

CHRTC 350

Science & Religion

CLASS HANDOUTS

Denis O. Lamoureux

Professor of Science & Religion

St. Joseph's College, University of Alberta

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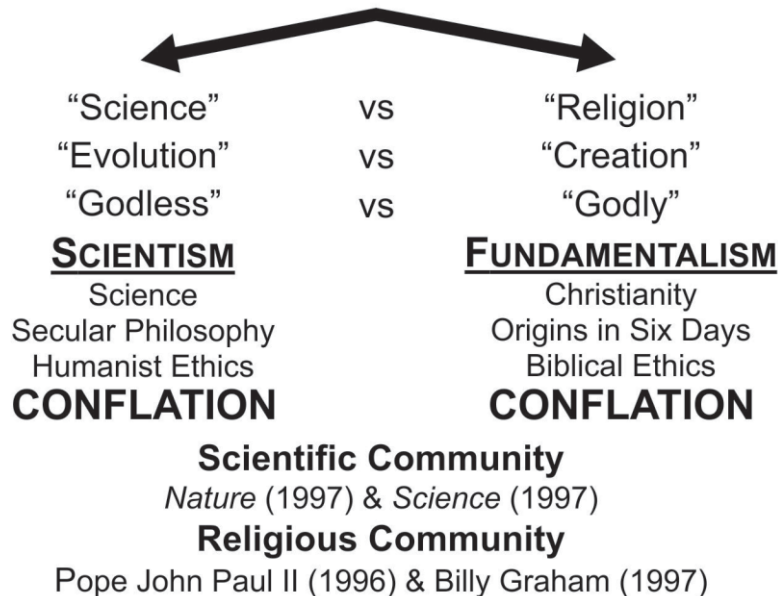
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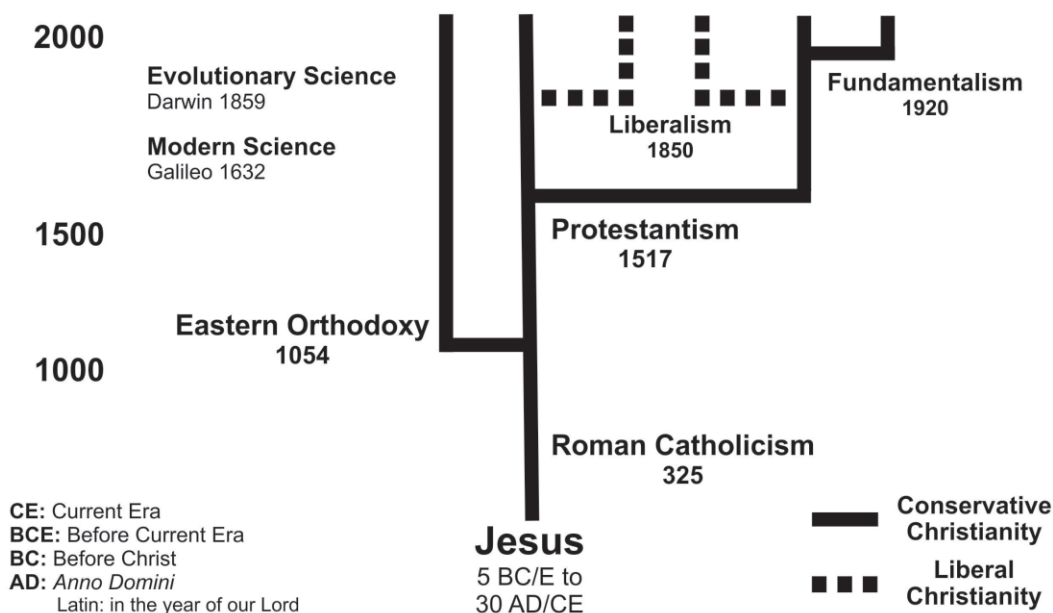
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SCIENCE & RELIGION WARFARE DICHOTOMY



CHURCH HISTORY



Catholic

Adjective
Universal, General

Noun
Roman Catholic

Evangelical

Adjective
Related to the Good News

Noun
Evangelical Protestant

CATEGORIES OF DIVINE REVELATION

Special

- Incarnation
God revealed himself through Jesus (John 1:1-3, 14)
- Biblical Revelation
God-breathed & the very words of God (2 Tim 3:16, Rom 3:2)
- Personal Revelation
Answered prayer, dreams, visions, signs & wonders

General

- Natural Revelation
Nature reflects God & his general attributes (Ps 19:1-4, Rom 1:19-20)
- Moral Revelation
Conscience & law written on the heart (Rom 2:14-15)

THE TWO DIVINE BOOKS

Book of God's Words

- Verbal Revelation
Uses Words
- Inspired Writings of the Bible
God-Breathed & Very Words of God (1 Tim 3:16, Rom 3:2)
- Specific Attributes of God
Holy (Rev 4:8, Rev 15:4) Love (1 Jn 4:8, 1 Jn 4:16)
Just (2 Th 1:6, Is 30:18) Merciful (Deut 4:31, Dan 9:9)
- Studied by Theology

Book of God's Works

- Non-Verbal Revelation
Does **NOT** Use Words
- Intelligent Design in Nature
Beauty, Complexity & Functionality
- General Attributes of God
Creator & Glorious (Ps 19:1)
Eternal Power & Divine Nature (Rom 1:19-20)
- Studied by Science

BIBLE OVERVIEW

		<u>THE DEBATE:</u>	
		Biblical Book	Date
OLD TESTAMENT	Jewish Bible	Genesis 1-11	→ History? Allegory? Fairy Tale?
		Genesis 12+	2150 Abraham—Birth of Jewish Nomadic Tribe ↳ Isaac → Jacob → 12 Tribes of Israel
			1850 Egyptian Captivity
			1450 Moses → Egyptian Royal Court
			1209 1 st Archeological Evidence for Israel
			1050 Birth of Jewish Nation (Saul 1 st King)
			930 Judah & Israel Divide
			722 Assyrian Captivity of Israel
			605 } Babylonian Captivity of Judah
			538 }
NEW TESTAMENT	DEUTEROCANON APOCRYPHA	440	Malachi (last book in OT)
		250	Septuagint (LXX) Greek OT
		5 BC/E	> Jesus
		30 CE/AD	
		90	Revelation (last book in NT)
		405	Vulgate (Vg) Latin OT & NT
		900	Massoretic Text (MT) Hebrew OT

CATEGORIES OF DIVINE ACTION

Personal

Interventionism

God raising a dead person to life

Providentialism

God working through “nudges” & “co-incidences”

Cosmological

Interventionism

Origins

God creating in 6 literal days

Operations

God moving planets off their normal course

Providentialism

Origins

God creating through evolution

Ordained & Sustained Natural Processes

Operations

God upholding the solar system

Ordained & Sustained Natural Processes

TEN COMMANDMENTS

- | | |
|----------------|--------------|
| 1. God #1 | 6. Murder |
| 2. Idols | 7. Adultery |
| 3. Name | 8. Stealing |
| 4. Day of Rest | 9. Lying |
| 5. Parents | 10. Coveting |

Exo 20:1-17
Deut 5:5-21

TWO COMMANDMENTS OF JESUS

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.

The **SECOND** is like it: **LOVE** your neighbour
as yourself.

All the Law and the Prophets [Old Testament]
hang on these **TWO** commandments.

Matt 22:37-40
cf Deut 6:5, Lev 19:18

METAPHYSICS-PHYSICS

PRINCIPLE

METAPHYSICS

Religion & Philosophy

Ultimate Beliefs



PHYSICS

Science

Theories & Laws

Observations & Experiments

MESSAGE-INCIDENT

PRINCIPLE



EPISTEMOLOGICAL CATEGORIES

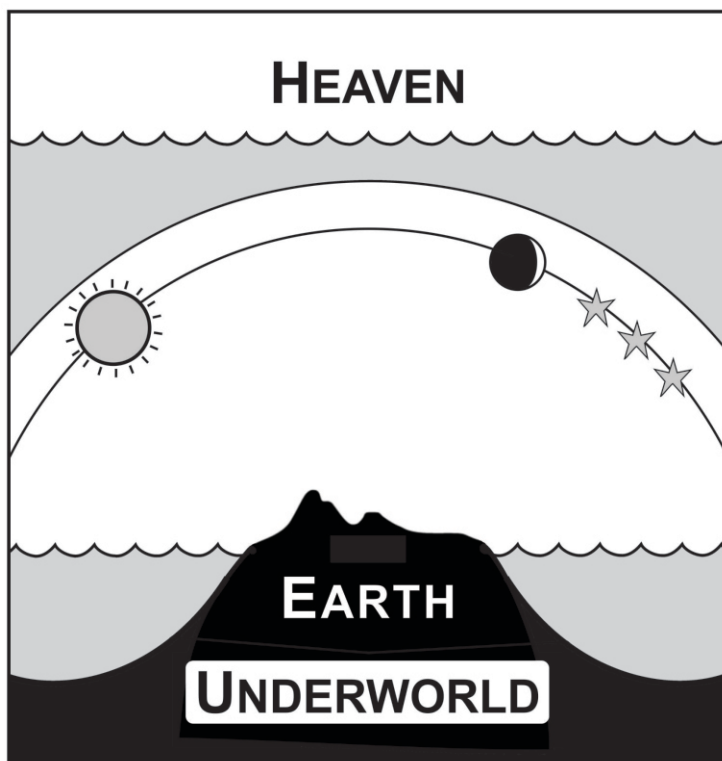
Foundational

- Correspondence
Knowledge matches with external reality
- Coherence
Knowledge is internally consistent & without contradictions
- Consilience
Knowledge interconnects into one encompassing theory

Religious

- Divine Foundation of Knowledge
Knowledge is ultimately rooted in God (Prov 1:7)
- Mystery
Knowledge that is beyond the human ability to know (1 Cor 13:12)
- Impact of Sin
Knowledge is influenced by the spiritual state of a person (Rom 1:21-23)

THE 3 TIER UNIVERSE

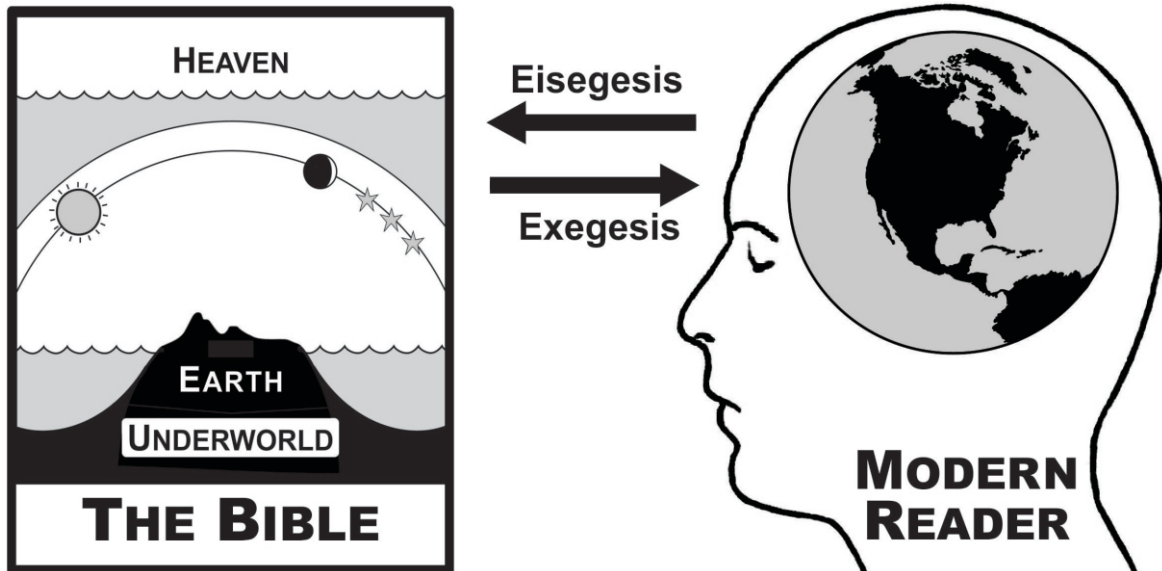


PHILIPPIANS 2:10-11

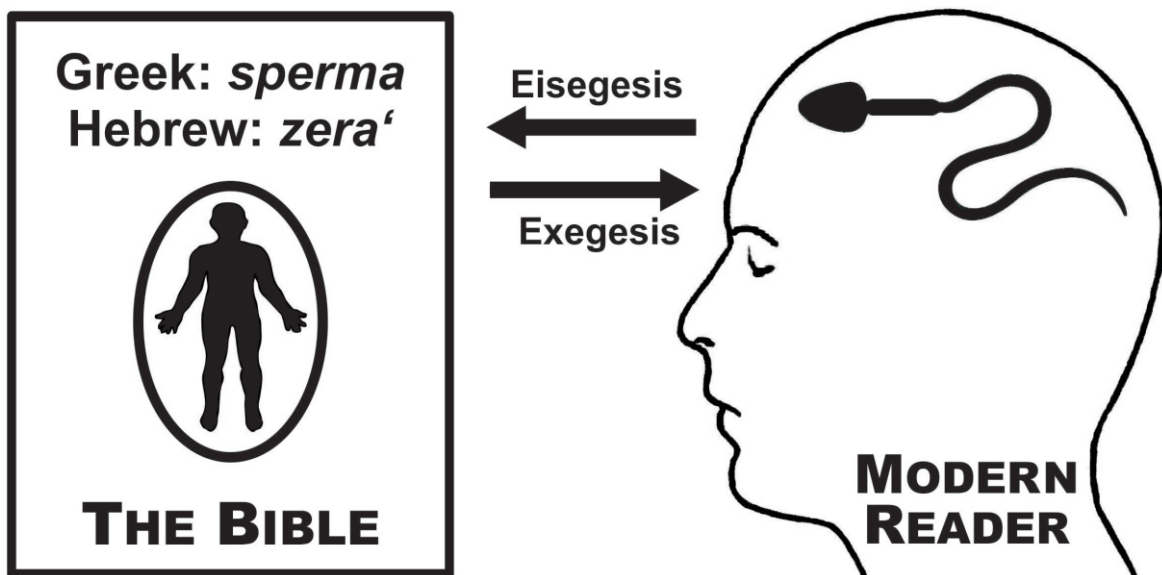
At the name of Jesus
every knee should bow,
[1] in **heaven** and,
[2] on **earth** and,
[3] in the **underworld**,
and every tongue confess
that Jesus Christ is Lord,
to the glory of God the
Father.

