your father by having sexual relations with your mother. She is your mother; do not have relations with her.

⁸ “Do not have sexual relations with your father’s wife; that would dishonor your father.

⁹ “Do not have sexual relations with your sister, either your father’s daughter or your mother’s daughter, whether she was born in the same home or elsewhere.

¹⁰ “Do not have sexual relations with your son’s daughter or your daughter’s daughter; that would dishonor you.

¹¹ “Do not have sexual relations with the daughter of your father’s wife, born to your father; she is your sister.

¹² “Do not have sexual relations with your father’s sister; she is your father’s close relative.

¹³ “Do not have sexual relations with your mother’s sister, because she is your mother’s close relative.

¹⁴ “Do not dishonor your father’s brother by approaching his wife to have sexual relations; she is your aunt.

¹⁵ “Do not have sexual relations with your daughter-in-law. She is your son’s wife; do not have relations with her.

¹⁶ “Do not have sexual relations with your brother’s wife; that would dishonor your brother.

¹⁷ “Do not have sexual relations with both a woman and her daughter. Do not have sexual relations with either her son’s daughter or her daughter’s daughter; they are her close relatives. That is wickedness. **Leviticus 18:6-17**

POPE JOHN PAUL II & BIBLICAL ACCOUNTS OF ORIGINS

SQ 10. “It is only through humble and assiduous study that she [the Church] learns to **dissociate** the **essentials of faith** from the **scientific systems of a given age.**”

Pope John Paul II, “A Papal Address on the Church and Science,”
Origins: CNS Documentary Service 13 (1983), 51.

SQ 11. “The Bible itself speaks to us of the origin of the universe and its makeup, not in order to provide us with a scientific treatise, but in order to state

the correct relationships of man with God and with the universe. Sacred scripture wishes simply to declare that the world was created by God, and in order to teach this truth it expresses itself in the terms of the cosmology in use at the time of the writer [ie, science-of-the-day].

The sacred book likewise wishes to tell men that the world was not created as the seat of the gods, as was taught by other cosmogonies and cosmologies, but was rather created for the service of man and the glory of God. Any other teaching about the origin and makeup of the universe is **alien to the intentions of the Bible**, which does not wish to teach how heaven was made but how one goes to heaven [Baronio/Galileo]

Pope John Paul II, “Scripture and Science: The Path of Scientific Discovery,”
Origins: CNS Documentary Service 11 (15 Oct 1981), 279.

EVANGELICAL J.I. PACKER & BIBLICAL ACCOUNTS OF ORIGINS

SQ 12. “**Genesis 1 and 2**, however, tell us **WHO** without giving many answers about **HOW**. Some today may think this is a defect; but in the long perspective of history our present day ‘scientific’ preoccupation with how rather than who looks very odd in itself. Rather than criticize these chapters for not feeding our **secular interest**, we should take from them a needed rebuke for our **perverse passion for knowing Nature** without regard for what matters most; namely, **knowing Nature’s creator**.

The **MESSAGE** of these two chapters is this:

‘You have seen the sea? the sky? sun, moon, and stars? You have watched the birds and the fish? You have observed the landscape, the vegetation, the animals, the insects, all the big things and little things together? You have marvelled at the wonder and complexity of human beings, with all their powers and skills and the deep feelings of fascination, attraction and affection that men and women arouse in each other? Fantastic, isn’t it?’

Well now, **meet the one who is behind [meta] it all!**’ As if to say: now that you have enjoyed these **works of art**, you must shake hands with the **artist**; since you were thrilled by the music, we will introduce you to the composer. It was to show us the Creator **rather than** the creation and to teach us knowledge of God rather than physical science, that Genesis 1 and 2, along with such celebrations of creation as Psalm 104 and Job 38-41, were written.

James I. Packer, *I Want to Be a Christian* (Kingsway Publications, 1978), 32-33

MODERN ORIGINS DEBATE

SQ 1. “Satan himself is the originator of the concept of evolution ... Then why do they [scientists] believe in evolution? The answer has to be a **spiritual** answer, not scientific ... What else can we call this pervasive belief in evolution, held in spite of all the overwhelming negative evidence against it, except some kind of **delusion**? ... Their minds have been **blinded by Satan** and are under such **strong delusion** that they have become sincerely committed to the false world view of evolution.

Henry M. Morris, *The Troubled Waters of Evolution* (San Diego: Creation Life Publishers, 1982), p. 75. Henry M. Morris, “Strong Delusion,” *Back to Genesis* (No. 133), in *Acts and Facts* (January 2000) Institute for Creation Research, El Cajon, CA.

ORIGINAL SIN & CHRISTIAN CREEDS

SQ 2. COUNCIL OF CARTHAGE

“If anyone says that infants are baptized for the forgiveness of sins but contract nothing for **Adam**, original sin ... let them be anathema.”

SQ 3. THE AUGSBURG CONFESSION (LUTHERAN)

“Article II: Of Original Sin” “Since the fall of **Adam**, all human beings who are born in the natural way are conceived and born in sin ... this same innate disease and original sin is truly sin.”

SQ 4. THIRTY-NINE ARTICLES (ANGLICAN)

“Article IX: Of Original or Birth Sin” “Original sin standeth not in the following of **Adam** ... but it is the fault and corruption of the nature of every man that naturally is engendered of the offspring of **Adam**, whereby man is very far gone from original righteousness, and is of his own nature inclined to evil, so that the flesh lusteth always contrary to the spirit; and therefore in every person born into this world, it deserveth God's wrath and damnation.”

SQ 5. THE WESTMINSTER CONFESSION (REFORMED)

“Chapter VI: Of the Fall of Man, of Sin, and of Punishment thereof” “Our first parents [**Adam** & Eve], being seduced by the subtilty and temptation of Satan, sinned in eating the forbidden fruit ... They being the root of all mankind, the guilt of this sin was imputed, and the same death in sin and corrupted nature conveyed to all their posterity descending from them by ordinary generation.”

SQ 6. THE GOSPEL ACCORDING TO THE APOSTLE PAUL

¹ Now, brothers and sisters, I want to remind you of the gospel I preached to you, which you received and on which you have taken your stand. ² By this gospel you are saved, if you hold firmly to the word I preached to you. Otherwise, you have believed in vain.

³ For what I received I passed on to you as of first importance: that Christ died for our sins according to the Scriptures, ⁴ that he was buried, that he was raised on the third day according to the Scriptures, ⁵ and that he appeared to Cephas, and then to the Twelve. ⁶ After that, he appeared to more than five hundred of the brothers and sisters at the same time, most of whom are still living, though some have fallen asleep. ⁷ Then he appeared to James, then to all the apostles, ⁸ and last of all he appeared to me also, as to one abnormally born.

1 Corinthians 15:1-8