Hermeneutical Horizons

Structure of the Universe



Human Reproductive Biology



CATEGORIES OF BIBLICAL STATEMENTS

SPIRITUAL

- Character of God

God's words are true, perfect & flawless (Prov 30:5, 2 Sam 22:31) God does not lie (Tit 1:2, Heb 6:18)
Holy (Rev 4:8, Rev 15:4) Love (1 Jn 4:8, 1 Jn 4:16) Just (2 Th 1:6, Is 30:18) Merciful (Deut 4:31, Dan 9:9)

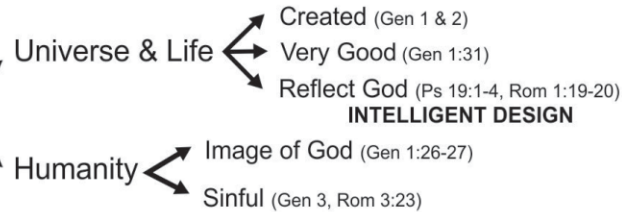
- Laws of God

10 Commandments (Exo 20:1-17, Deut 5:5-21)
2 Great Commandments (Matt 22:37-40)

- Acts of God



- Character of God's Creation



HISTORICAL

- Jesus of Nazareth

To write an orderly account about Jesus (Lk 1:1-4)

- Israel, Church & Nations

Israel in Ancient Near East (Josh 4:22; Jud 17:6)

Merneptah (Egyptian Pharaoh) Stele (1210 BC/E) →

**"Israel is laid waste,
his seed is not"**

House of David (2 Sam 3:1)

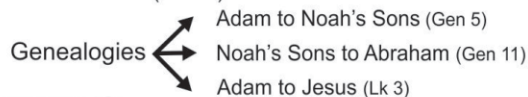
Tel Dan Stele (850 BC/E): "House of David"

Herod King of Judea (Lk 1:5)

- Human **ORIGINS**

Humanity created on 6th day (Gen 1)

Adam & Eve (Gen 2)



SCIENTIFIC

- Structures

3 Tiered Universe

At the Name of Jesus every knee should bow
in heaven, and on earth and under the earth (Phil 2:10)

- Operations

Immobility of the Earth

The world is firmly established, it cannot move (1 Chr 16:30, Ps 93:1, Ps 96:10)

Mobility of the Sun

The sun rises and the sun goes down, and hurries to the place where it rises (Eccl 1:5)

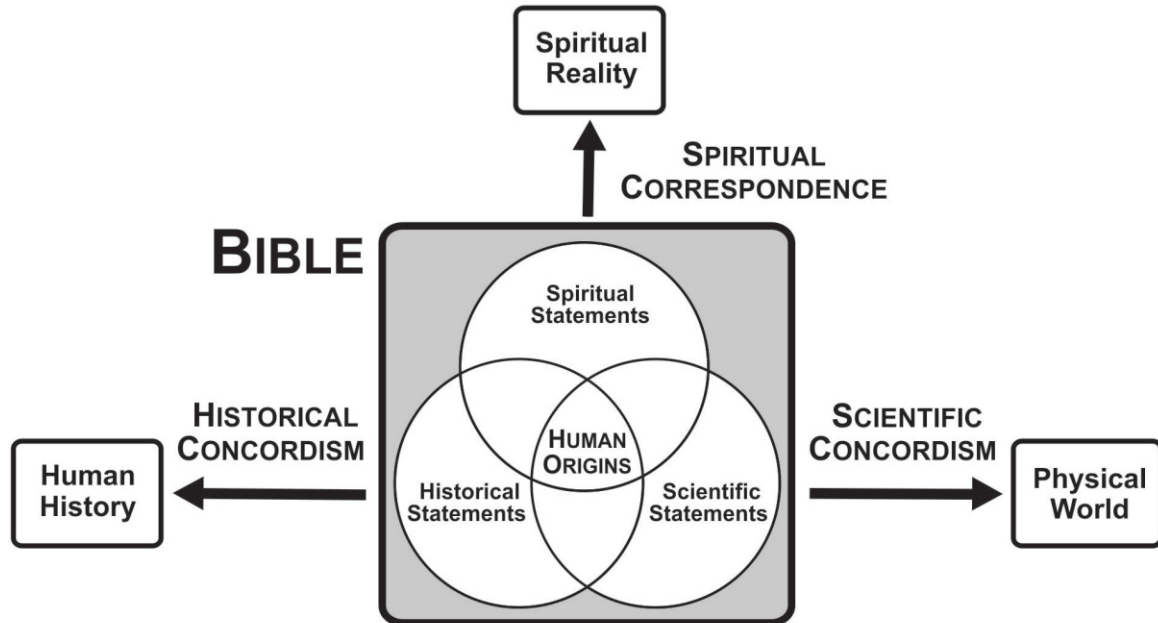
- **ORIGINS**

Heavens, Earth & Living Organisms

Creation of World in 6 Days (Gen 1)

Creation of Adam & Eve (Gen 2)

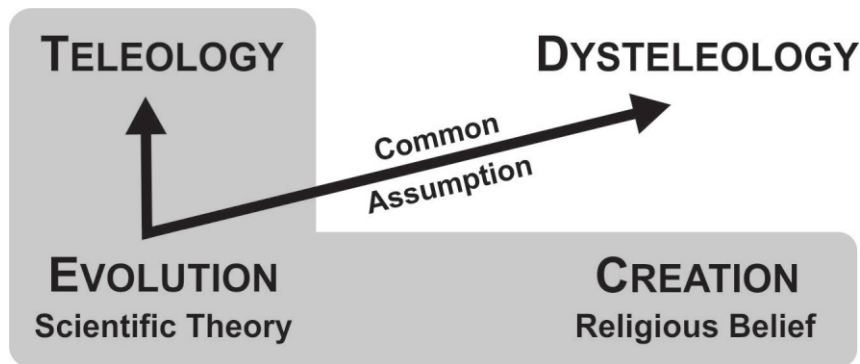
CATEGORIES OF BIBLICAL CONCORDISM & CORRESPONDENCE



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

Spiritual? Historical? Scientific?

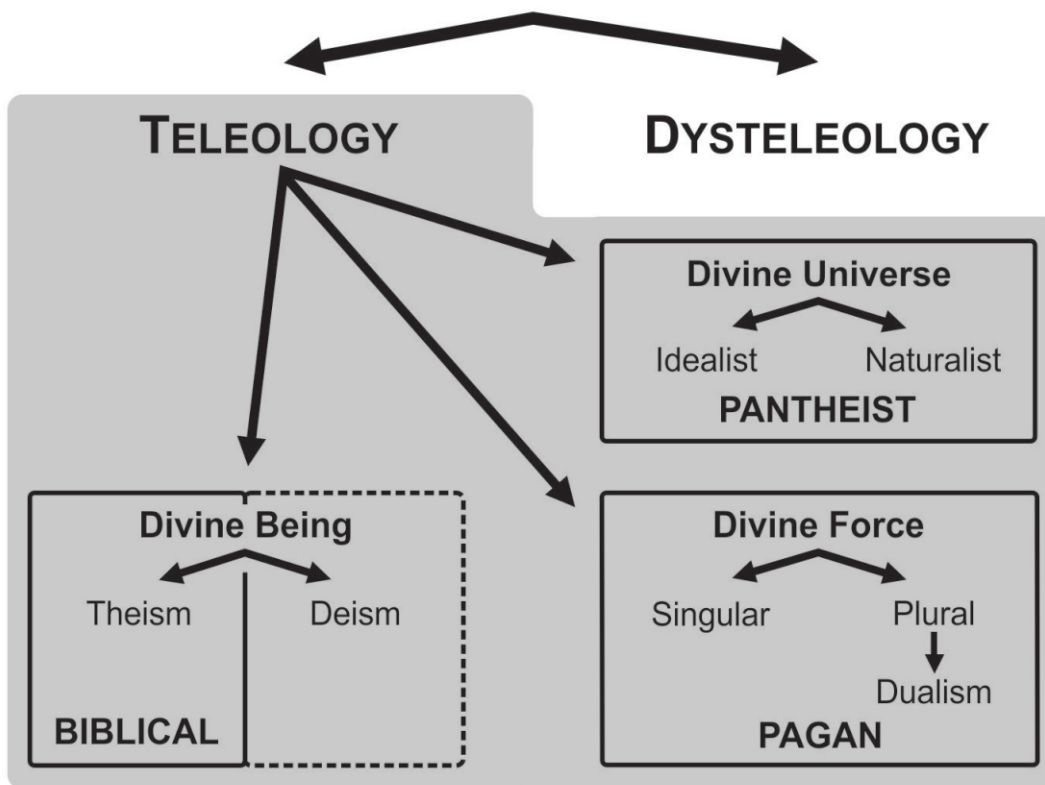
RE-CATEGORIZING ORIGINS



ORIGINS & CONCORDISM

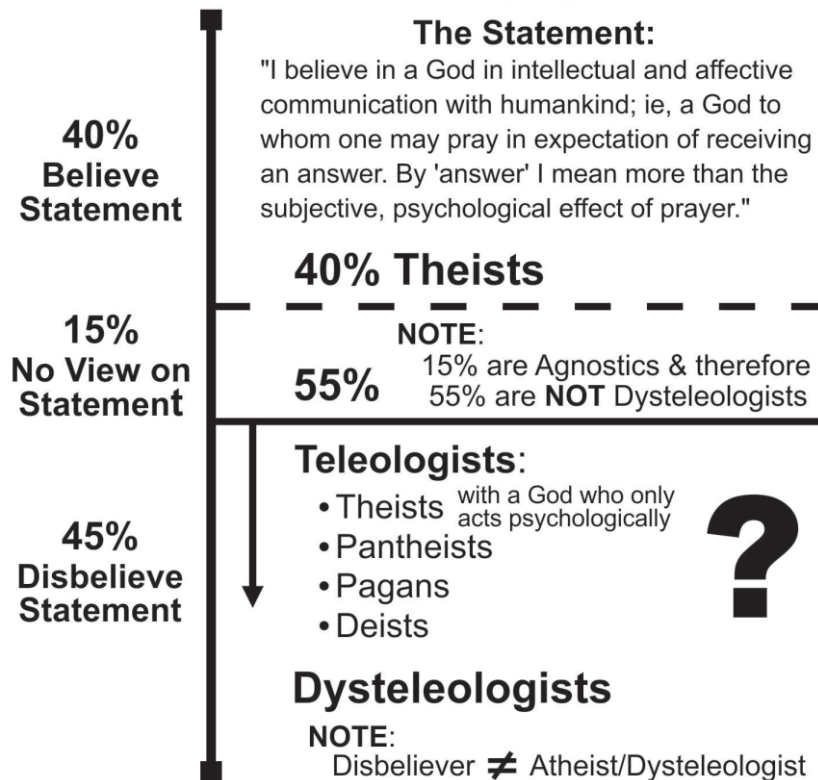
	Cosmological Evolution	Geological Evolution	Biological Evolution	Concordism & Genesis 1	
Young Earth Creation	X	X	X	✓	Days = 24 Hrs 6000 Yrs
Progressive Creation	✓	✓	X	✓	Days = Millions Yrs 13.8 Billion Yrs
Evolutionary Creation	✓	✓	✓	X	Ancient Science 13.8 Billion Yrs
Deistic Evolution	✓	✓	✓	X	Rejects Biblical Revelation
Dysteleological Evolution	✓	✓	✓	X	Rejects Biblical Revelation

RELIGIOUS/ METAPHYSICAL BELIEFS



INTERPRETING LARSON & WITHAM

Scientists Are Still Keeping the Faith



* Corrected from 67,200

GENESIS 5

HEBREW GENEALOGY BEFORE THE FLOOD

Bold: multiples of 5 (0,5). Subtract 7 from non-multiples of 5, results in a multiple of 5. * from Gen 9:29

THE REIGNS OF THE KINGS OF JUDAH

Sources: 1 & 2 Kings , 2 Chronicles


GENEALOGY OF JESUS IN MATTHEW 1:1-16

1 st 14	1 Chr 1:34, 2:1-15	2 nd 14	1 Chr 3:10-16	3 rd 14	1 Chr 3:17-24
1. Abraham	✓	1. Solomon	✓	1. Shealtiel	✓
2. Isaac	✓	2. Rehoboam	✓	2. Zerubbabel	Pedaiah
3. Jacob	✓	3. Abijah	✓	3. Abiud	✓
4. Judah	✓	4. Asa	✓	4. Eliakim	Hananiah
5. Perez	✓	5. Jehoshaphat	✓	5. Azor	Shecaniah
6. Hezron	✓	6. Joram	✓	6. Zadok	Neariah
7. Ram	✓		Ahaziah	7. Akim	Elieoenia
8. Amminadab	✓		Joash	8. Eliud	
9. Hahshon	✓		Amaziah	9. Eleazar	
10. Salmon	✓	7. Uzziah	✓	10. Matthan	
11. Boaz	✓	8. Jotham	✓	11. Jacob	
12. Obed	✓	9. Ahaz	✓	12. Joseph	
13. Jesse	✓	10. Hezekiah	✓	13. Jesus	
14. David	✓	11. Manasseh	✓	14. Christ	
		12. Amon	✓		
		13. Josiah	✓		
			Jehoiachkim		
		14. Jeconiah	✓		
				TOTAL: 42	

Matt 1:17

14 generations in all from Abraham to David,
 14 from David to the exile to Babylon, and
 14 from the exile to the Christ.

Gematria of David


Dāwid
 4 + 6 + 4 = 14

Stylistic Seven

14 = 7 X 2 42 = 14 x 3

Jesus the Son of David Theme

Matthew: 9 X
 Mark: 3 X and Luke: 2 X

GENEALOGY OF JESUS IN LUKE 3:23-38

1. Jesus	12. Esli	23. Neri	34. Simeon	45. Obed	✓	56. Abraham
2. Joseph ✓	13. Naggi	24. Melki	35. Judah	46. Boaz	✓	57. Terah
3. Heli	14. Maath	25. Addi	36. Joseph	47. Salmon	✓	58. Nahor
4. Matthat	15. Mattahias	26. Cosam	37. Jonam	48. Nahshon	✓	59. Serug
5. Levi	16. Semein	27. Elamadam	38. Eliakim	49. Amminadab	✓	60. Reu
6. Melki	17. Josech	28. Er	39. Melea	50. Ram	✓	61. Peleg
7. Jannai	18. Joda	29. Joshua	40. Menna	51. Hezron	✓	62. Eber
8. Joseph	19. Joanan	30. Eliezar	41. Mattatha	52. Perez	✓	63. Shelah
9. Mattahias	20. Rhesa	31. Jorim	42. Nathan	53. Judah	✓	64. Cainan
10. Amos	21. Zerubbabel ✓	32. Matthat	43. David ✓	54. Jacob	✓	65. Arphaxad
11. Nahum	22. Shealtiel ✓	33. Levi	44. Jesse ✓	55. Isaac	✓	66. Shem

✓ aligns with Matt 1 genealogy

From David (43) to Adam (76) aligns with 1 Chr 1-3

TOTAL: 77

Stylistic Seven

77 is double 7s,
 perfect number?
 Jesus is the 42nd
 generation after David

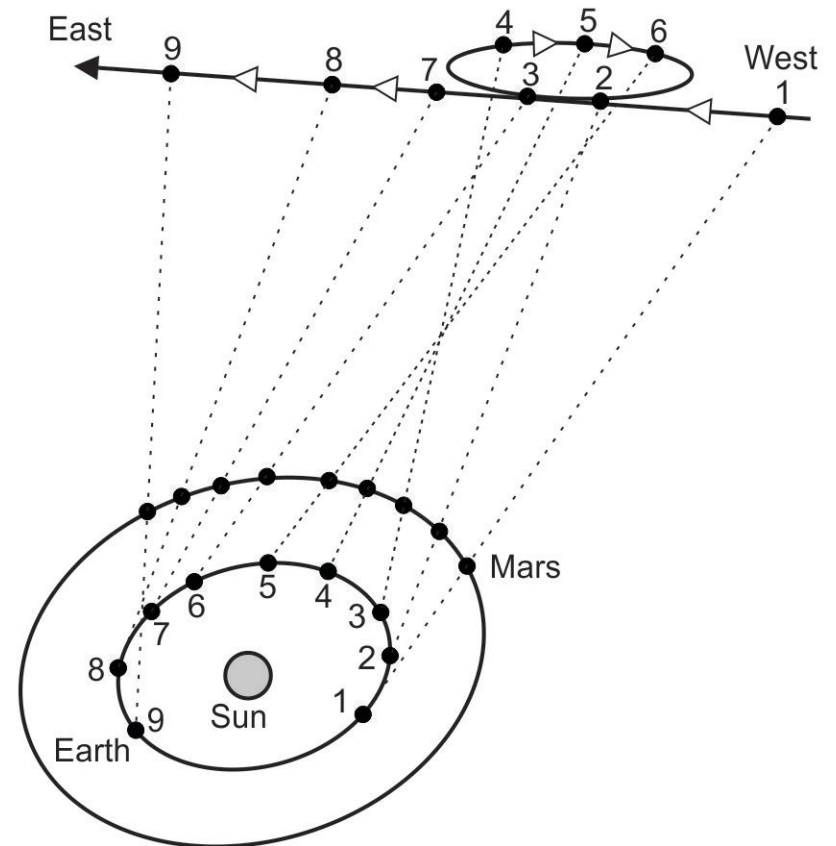
MARTIN LUTHER'S GEOCENTRIC UNIVERSE

This image is across from the Genesis 1 creation account in Luther's 1534 translation of the Bible.



Redrawn from facsimile by Andrea Dmytrash

RETROGRADE PLANETARY MOTION

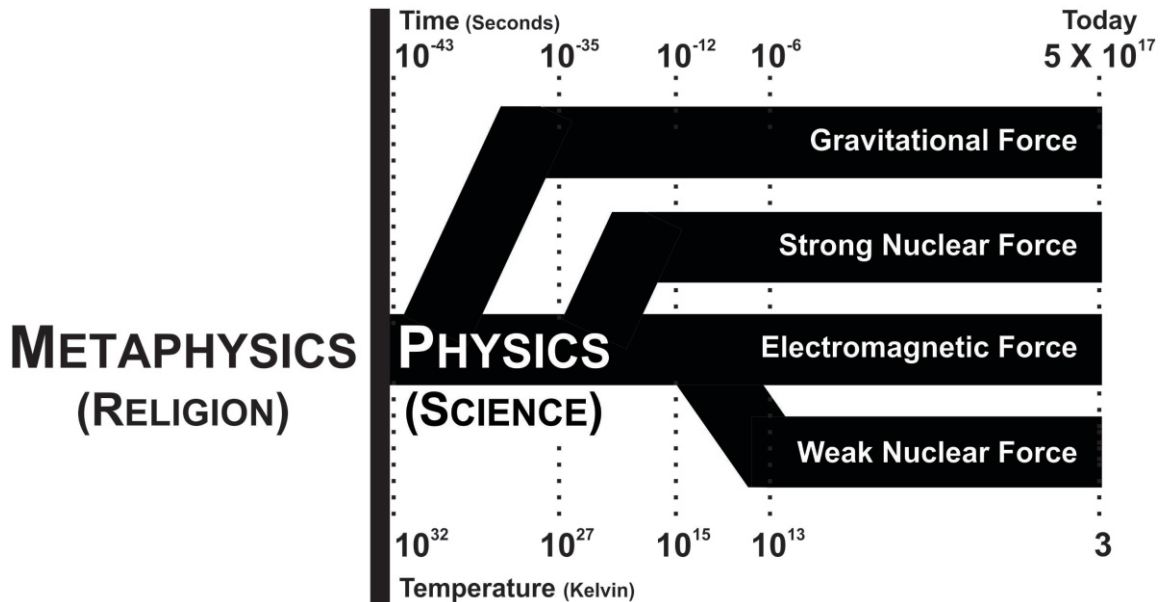


As the earth revolves around the sun, it passes by Mars for a short period giving the appearance that Mars “moves backward” (positions 4 to 6). Mars then resumes its west-to-east movement across the sky (positions 6 to 8).

However, with a geocentric understanding of the structure of the universe (diagram at left), it was thought that Mars literally made loops in its movement across the sky. Luther believed this was caused by God's direct intervention.

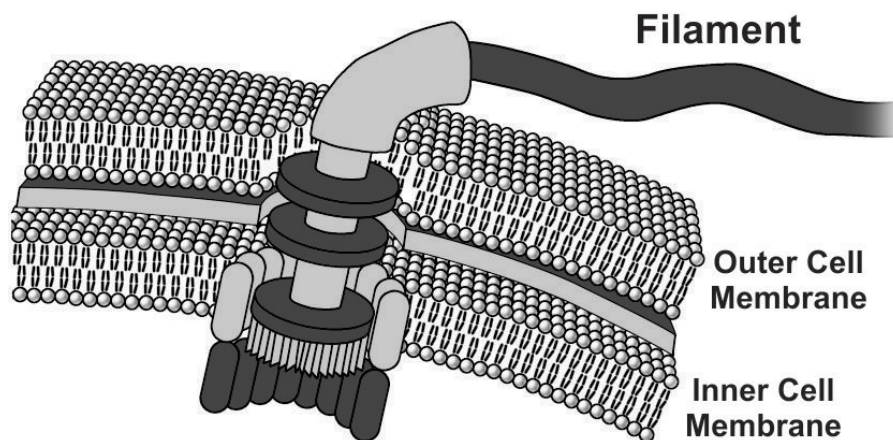
Redrawn from Nancy Morvillo, *Science and Religion* (Oxford, UK: Wiley-Blackwell, 2010), 57.

THE BIG BANG & METAPHYSICS



Redrawn & Adapted from A Fraknoi, D Morrison & S Wolf, *Voyages through the Universe*, (Fort Worth: Saunders, 1997), II: 578

THE BACTERIAL FLAGELLUM



Redrawn & Adapted by Kenneth Kully from D Voet & Voet, *Biochemistry*, 2nd (NY: John Wiley & Sons 1997), 1259.

EVIDENCE FOR FINE-TUNING OF THE UNIVERSE

Hugh Ross, *The Creator & the Cosmos*
(Colorado Spring, CO, 1993), 111-114.

More than two dozen parameters for the universe must have values falling within narrowly defined ranges for life of any kind to exist.

Gravitational Force Constant

if larger: stars would be too hot and would burn up too quickly and too unevenly

if smaller: stars would remain so cool that nuclear fusion would never ignite, hence no heavy element production

Strong Nuclear Force Constant

if larger: no hydrogen; nuclei essential for life would be unstable

if smaller: no elements other than hydrogen

Weak Nuclear Force Constant

if larger: too much hydrogen converted to helium in big bang, hence too much heavy element material made by star burning; no expulsion of heavy elements from stars

if smaller: too little helium produced from big bang, hence too little heavy element material made by star burning; no expulsion of heavy elements from stars

Electromagnetic Force Constant

if larger: insufficient chemical bonding; elements more massive than boron would be too unstable for fission

if smaller: insufficient chemical bonding

Ratio of Electromagnetic Force Constant to Gravitational Force Constant

if larger: no stars less than 1.4 solar masses, hence short stellar life spans and uneven stellar luminosities

if smaller: no stars more than 0.8 solar masses, hence no heavy element production

Ratio of Electron to Proton Mass

if larger: insufficient chemical bonding

if smaller: insufficient chemical bonding

Ratio of Protons to Electrons

if larger: electromagnetism would dominate gravity, preventing galaxy, star, and planet formation

if smaller: electromagnetism would dominate gravity, preventing galaxy, star, and planet formation

Expansion Rate of the Universe

if larger: no galaxy formation

if smaller: universe would collapse prior to star formation

Entropy Level of the Universe

if smaller: no proto-galaxy formation

if larger: no star condensation within the proto-galaxies

Mass Density of the Universe

if larger: too much deuterium from big bang, hence stars burn too rapidly

if smaller: insufficient helium from big bang, hence too few heavy elements forming

Velocity of Light

if faster: stars would be too luminous

if slower: stars would not be luminous enough

Age of the Universe

if older: no solar-type stars in a stable burning phase in the right part of the galaxy

if younger: solar-type stars in a stable burning phase would not yet have formed

Initial Uniformity of Radiation

if smoother: stars, star clusters, and galaxies would not have formed

if coarser: universe by now would be mostly black holes and empty space

Fine Structure Constant

if larger: no stars more than 0.7 solar masses

if smaller: no stars less than 1.8 solar masses

Average Distance between Stars

if larger: heavy element density too thin for rocky planets to form

if smaller: planetary orbits would become destabilized

Decay Rate of the Proton

if greater: life would be exterminated by the release of radiation

if smaller: insufficient matter in the universe for life

Carbon (¹²C) to Oxygen (¹⁶O) Energy Level Ratio

if larger: insufficient oxygen

if smaller: insufficient carbon

Ground State Energy Level for Helium (⁴He)

if larger: insufficient carbon and oxygen

if smaller: insufficient carbon and oxygen

Decay Rate of Beryllium (⁸Be)

if slower: heavy element fusion would generate catastrophic explosions in all the stars

if faster: no element production beyond beryllium and, hence, no life chemistry possible

Mass excess of the Neutron over the Proton

if greater: neutron decay would leave too few neutrons to form the heavy elements essential for life

if smaller: proton decay would cause all stars to collapse rapidly into neutron stars or black holes

Initial Excess of Nucleons over Anti-Nucleons

if greater: too much radiation for planets to form

if smaller: not enough matter for galaxies or stars to form

Polarity of the Water Molecule

if greater: heat of fusion and vaporization would be too great for life to exist

if smaller: heat of fusion and vaporization would be too small for life's existence; liquid water would become too inferior a solvent for life chemistry to proceed; ice would not float, leading to a runaway freeze-up

Supernovae Eruptions

if too close: radiation would exterminate life on the planet

if too far: not enough heavy element ashes for the formation of rocky planets

if too frequent: life on the planet would be exterminated

if too infrequent: not enough heavy element ashes for the formation of rocky planets

if too late: life on the planet would be exterminated by radiation

if too soon: not enough heavy element ashes for the formation of rocky planets

White Dwarf Binaries

if too few: insufficient fluorine produced for life chemistry to proceed

if too many: disruption of planetary orbits from stellar density; life on the planet would be exterminated

if too soon: not enough heavy elements made for efficient fluorine production

if too late: fluorine made too late for incorporation in protoplanet

Ratio of Exotic to Ordinary Matter

if smaller: galaxies would not form

if larger: universe would collapse before solar type stars could form

EVIDENCE FOR DESIGN IN THE GALAXY-SUN- EARTH-MOON SYSTEM FOR LIFE SUPPORT

Hugh Ross, *The Creator & the Cosmos*
(Colorado Spring, CO, 1993), 129-132.

The following parameters must have values that fall within a narrowly defined ranges for life to exist.

Galaxy Type

if too elliptical: star formation would cease before sufficient heavy element build-up for life chemistry

if too irregular: radiation exposure on occasion would be too severe and heavy elements for life chemistry would not be available

Supernova Eruptions

if too close: life on the planet would be exterminated by radiation

if too far: not enough heavy element ashes would exist for the formation of rocky planets

if too frequent: life on the planet would be exterminated

if too infrequent: not enough heavy element ashes would be present for the formation of rocky planets

if too late: life on the planet would be exterminated by radiation

if too soon: not enough heavy element ashes would exist for the formation of rocky planets

White Dwarf Binaries

if too few: insufficient fluorine would be produced for life chemistry to proceed

if too many: planetary orbits would be disrupted by stellar density; life on the planet would be exterminated

if too soon: not enough heavy elements would be made for efficient fluorine production

if too late: fluorine would be made too late for incorporation in protoplanet

Parent Star Distance from Centre of Galaxy

if farther: quantity of heavy elements would be insufficient to make rocky planets

if closer: galactic radiation would be too great; stellar density would disturb planetary orbits out of life support zones

Number of Stars in the Planetary System

if more than one: tidal interactions would disrupt planetary orbits

if less than one: heat produced would be insufficient for life

Parent Star Birth Date

if more recent: star would not yet have reached stable burning phase; stellar system would contain too many heavy elements

if less recent: stellar system would not contain enough heavy elements

Parent Star Age

if older: luminosity of star would change too quickly

if younger: luminosity of star would change too quickly

Parent Star Mass

if greater: luminosity of star would change too quickly; star would burn too rapidly

if less: range of distances appropriate for life would be too narrow; tidal forces would disrupt the rotational period for a planet of the right distance; uv radiation would be inadequate for plants to make sugars and oxygen

Parent Star Color

if redder: photosynthetic response would be insufficient

if bluer: photosynthetic response would be insufficient

Parent Star Luminosity Relative to Speciation

if increases too soon: would develop runaway greenhouse

if increases too late: would develop runaway glaciation

Age

if too young: planet would rotate too rapidly

if too old: planet would rotate too slowly

Magnetic Field

if stronger: electromagnetic storms would be too severe

if weaker: ozone shield and life on the land would be inadequately protected from hard stellar and solar radiation

Inclination of Orbit

if too great: temperature differences would be too extreme

Distance from Parent Star

if farther: planet would be too cool for a stable water cycle

if closer: planet would be too warm for a stable water cycle

Orbital Eccentricity

if too great: seasonal temperature differences would be too extreme

Axial Tilt

if greater: surface temperature differences would be too great

if less: surface temperature differences would be too great

Rotation Period

if longer: diurnal temperature differences would be too great

if shorter: atmospheric wind velocities would be too great

Thickness of Crust

if thicker: too much oxygen would be transferred from the atmosphere to the crust

if thinner: volcanic and tectonic activity would be too great

Albedo (reflected light to total amount falling on surface)

if greater: runaway glaciation would develop

if less: runaway greenhouse effect would develop

Collision Rate with Asteroids & Comets

if greater: too many species would become extinct

if less: crust would be too depleted of materials for life

Surface Gravity (Escape Velocity)

if stronger: planet's atmosphere would retain too much ammonia and methane

if weaker: planet's atmosphere would lose too much water

Oxygen to Nitrogen Ratio in Atmosphere

if larger: advanced life functions would proceed too quickly

if smaller: advanced life functions would proceed too slowly

Carbon Dioxide Level in Atmosphere

if greater: runaway greenhouse effect would develop

if less: plants would be unable to maintain efficient photosynthesis

Water Vapor Level in Atmosphere

if greater: runaway greenhouse effect would develop

if less: rainfall would be too meager for advanced life

Atmospheric Electric Discharge Rate

if greater: too much fire destruction would occur

if less: too little nitrogen would be fixed in the atmosphere

Ozone Level in Atmosphere

if greater: surface temperatures would be too low

if less: surface temperatures would be too high; there would be too much uv radiation at the surface

Oxygen Quantity in Atmosphere

if greater: plants and hydrocarbons would burn up too easily

if less: advanced animals would have too little to breathe

Seismic Activity

if greater: too many life forms would be destroyed

if less: nutrients on ocean floors (from river runoff) would not be recycled to the continents through tectonic uplift

Oceans-to-Continents Ratio

if greater: diversity & complexity of life forms would be limited

if smaller: diversity & complexity of life forms would be limited

Global Distribution of Continents

if too much in the southern hemisphere: seasonal temperature differences would be too severe for advanced life

Gravitational Interaction with a Moon

if greater: tidal effects on the oceans, atmosphere, and rotational period would be too severe

if less: orbital obliquity changes would cause climatic instabilities; movement of nutrients and life from the oceans to the continents and continents to the oceans would be insufficient; magnetic field would be too weak

CONVERGENCES INDEX

Simon Conway Morris *Life's Solution: Inevitable Humans in a Lonely Universe*

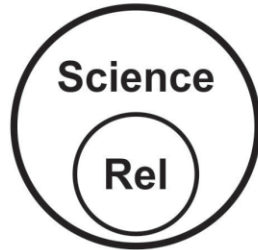
NY: Cambridge U Press, 2003. 455-461

- African golden mole
Afrotheria
Afterbirth
aggression
agriculture
accessory retina
acute visual zone
alcipodids
aldolase
alkaloids
allosaurids
alfi barrels
ambrosia beetles
aminoacyl-tRNA synthetases
amphibians
annelids
anolids
anteaters
antifreeze proteins
antigen receptors
ants
army ants
aorta
apatemyids
appendages
aquatic birds
arboreal gait
argyrolagids
armadillos
army ants
arthropodization
arthropods
artiodactyls
atelines
attachment pads
auditory mechanisms
aye-aye 372n3
babbling
bacteria
bacterial symbionts
bacteriorhodopsin
balance
barnacles
Batesian mimicry
batherids
bats
bat carnivory
bees
bee eusociality
beetles
behaviours
binocular vision
bipedalism
bird songs
bird vocalizations
birds
bivalve molluscs
bladders
blood-brain barrier
blood rete
blue vision
blue-sensitive vision, loss
Bombardier beetle
bone
bottlenose dolphins
brain structure
brains
brain-size increase
brittle-stars
bryophytes
bryozoans
'bucket brigades'
burrowing
burrowing cycle
butterflies
C4 photosynthesis
cactus Caddis fly
camera eyes
canines
cartilage
cephalopods Is
chameleons
Châtelerronian
chemical
chemosensory
chimps
chitin-binding proteins
chrysochlorids
cichlids
circulatory systems
cnidocyst
coccoideans
cochlea
cognitive processes
collembolans
colobine monkeys
commelinoids
communication
communities
compound eyes
concerted
constructions
counter-current systems
courtship behaviour
crab spider
crabs
crested auklets
crickets
crustaceans
cryptochromes
crystallins
cubozoans
cultural transmission
culture
cyanogenic glycosides
cytokinases
defence
descended larynx
development
dialects
dichromacy
dinoflagellates
diptcrans
disgust
DM domain factors
dolphins
double-fertilization
duck-billed platypus
E. coli
ears
echidna
echolocation
ecomorphological
eel
elastic proteins
elastic release
electric organs II
electrical signals
electrocytes
electrogenation
electroreception
elephants
Elvis taxa
encephalization
endosymbiosis
endothermy
enzyme
Ernanodon
euphasiids
Eurotamandua
eusociality
expressions of surprise
extra-embryonic membranes
extra-ocular muscles
eye spots
eyes
farming
fibre-optics
fiddler crabs
finches
fish
fission-fusion society
five-site rule
flies
flightlessness
flowers
fore-limb/hind-limb separation
fore-limb manipulation
fovea
frogs
fruit-flies
gall-thrips
gas-filled bladders
geckos
grebes
gymnotids
gyroscopes
haennocyanin
haemoglobin
halteres
hearing
heat-sensitive organ
helicases
hemipterans
heteropods
heteropterans
hexapod gait
high-altitude birds
HIV proteases
hoatzin
hominid cultures
hominids
hooves
houseflies
humming birds
hyaluronan synthase
hydrogenosomes
hydrostatic skeleton
hymenopterans
hypocone
Indian Red ant
ink clouds
insect-bacterial association
insectivores
insectivorous birds
insects
intelligences
island faunas
Jamming avoidance response
jellyfish
jerboas
kiwi
lacewings
lactate
dehydrogenases
lamprins
langur
lateral-line systems
latex
Laurasiatheria
leaf-eating
leaves
lekking
lens
light-harvesting proteins
lilies
limb loss
limbs
lizards
locomotion
ons
luminescence
lysozyme
malignant hyperthermia
'mammal-ness'
mammals
manipulative skills
mantids
mantispids
marsupial mole
marsupials
marsupium
maternal care
matrilineal social systems
matrotrophy
Mediterranean-style floras
megadont
memory
menopause
mice
migratory birds
millipede
mimicry
mites
molars
mole
mole rat
molecular
molluscs
mormyridsmorphological
moths & sphinx moths
Millerian mimicry
multicellulantly
music
myoglobin
NADH dehydrogenase
naked mole rats
necrolestids
nectar-feeding bats
nectar-feeding birds
neural algorithms
neural networks
neural processing
nicotine oxidases
nucleotide binding proteins
octopus
oil droplets, in eye
olfaction
orypodid crabs
ornithids
ostracods
ovoviviparity
ovum, minute
owls
palcanodonts
pangolins
parallel, versus
parental care
pathogen-host relationship
pectinate claws
penis
peptidases
personalities
phorid flies
phylogenies
physiology
pike
placenta
placentals
plants
plant eating
polarization vision
polysaccharide lyases
porpoise
praying mantis
precision grip
prc-pollex
(Panda's thumb)
proteases
proteinase inhibitors
proteins
push-rod
mechanoreceptors
quorum sensing
raptorial
red vision
red-green vision
reflective structures
Rensch's rule
reproduction
resin
rhachiberothidids
rhodopsin
RNA-protein
rodents
rumen
sabellids
sabre-tooth cats
sandlance
sarcophagids
sea-bream
sea urchin
seed dispersal
seismic communication
self-organization, role of
self-recognition
semicircular canals
sharks
shrimps
sieve tubes
silk & silk nets
skeletons
sleep
snails
snakes
social systems
social voles
sodium channels
somatosensory systems
song
spectral sensitivities
speech
sperm whales
spherical aberration (eyes)
spider-monkey
spiders
spurge
staphylinids
star-nosed moles
Statocysts
steroid signalling
strepsipterans
structural mimicry
super-efficient transport
surprise, expressions
teeth
teiids
temperaments
tents
termite eaters
termites
terrestrialization
threads, adhesive
thylacosmilids
toe-fringes
tools
topoisomerases
trabecular bone
trachea
tribosphenic
trichromacy
trilobites
tropical seabirds
tuna
turret eyes
tympanic, ear
ultrasound detection
uncertainty response
ungulate
unihemispheric sleep
vangids
vermivores
vertebrates
vestibulo-oculomotor reflex
vision
visual stimuli
visual streak
visual systems
visual tracking
viviparity
vocal control systems
vocal learning
vocalizations
walking
walrus
warmbloodedness
wasps
waste management
water-vascular system
weaver ants
wetas
winkle
woodpecker
'worker policing'
worm
xenarthran
xerophyte

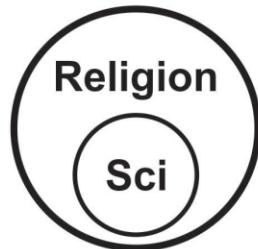
LAMOUREUX'S SCIENCE & RELIGION MODEL

1. WARFARE

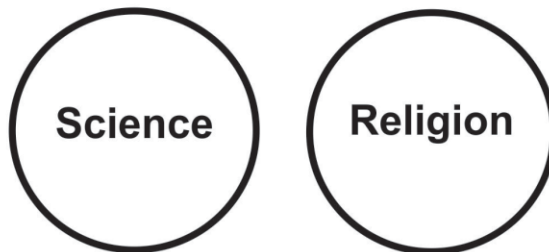
Scientism



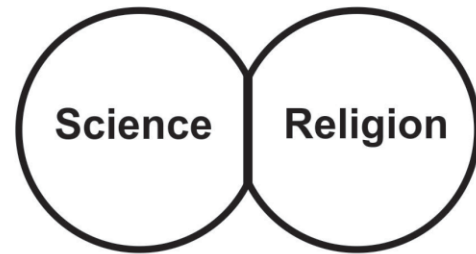
Fundamentalism



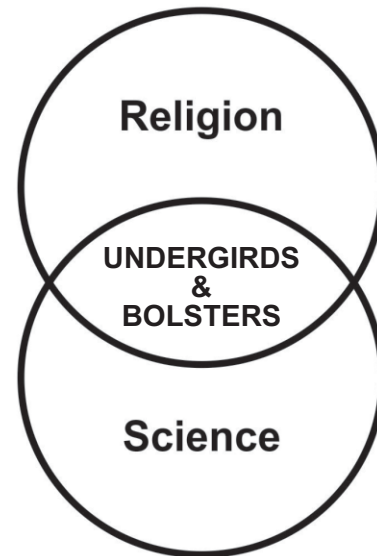
2. COMPARTMENT



3. BOUNDARY



4. COMPLEMENTARY



INTELLIGENT DESIGN & NATURE: A COMPLEMENTARY RELATIONSHIP

INTELLIGENT DESIGN

Religion & Philosophy

Ultimate Beliefs



NATURE

Scientific Discoveries

Beauty, Complexity & Functionality

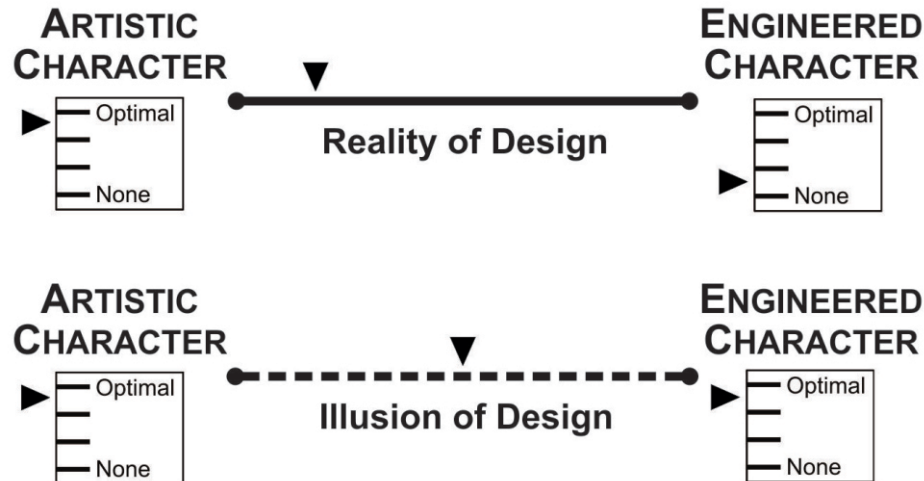
Argument from Design to Nature

Downward Arrows

Argument from Nature to Design

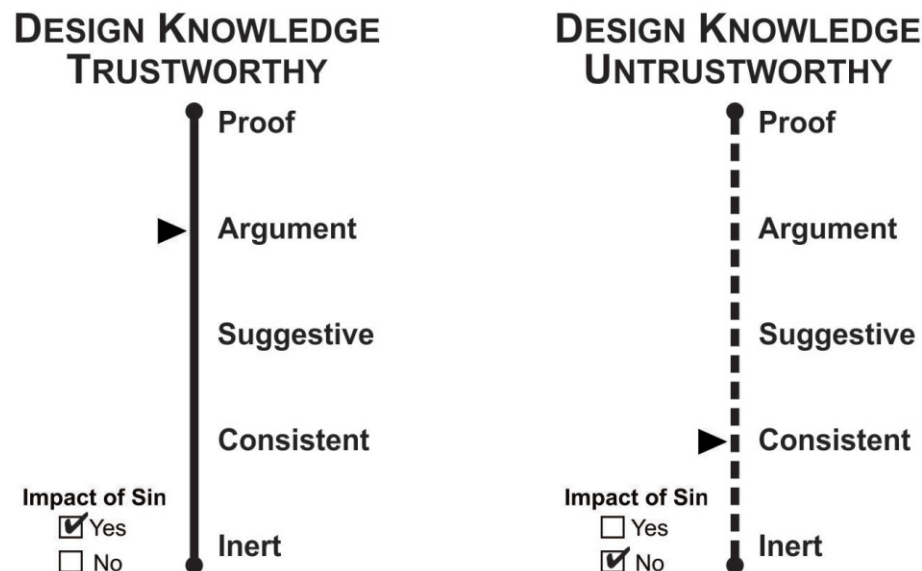
Upward Arrows

ONTOLOGICAL PARAMETER OF INTELLIGENT DESIGN



TOP: The solid line signifies that design in nature is real. The triangle above the line exemplifies a view of design that is more artistic in character than engineered. This feature is also reflected with the artistic gradient being nearly optimal (left box) and the engineered gradient quite low (right box). **BOTTOM:** The dashed line indicates that intelligent design in the world is not real but only an illusion. The position of the triangle above the line in the middle between the artistic and engineered poles means that the illusory experience of design includes both of these characteristics. The near optimal level in both the artistic and engineer gradients suggests that the impact of beauty, complexity, and functionality in nature is a powerful illusion.

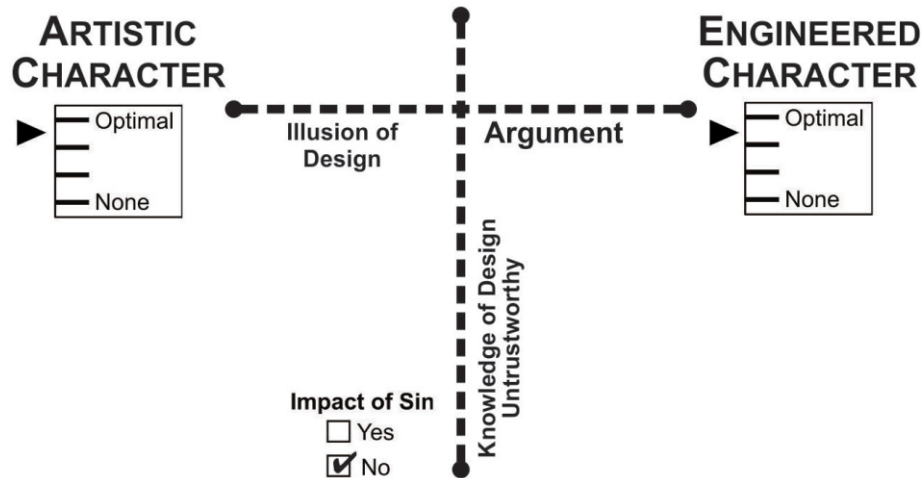
EPISTEMOLOGICAL PARAMETER OF INTELLIGENT DESIGN



LEFT: The solid line indicates that knowledge of intelligent design in nature is trustworthy because the human mind is competent to identify design. The position of the triangle next to this line signifies that the level of certainty for design is similar to that of a reasonable argument. To use a legal term, design in nature is **BEYOND A REASONABLE DOUBT**. The checked box acknowledges that sin is a factor in dealing with intelligent design.

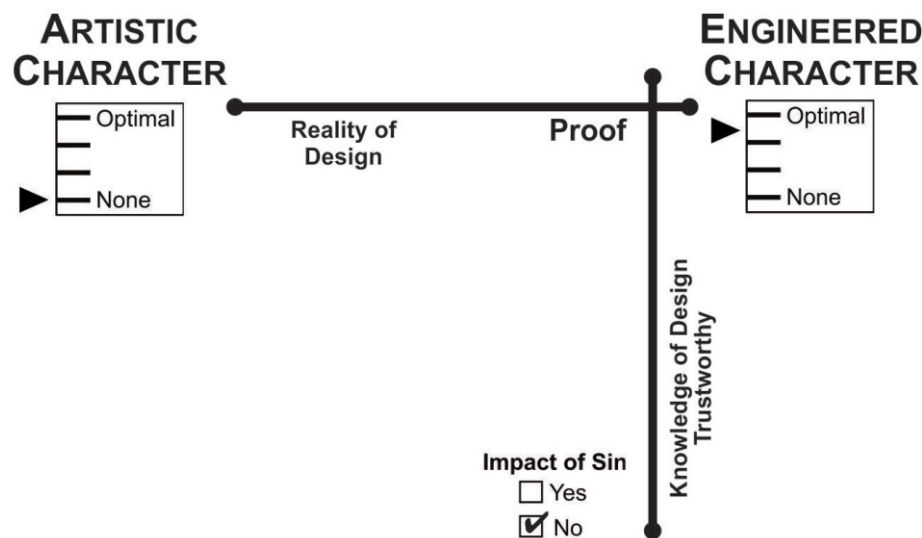
RIGHT: The dashed line signifies that knowledge of design cannot be trusted because the mind is naturally misled into believing it exists. The triangle at a low level on the epistemological parameter indicates that the experience of beauty, complexity, and functionality in nature is not that powerful. The checked box signifies that sin plays no part regarding intelligent design.

INTELLIGENT DESIGN POSITION OF RICHARD DAWKINS



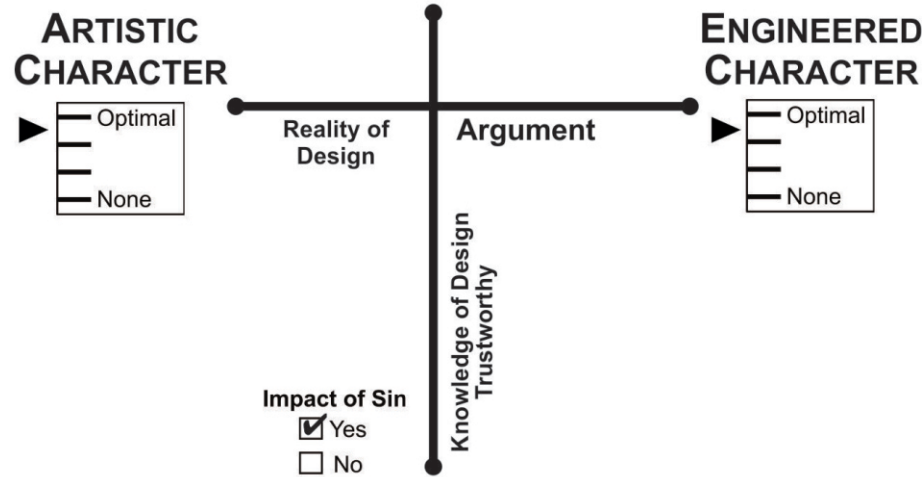
Dawkins believes that intelligent design is merely “apparent” and nothing but an **illusion**, as indicated by the dashed line on the ontological parameter. He acknowledges that this illusion is similar to “works of art” and “feats of engineering,” and that both of these characteristics appear in nature in a balanced way, as reflected by his terms “elegant efficiency” and “complex elegance.” This balance is depicted by the intersection in the middle of the ontological parameter. The triangles in both the artistic and engineered gradient boxes are near the level of optimal, signifying further the impact of these two characteristics. Dawkins does not believe that design knowledge is trustworthy, as represented by the dashed line on the epistemological parameter. However, he acknowledges that nature strikes everyone forcefully, and he contends that this is the “most powerful reason” why most people have believed in a “supernatural deity.” This level of certainty is depicted by the intersection at the level of an **argument** on the epistemological parameter. Dawkins does not believe in sin and it is not a factor in his position on ID.

INTELLIGENT DESIGN POSITION OF INTELLIGENT DESIGN THEORISTS



Intelligent Design Theorists claim that design in nature is **real**, as signified by the solid line along the ontological parameter. They focus only on the complexity and functionality of the biological structures in the cell, disregarding completely the artistic aspects of nature. Thus, the intersection on the ontological parameter is at the far right to indicate the emphasis on engineered characteristics. The triangle positioned at the bottom of the artistic gradient box, and the triangle near the top in the engineered gradient box, further indicate a disregard of beauty in nature and a focus on complexity and functionality. ID Theorists claim design knowledge is trustworthy and can be proven scientifically. This is represented by the solid line on the epistemological parameter and the intersection at the level of **proof**. Since ID Theorists claim design is scientific (and not a belief), sin is not a factor in their position on design.

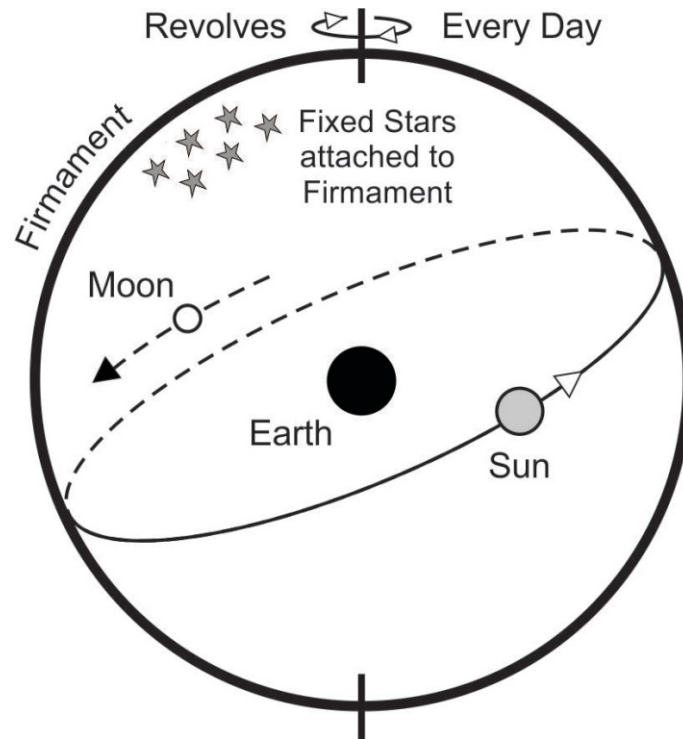
INTELLIGENT DESIGN POSITION OF LAMOUREUX



I believe that intelligent design is **real**, as indicated by the solid line on the ontological parameter. Though I appreciate both the artistic and engineered aspects in the world, beauty in nature strikes me a bit harder than complexity and functionality. Thus, the intersection is slightly to the left on the ontological parameter. The triangles in both the artistic and engineered gradient boxes are near the level of optimal and also signify the impact of nature. However, the world does have some unaesthetic and malfunctional features (eg, cancer).

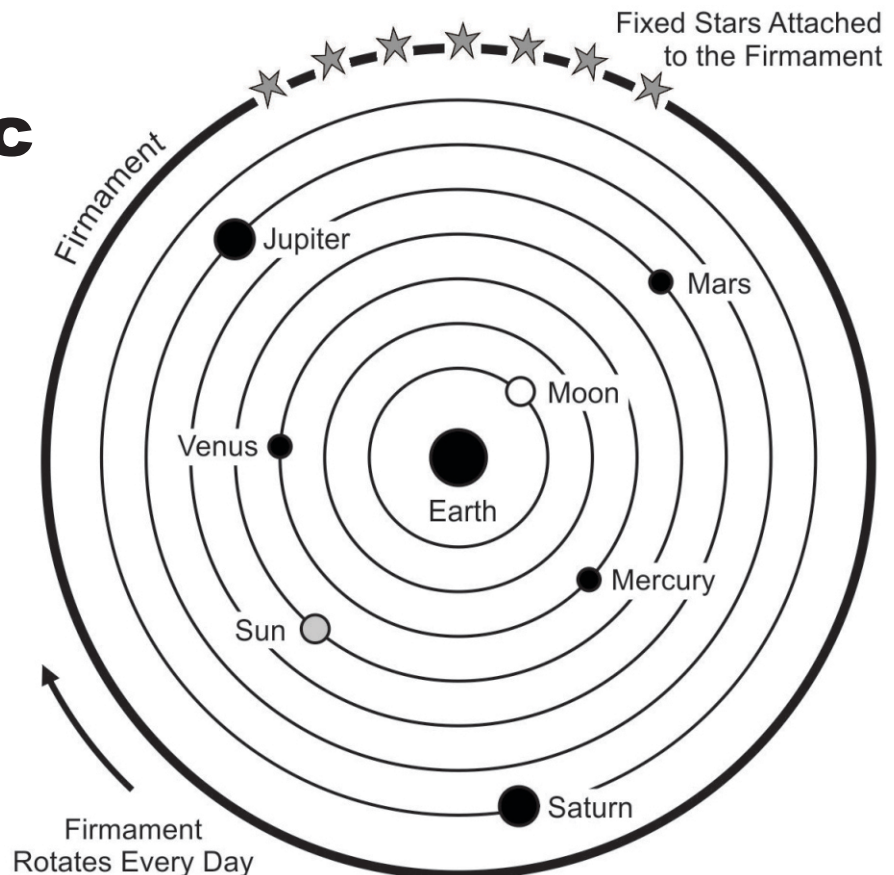
I believe design knowledge is trustworthy, as represented by the solid line on the epistemological parameter. The intersection at the level of an **argument** on the epistemological parameter recognizes that design in nature is clearly seen by everyone, so much so that we are accountable with regard to the implications of this divine revelation. Therefore, we are "without excuse" if we disregard or dismiss design (Rom 1:20; Wis 13:8). To use a legal term, I believe that intelligent design in nature is **Beyond a Reasonable Doubt**. I also believe that human sin is a critical factor that influences positions on intelligent design; in particular, the 1st Commandment and our relationship or lack of a relationship with God.

PLATO'S GEOCENTRIC UNIVERSE



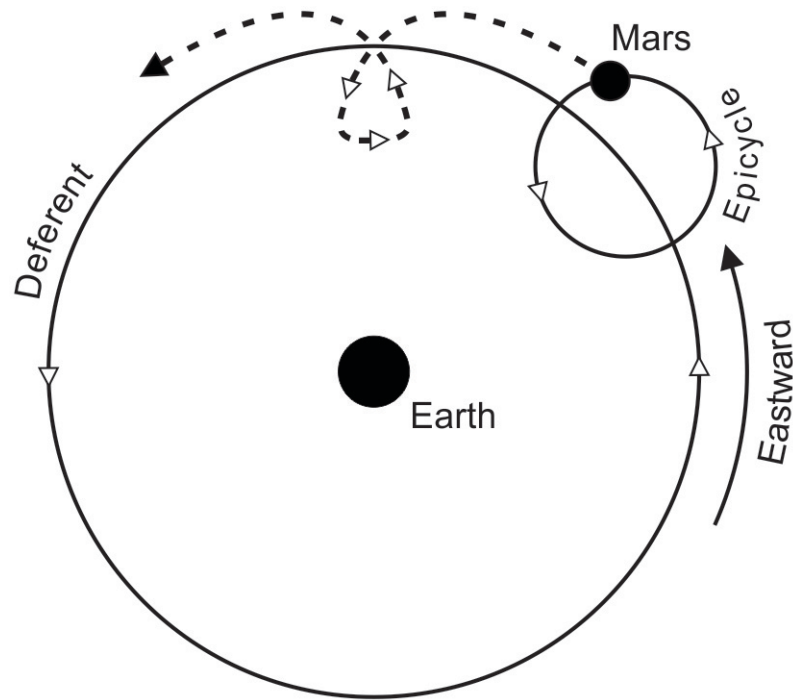
Redrawn from DC Lindberg, *Beginnings of Western Science* (Chicago: U Press, 1992), 43

Aristotle's Geocentric Universe

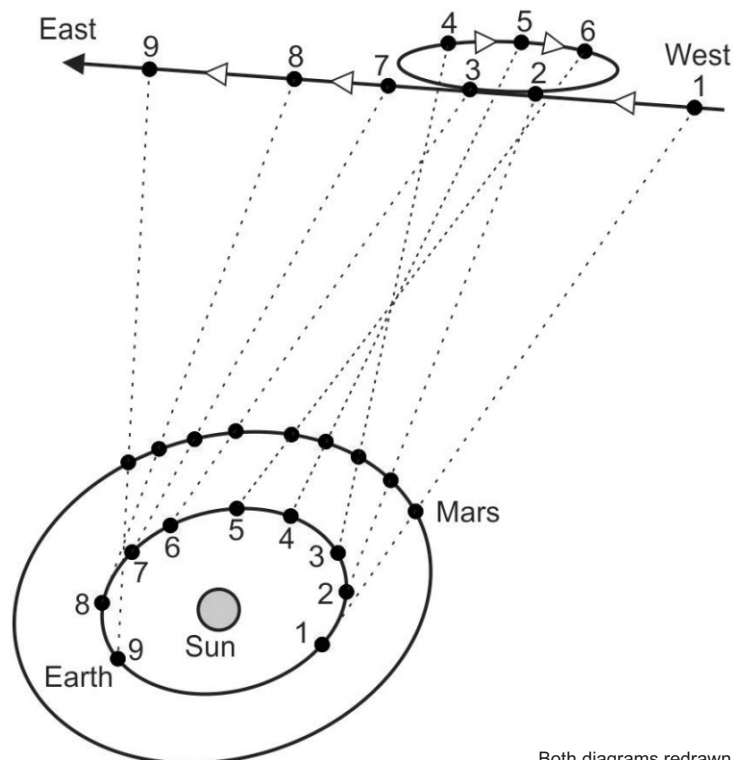


Redrawn from C Hummel, *Galileo Connection* (Downers Grove: IVP, 1986), 29

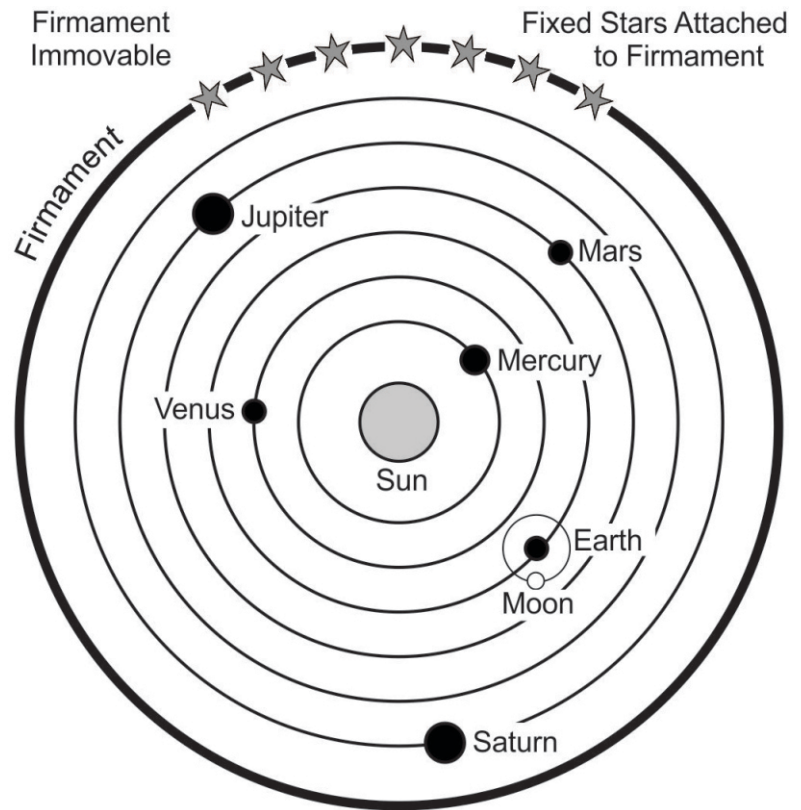
PTOLEMY & RETROGRADE MOTION OF “WANDERING STARS”



RETROGRADE PLANETARY MOTION

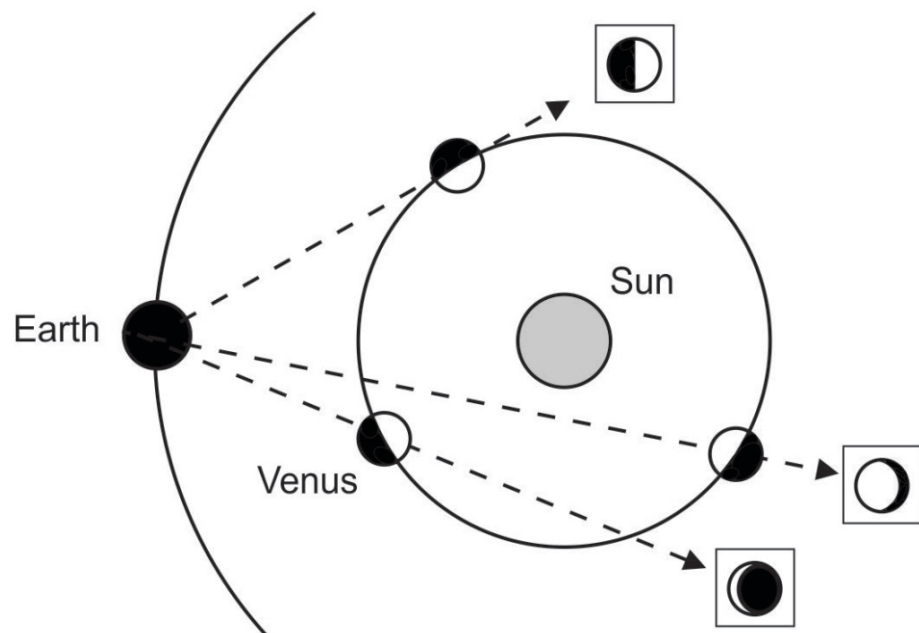


COPERNICUS' HELIOCENTRIC UNIVERSE



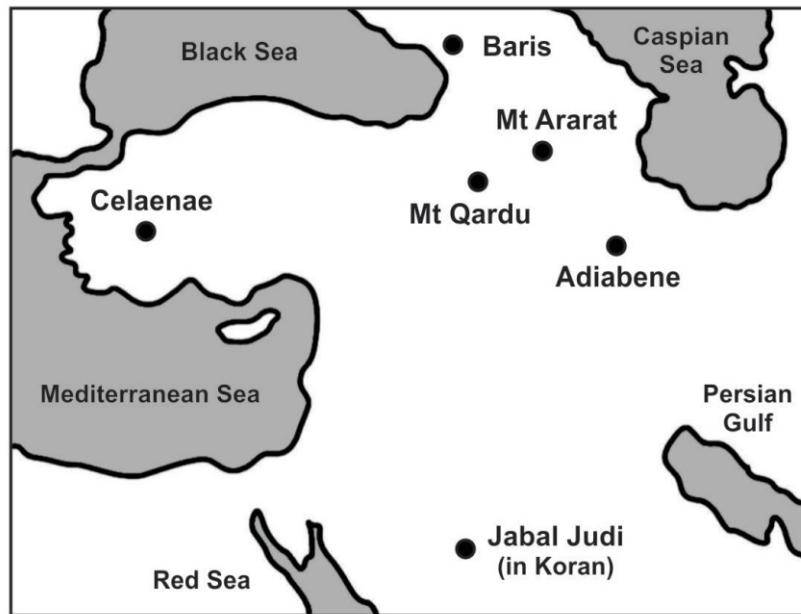
Based on C Hummel, *Galileo Connection*
(Downers Grove: IVP, 1986), 45

PHASES OF VENUS



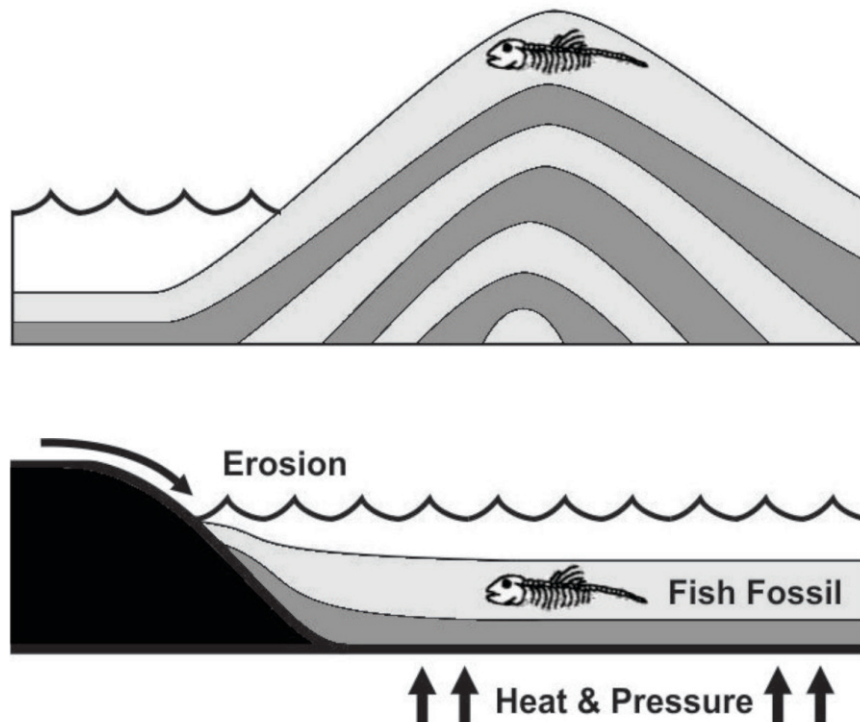
Based on M Zeilik & J Gaustad, *Astronomy*
(NY: Harper & Row, 1983), 95

PROPOSED LANDING SITES OF NOAH'S ARK



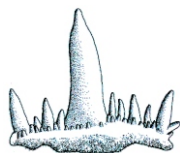
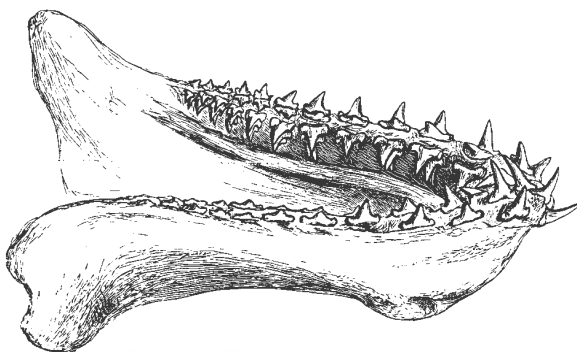
Redrawn from D Young, *The Biblical Flood* (Grand Rapids: Eerdmans, 1995), 33.

JAMES HUTTON'S PRINCIPLE OF ACTUALISM



Redrawn from P Bowler, *Evolution: History of an Idea* (Berkeley: U of California Press, 1984), 43.

SHARK JAW & TEETH



400
mya



320
mya



150
mya

Jaw from C Tomes, *Manual of Dental Anatomy* (London: Churchill, 1889), 240
Teeth redrawn from R Carroll, *Vertebrate Paleontology & Evolution* (NY: Freeman, 1988), 68

JAMES DANA'S DAY-AGE THEORY

The order of events in the Scripture cosmogony corresponds essentially with that which has been given. There was first a void and formless earth: this was literally true of the "heavens and the earth," if they were in the condition of a gaseous fluid. The succession is as follows:—

- (1.) Light.
- (2.) The dividing of the waters below from the waters above the earth (the word translated *waters* may mean *fluid*).
- (3.) The dividing of the land and water on the earth.
- (4.) Vegetation; which Moses, appreciating the philosophical characteristic of the new creation distinguishing it from previous inorganic substances, defines as that "which has seed in itself."
- (5.) The sun, moon, and stars.
- (6.) The lower animals, those that swarm in the waters, and the creeping and flying species of the land.
- (7.) Beasts of prey ("creeping" here meaning "prowling").
- (8.) Man.

In this succession, we observe not merely an order of events, like that deduced from science; there is a system in the arrangement, and a far-reaching prophecy, to which philosophy could not have attained, however instructed.

The account recognizes in creation two great eras of three days each,—an *Inorganic* and an *Organic*.

Each of these eras opens with the appearance of *light*: the *first*, light cosmical; the *second*, light from the sun for the special uses of the earth.

The arrangement is, then, as follows:—

1. The Inorganic Era.

1st Day.—LIGHT cosmical.

2d Day.—The earth divided from the fluid around it, or individualized.

3d Day.— { 1. Outlining of the land and water.
2. Creation of vegetation.

2. The Organic Era.

4th Day.—LIGHT from the sun.

5th Day.—Creation of the lower orders of animals.

6th Day.— { 1. Creation of Mammals.
2. Creation of Man.

James D. Dana, *Manual of Geology*
(Philadelphia: Bliss Co., 1863), 745

GEOLOGICAL COLUMN

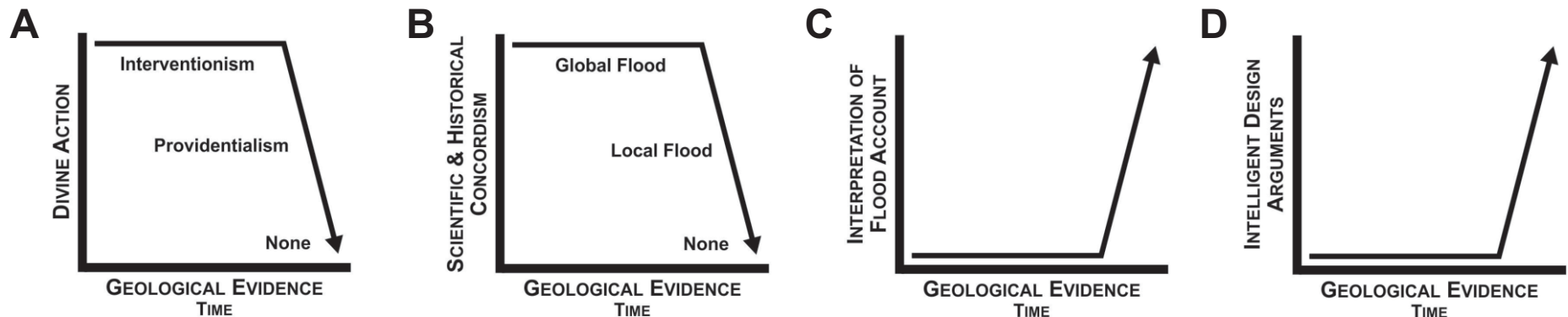
	Modern Names	Old Names c. 1850	
Cenozoic Era (Age of Mammals)	Recent	Recent Deposites	Tertiary Series
	Pleistocene		
	Pliocene	Pliocene	
	Miocene	Miocene	
	Oligocene		
	Eocene	Eocene	
Mesozoic Era (Age of Reptiles)	Paleocene		Secondary Series
	Cretaceous	Cretaceous	
	Jurassic	Wealden Oolitic Lias	
	Triassic	New Red Sandstone	
Paleozoic Era (Age of Invertebrates)			Transition Series
	Permian		
	Carboniferous	Carboniferous	
	Devonian	Old Red Sandstone	
	Silurian	Silurian	
	Ordovician		
	Cambrian	Cambrian	
	Precambrian	Primary Rocks	

Redrawn from P Bowler, *Evolution: History of an Idea*
(Berkeley: U of California Press, 1984), 117

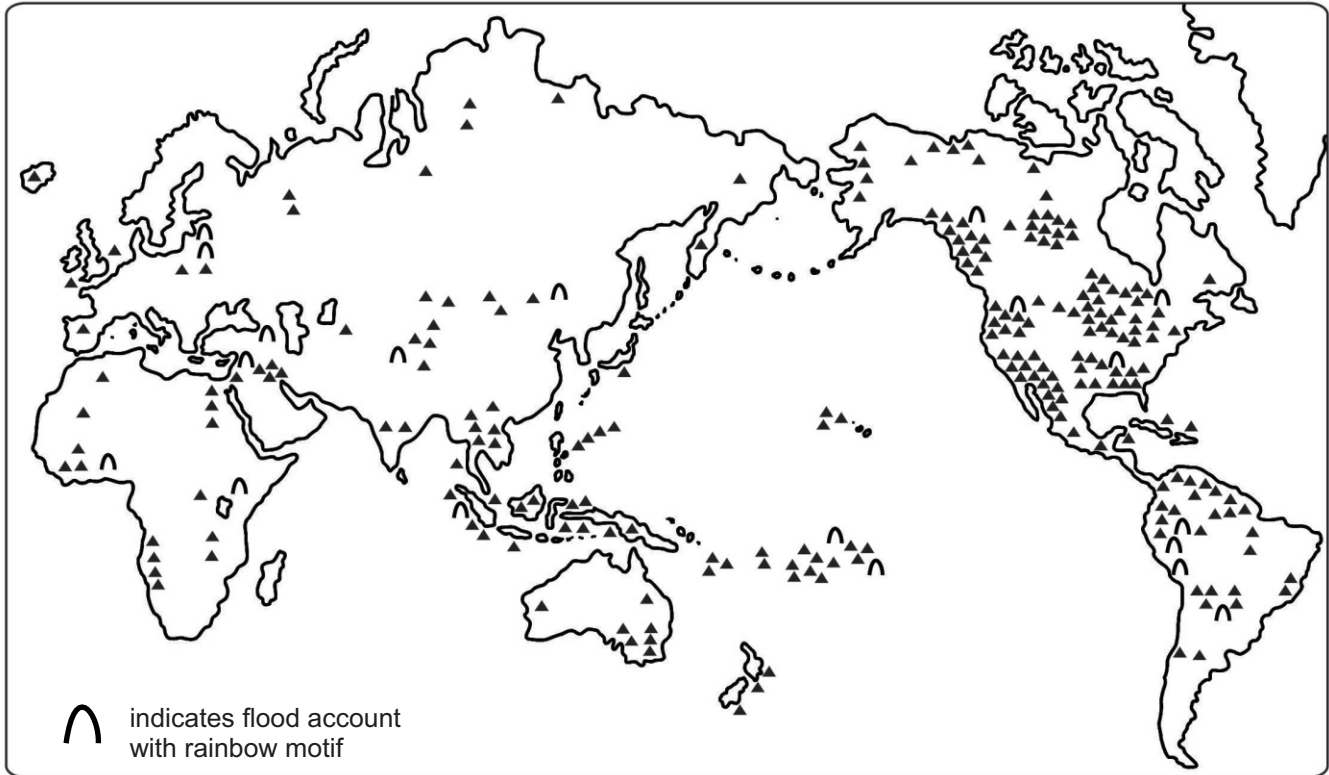
SUMMARY

Brief History of Geology & the Biblical Flood

	EARLY CHURCH & MIDDLE AGES Up to 1450	EARLY MODERN PERIOD 1450 to 1750	BEGINNING OF GEOLOGY 1750 to 1825	19 TH CENTURY MODERN GEOLOGY 1825 to 1900	20 TH & 21 ST CENTURY MODERN GEOLOGY 1900 to Present
NOAH'S FLOOD	Global (worldwide)	Global Flood Theory Biblical flood caused ALL geological strata	Catastrophism Natural processes caused ALL geological strata Catastrophic floods caused surface features worldwide	Local Flood Theory Biblical flood caused surface features in a local region	No Biblical flood in geology
INTERPRETATION OF BIBLICAL FLOOD ACCOUNT (GENESIS 6-9)	Literal Scientific & Historical Concordism	Literal Scientific & Historical Concordism Start of local flood minority position	General Scientific & Historical Concordism Biblical flood the last catastrophic flood	Limited Scientific & Historical Concordism Biblical flood restricted to Mesopotamia	No Scientific & Historical Concordism
DIVINE ACTION & THE FLOOD	Interventionism by God & Angels	Interventionism starting to decrease Providentialism starting to increase	Interventionism decreasing Providentialism increasing	Interventionism little to none Providentialism majority position	Interventionism No Providentialism No
GEOLOGICAL EVIDENCE	marine fossils on mountains & purported ark sightings	Start of Modern Science focus on natural processes Niels Steneseen Principle of Superposition	Start of Geomorphology & Stratigraphy James Hutton Principle of Actualism	Geological Column established in 1850 Charles Lyell Principle of Uniformitarianism	Radiometric Dating Geology integrated with Cosmology & Evolutionary Biology

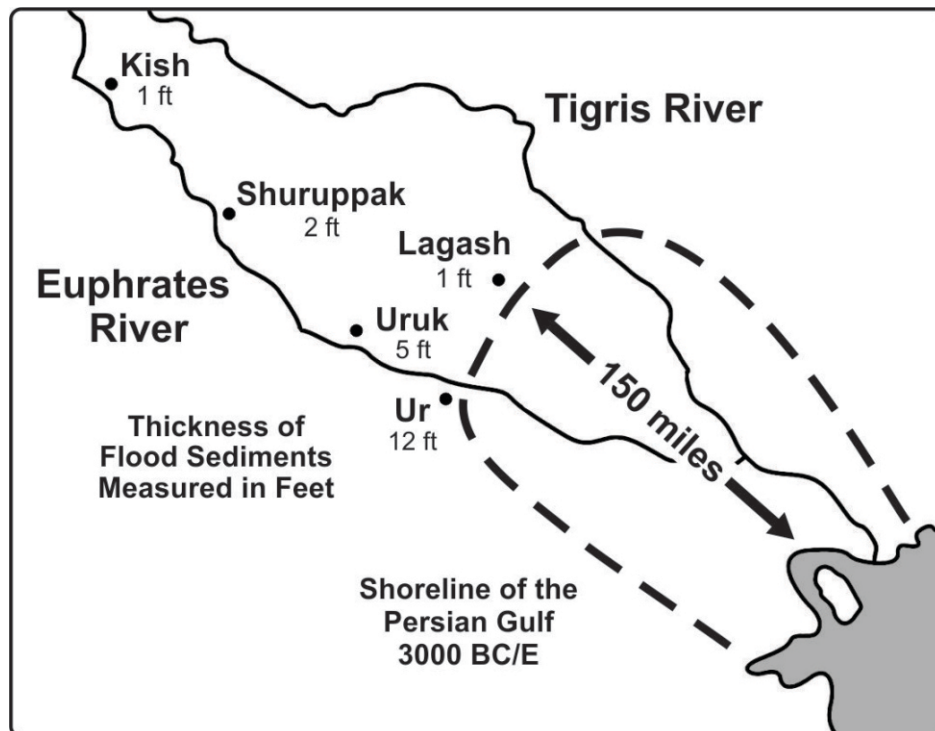


FLOOD ACCOUNTS ACROSS THE WORLD



Redrawn from B Lang, "Non-Semitic Deluge Stories & the Book of Genesis"
Anthropos 80 (1985), 609-10

MESOPOTAMIAN FLOOD PLAIN



Redrawn from L Bailey, *Noah* (U of S Carolina Press, 1989), 33
 Alan Dicken, *Scientific Commentary on Genesis 1-11* (2015), 97

COMPARISON OF MESOPOTAMIAN FLOOD ACCOUNTS & THE BIBLICAL FLOOD ACCOUNT

	Sumerian Flood BC/E: 2000-1700	Ark Tablet Flood 1900-1700	Epic of Atrahasis 1700	Epic of Gilgamesh 1600	Biblical Flood 1000-500
God/s					
Number	many gods	many gods	many gods	many gods	One Holy God
Reason for flood	noise		noise	overpopulation	sin
Warn/s flood hero	✓	✓	✓	✓	✓
Flood Hero					
Name	Ziusudra	Atrahasis	Atrahasis	Utnapishtim	Noah
Age (years)	36,000*		600+**		600
Location	Shuruppak		Shuruppak	Shuruppak	Mesopotamia
Builds ark	✓	✓	✓	✓	✓
Construction of Ark	40 lines missing				
Materials used		✓	✓	✓	✓
Multiple decks		✓	✓	✓	✓
Roof		✓	✓	✓	✓
Dimensions (cubits)		circular***		120/120/120	300/50/30
Life Preserved in Ark	40 lines missing				
Family of flood hero		✓	✓	✓	✓
Animals		✓	✓	✓	✓
Birds			✓	✓	✓
Wild & domestic		✓	✓	✓	✓
Clean & unclean			✓		✓
Flood					
Ark door closed		✓	✓	✓	✓
All life destroyed	✓	rest of the account missing	✓	✓	✓
Duration (days)	7		7	7	40/150
Flood frightens God/s			✓	✓	
Retreat of Flood			58 lines missing		
Ark rests on mountain				Mt Nisir	Ararat Mts
Hero opens hatch	✓			✓	✓
Bird reconnaissance				✓	✓
Dove & raven				✓	✓
Duration (days)				7	7/7
Earth dried				✓	✓
Duration				7	150/40/7/7
After Flood	39 lines missing				
Hero sacrifices	✓		✓	✓	✓
God/s smell/s it			✓	✓	✓
God/s offer/s hero	Eternal life	Eternal life	Eternal life?	Eternal life	Covenant

NOTE: Mesopotamian flood accounts are written on cuneiform tablets. Many of these are broken and missing parts of the account. If recovered, it is likely there would be more similarities with the biblical flood account

* Age from Sumerian King List

** No specific age given, but time periods marked by phrase "600 years, less than 600, passed."

*** Diameter: 67.7 metres. Area: 3600 square metres. Walls: 6 metres.

EPIC OF GILGAMESH FLOOD ACCOUNT

The Epic of Gilgamesh is a Mesopotamian poem with twelve tablets. The eleventh tablet includes an account of a great flood that destroys the world. This poem was first composed around 2000 BC/E, but the flood story was probably not added until 1600 BC/E. The epic is about Gilgamesh, the king of the city of Uruk in Southern Mesopotamia, and his quest to gain eternal life. In his pursuit, he meets Utnapishtim, the flood hero who was given immortality. In the first part of the eleventh tablet, the flood hero Utnapishtim recounts events of the deluge. He also reveals that there is a magical plant that can restore youth. Gilgamesh then obtains the plant, but it is stolen by a serpent.

This epic features a number of motifs from Sumerian poems of an earlier period. Yet the story of Gilgamesh is an original work. In other words, the author/s borrowed, re-cycled, and re-interpreted common motifs to develop their new themes and theologies. The many parallels between the Epic of Gilgamesh and the later composed Biblical Flood Account (1000-500 BC/E) suggests that the Hebrews practised a similar literary process. Guided by the Holy Spirit, the writers of Noah's flood account used common ancient Near Eastern motifs to reveal the innovative theme that a single Holy God judges human sin and saves the righteous from judgment.

Tablet XI

INTRODUCTION

⁸Utnapishtim said to Gilgamesh:

"I will reveal to you, Gilgamesh, a hidden matter.

I will tell you a secret of the gods.

Shuruppak¹ is a city that you know.

It is situated on the banks of the Euphrates River.

That city was ancient when the gods within it

¹⁴decided that the great gods should launch a flood,

...

THE GODS WARN THE HERO OF THE FLOOD

[The Gods said to Utnapishtim:]

²³Man of Shuruppak, son of Ubara-Tutu,
tear down your house and build a boat.

Give up possessions, search out living things.

Reject worldly goods and keep souls alive!

Put into the boat the seed of all living things.

The boat you are to build,

will have her dimensions in proportion.

Her width and her length shall be equal.

The roof shall be like the Aspu³

¹Shuruppak was an ancient city in Southern Mesopotamia on the Euphrates River. It was in an area susceptible to flooding. Three Mesopotamian flood heroes come from this city: Utnapishtim, Atrahasis (Epic of Atrahasis), and Ziusudra (Sumerian Flood Account).

³The Aspu is a body of fresh water below the earth. In the context of the verse, the earth seals it over.

I understood, and I said to my Lord Ea³, my lord:

"I have paid attention to the words you ordered.

³⁴My lord I will be honored to carry them out."

...

BUILDING OF THE BOAT

⁵⁴The children carried tar [to seal the boat],
while the older people brought everything else
that was needed.

On the 5th day I laid down her framework.

One whole acre was her floor space,

120 cubits was the height of each of her walls,

120 cubits each edge of the square deck.

I laid out the contours and joined her together.

I gave her 6 decks, dividing her thus into 7 parts.

I divided her floor plan into 9 parts. I hammered
water plugs into her. I put in paddles & laid in supplies.

6 sar⁴ measures of tar I poured into the furnace,

3 sar of asphalt I also poured into the inside.

3 sar of oil the were carried in baskets by workmen.

Not counting the 1 sar of oil which the dust had absorbed,

⁶⁹and the 2 sar of oil which the boatman stowed away.

...

³The god Ea lived in the Aspu.

⁴A "sar" is the number 3600 (or 60²). It is about 8000 gallons.
6 sar is 48,000 gallons; 3 sar is 24,000 gallons

LOADING & LAUNCHING OF THE BOAT

⁷⁶On the 7th day the ship was completed.

The launching was very difficult,

launch rollers had to be used from above and
below, until two-thirds of it was in water.

I loaded her with everything there was:

I had silver loaded on her; I had gold loaded on her.

I put on board all the seed of living things; all of them

I put on board all my family and friends

The beasts of the field, the wild creatures of the open
country, and all kinds of craftsmen.

The sun god Shamash had set the time for me:

"In the morning a darkness,

in the evening a heavy rain,

⁸⁸Board the boat and shut your door!"

THE FLOOD

⁸⁹That stated time had arrived:

He who orders in the morning a darkness,
in the evening a heavy rain.

I watched the appearance of the storm.

The storm was terrifying to see.

I boarded the boat and shut the door.

To seal the boat, I handed over the floating structure
with its contents to Puzur-Amurri, the boatman.

With the first light of dawn appeared,
a black cloud rose up from the horizon.

Inside it the storm god Adad¹ thunders,
while servant god Shullat & Hanish [Adad] go in front,
marching like officers over mountain and plain.

The underworld god Erragal tears out the mooring posts.

The war god Ninurta marches & the dikes overflow.

The earth gods Anunnaki lift up torches,
and they lit up the land with their brightness.

The calm reaches to the heavens before the storm god
Adad turns to darkness everything that had been light.

The wide land was shattered like a pot!

On the first day, the storm blew, gathering speed,
overtaking the people like a battle.

¹¹⁴No man could see his fellow,
nor could people be distinguished from the heaven.

THE GODS TERRIFIED BY THE FLOOD

¹¹³The gods were frightened by the flood, and shrinking
back, they ascended to the highest heaven of Anu.

The gods cowered, like dogs crouched against an
outside wall.

....

¹²⁵The gods, all humbled, sat there and wepted,
their lips were closed & covered with scab.

6 days and 6 nights

The wind blew, the flood & storm overwhelmed the land.

END OF THE FLOOD &

LANDING OF THE BOAT ON MT. NISIR

¹²⁹When the 7th day arrived, the storm, flood & onslaught,
which had fought like an army, subsided.

The sea became calm, the storm was still, and the flood
was held back.

I looked at the weather: stillness had set in,
and **all of humankind had returned to clay.**

The land was level as flat as a roof.

I opened the door, and light fell upon my face.

I bent down and I sat.

I wept with tears running down on my face.

I looked for coast, for the limits of the sea.

In each of 14 regions there emerged a region-mountain.

The boat came to rest on Mount Nisir.

Mount Nisir held the boat firmly, not allowing it to move.

On the 1st and 2nd day, Mount Nisir held the boat firmly,
not allowing it to move.

On the 3rd and 4th day, Mount Nisir held the boat firmly,
not allowing it to move.

¹⁴⁴On the 5th and 6th day, Mount Nisir held the boat firmly,
not allowing it to move.

BIRD RECONNAISSANCE AFTER THE FLOOD

¹⁴⁵When the 7th day arrived,

I put out and released a **dove**.

The dove went out and then came back.

Because there was no visible resting-place,
it turned around.

Then I put out and released a **swallow**.

Because there was no visible resting-place,
it turned around.

Then I put out and released a **raven**.

The raven went and saw that the waters had receded.

¹⁵⁴And it ate, circled, lifted its tail, and did not turn around.

DISEMBARKMENT OF THE BOAT & SACRIFICE TO THE GODS

¹⁵⁵Then I let out all [the creatures] to the four winds
and offered a sacrifice.

I poured out a libation on the top of the mountain.

I arranged the sacrificial jars 7 and 7.

In the bottom of the jars I poured the essences of
cane, cedarwood, and myrtle.
The gods smelled the fragrance,
The gods smelled the pleasant fragrance,
¹⁶¹The gods crowded around the sacrifice/er like flies.

ARGUMENT AMONG THE GODS

¹⁶²When the great goddess [Ishtar the fertility goddess]
arrived, she lifted up the necklace which the sky god
Anu (leader of the gods) had made to please her.
“See, the gods here will never forget this lapis necklace,
I will remember these days, and will never forget them.
Let the other gods come to the libation offering.
But do not let the storm god Enlil come to the offering,
for he did not consult anyone and launched the flood,
causing the destruction of my people.”
When the storm god Enlil arrived,
and saw the boat. And Enlil was furious.
He was filled with anger at the Igigi gods in the heavens
“Have any living souls survived? No man should have
survived through the destruction!”
The warrior god Ninurta opened his mouth & said to Enlil:
“Who other than the god of fresh water Ea could have
done this?
It is Ea alone who knows every matter.”
Ea opened his mouth and said to Enlil:
“You are wisest of the gods, you are the hero,
how could you not consult anyone & launch the flood?
Punish the sinner for sin.
Punish the criminal for his crime.
But be lenient, or else he will be cut off.
Be patient, or else he will be dislodged!
Instead of you bringing on a flood, let a lion come
and reduce the number of people.
Instead of you bringing on a flood, let a wolf come
and reduce the number of people.
Instead of you bringing on a flood, let a famine come
and reduce the land.
Instead of you bringing on a flood, let Erra the god of
plagues destroy the people.
I did not reveal the secret of the great gods.
I just showed the exceedingly wise one a dream,
and he perceived the secret of the gods.
¹⁸⁸So the advice was his advice.”

CONCLUSION: THE FLOOD HERO & HIS WIFE GIVEN ETERNAL LIFE

¹⁸⁹The storm god Enlil then boarded the boat.
He took my hand [Utnapishtim] and led me up.
He led my wife and made her kneel down by
my side.
Standing between us, he touched our foreheads,
and he blessed us.
“Until now Utnapishtim has been mortal.
But from now on Utnapishtim and his wife shall
be like us as gods.
Utnapishtim will live far away, at the mouth of
the rivers.
¹⁹⁶They took me and made me live far away, at
the mouth of the rivers.”

This abridged version of the 11th Tablet of the Epic of Gilgamesh is based on James B. Pritchard, ed. *Ancient Near Eastern Texts Relating to the Old Testament* 3rd ed. (Princeton, NJ: Princeton U Press, 1969), 93-95; Stephanie Daley, *Myths from Mesopotamia: Creation, The Flood, Gilgamesh, and Others* (Oxford, UK: U Press, 1989), 110-116.

THEORY OF SOURCES
JAHWIST & PRIESTLY
ACCOUNTS

J AUTHOR

J Creation Account
J Flood Account
J Post-Flood Account

P AUTHOR

P Creation Account
P Flood Account
P Post-Flood Account

REDACTOR

P Creation Account
J Creation Account
P Flood Verse
J Flood Verse
P Flood Verse
J Flood Verse
P Post-Flood Verse
J Post-Flood Verse
P Post-Flood Verse
J Post-Flood Verse

GEN 1

GEN 2

GEN 6-9

Biblical Flood
Account

GEN 10

Biblical
Post-Flood
Account

VERSE DISTRIBUTION
IN BIBLICAL FLOOD
ACCOUNT
GENESIS 6-9

J FLOOD VERSES	P FLOOD VERSES
6:5-8	
	6:9-22
7:1-5	
	7:6
7:7-8	
	7:9
7:10	
	7:11
7:12	
	7:13-16a
7:16b-17	
	7:18a
7:18b	
	7:19-21
7:22-23	
	7:24-8:2a
8:2b-3a	
	8:3b-5
8:6	
	8:7
8:8-12	
	8:13a
8:13b	
	8:14-19
8:20-22	
	9:1-19

Note:
P source also includes: Gen 5; 11:10-26
J source: Gen 3-4; 11:1-9

PROBLEMS IN THE BIBLICAL FLOOD ACCOUNT (GEN 6-9)

EVENT CONFLICTS

Conflicts between the events in Gen 6-9 also raise doubts concerning the historicity of the flood account. To mention three obvious examples:

- Two different Divine orders are given to load the animals in the ark.

Gen 6:19 states that God (*'Elōhîm*) commands Noah to bring "two of every kind of bird, of every kind of animal and of every kind of creature that moves along the ground."

BUT

Gen 7:2-3 states the Lord (*Yahweh*) commands him to take "seven of every kind of bird," "seven of every kind of clean animal" and "two of every kind of unclean animal."

- Two conflicting accounts of entering the ark exist.

Gen 7:7-8 states that Noah, his family and the animals went into the ark, and "after seven days the floodwaters came" (v. 10).

BUT

Gen 7:13-15 asserts that every person and every animal entered the ark "on the very day" that "all the springs of the great deep burst forth, and the floodgates of the heavens were opened" (v. 11).

- Two different versions are presented of when the rain ceased.

Gen 7:12 asserts that it rained for 40 days and 40 nights, implying that the rain ended after 40 days.

BUT

Gen 8:2 states that "the rain stopped" after the 150 day period during which the flood prevailed on earth (7:24)

CHRONOLOGY CONFLICTS

Conflicts emerge with the chronology in Gen 6-9. The dates and days do not align. This is clearly seen in the period between the start of the flood and the landing of the ark in the Ararat Mountains.

600th year, 2nd month and 17th day of Noah's life.

- Flood begins.
- Springs of the deep burst & floodgates of heaven open (7:11)
- **40 days** rain falls (7:12, 17)
- Waters rise and cover the highest mountains (7:18-20)
- All life outside the ark perishes (7:21-23)
- **150 days** flood prevails over the earth (7:24)
- God remembers Noah (8:1a)
- God sends a wind and the waters recede (8:1b)
- Springs of the deep and floodgates of heaven close (8:2a)
- Rain stops (8:2b)
- Waters recede (8:3a)
- **150 days** waters decrease (8:3b)

600th year, 7th month and 17th day of Noah's life.

Ark lands in Ararat mountains (8:4)

Adding the number of days (40 + 150 + 150) that are mentioned between the two dates of Noah's age totals 340. If the 40 days of rain are included in the 150 day period that the flood prevails over the earth, then the sum is 300. However, according to the dates of Noah's age there are exactly 5 months between the start of the flood and the landing of the ark. Using either a lunar (29½ days) or 30-day month provides only 147½ and 150 days, respectively. In order to correct this glaring discrepancy, many historical concordists collapse all the events between Gen 7:11 and 8:4 into a 150 day period. But this approach betrays the sequential order of consecutive events plainly stated in Scripture.

Jahwist Flood Account

INTRODUCTION: SINFUL STATE OF THE WORLD BEFORE THE FLOOD & DIVINE JUSTIFICATION FOR DESTRUCTION

6 ⁶The **LORD** saw that the evil of man on the earth was great, and that every imagination of the thoughts of his heart was only evil all of the day. ⁶The **LORD** was sorry that He had made man on the earth, and it hurt his heart. ⁷The **LORD** said, “I will wipe out man, whom I have created, from the face of the ground—from man, to animal, to crawler, and to bird of the heavens for I am sorry that I made them.” ⁸But Noah found favor in the eyes of the **LORD**.

DIVINE WARNING OF THE FLOOD & PREPARATION FOR PRESERVATION OF LIFE IN THE ARK

7 ¹The **LORD** said to Noah, “Go into the ark, you and all your household, because I found you righteous before my face in this generation. ²Take with you 7 pairs [literally: ‘seven seven;’ or ‘seven by seven’] from every clean animal, a man and his woman, and two from every animal that is not clean, a man and his woman, ³also 7 pairs from every bird of the heavens, male and female, to keep alive seed on the face of all the earth. ⁴For in 7 days from now I will send rain on the earth, 40 days and 40 nights; and I will wipe out from the face of the earth all the standing which I made.” ⁵Noah did exactly all that the **LORD** commanded him. ⁷Noah entered, and his sons, and his wife, and his sons' wives into the ark from the face of waters of the flood—⁸from clean animal and from animal that is not clean, and from bird, and all that crawls on the ground.

THE LAUNCH OF THE FLOOD

¹⁰It was after the 7 days the waters of the flood came on the earth ¹²& the rain fell on the earth 40 days & 40 nights. ^{16b}The **LORD** shut him in. ¹⁷The flood was 40 days on the earth, the waters increased, they lifted the ark, and it rose from on the earth. ^{18b} And the ark floated on the surface of the waters. ²²All that had the breath of life in its nostrils, from all that was on the dry land, they died. ²³It wiped out all the standing that was on the face of the ground—from man, to animal, to crawler, and to bird of the heavens. They were wiped out from the earth. Only Noah was left and that with him in the ark.

THE RETREAT OF THE FLOOD

8 ^{2b}The rain from the heavens was stopped. ^{3a}The waters receded from the earth and they continued to recede. ⁶It was at the end of 40 days and Noah opened the window of the ark that he had made. ⁸He sent out a dove from him to see if the waters had subsided from the face of the ground. ⁹But the dove found no place to set her foot and she returned to him to the ark because the waters were on the face of all the earth. He put out his hand and took her and brought her with him into the ark. ¹⁰He waited yet another 7 days and he repeated to send out the dove from the ark. ¹¹The dove returned to him in the time of evening. And behold a freshly plucked olive leaf was in her mouth! Noah knew that the waters had subsided from on the earth. ¹²He waited yet another 7 days and he sent out the dove out. But she did not repeat to return to him again. ^{13b}Noah removed the covering from the ark and looked. And behold the faces of the ground were dry!

CONCLUSION: AFTER THE FLOOD & DIVINE PROMISE NEVER TO FLOOD THE WORLD AGAIN

²⁰Noah built an altar to the **LORD**. He took from every clean animal and from every clean bird, and he offered burnt offerings on the altar. ²¹The **LORD** smelled the pleasant smell. The **LORD** said in his heart, “Never again will I repeat to curse the ground because of man though the imagination of the heart of man is evil from his youth. Never again will I repeat to strike all living as I have done. ²²While all the days of the earth—seedtime and harvest, cold and heat, summer and winter, day and night will not rest.”

NOTE: This translation of the J Flood Account above and that of the P Flood Account on pages 37 & 38 follow the original Hebrew as literally as possible in order to accentuate similarities and differences. The grammatical constructions will on occasions be clumsy to English-speaking readers. For example, the divine promise in the Jahwist flood account begins with “never again will I repeat to . . .” (Gen 8:21 [2X]) while in the Priestly source it is “never again will . . .” (Gen 9:11, 15).

TERMS, PHRASES & STYLISTIC FEATURES

IN THE JAHWIST FLOOD ACCOUNT

LORD (<i>Yahweh</i>)	10X. See below for verses.
face (of)	9X. 6:7; 7:1, 3, 4, 7, 23; 8:8, 9, 13b
heart	4X. 6:5, 6; 7:21 (2X)
wipe out	4X. 6:7; 7:4, 23 (2X)
clean animal & animal that is not clean	4X. 7:2,8; see also 8:20 (2X)
from man, to animal, to crawler, and	2X. 6:7; 7:23
to bird of the heavens	
never again will I repeat to . . .	3X. 8:21 (2X); see also 8:12
imagination	2X. 6:5; 8:21
Lord given anthropomorphic features:	4X.
He is sorry He made humanity	6:6
His heart is hurt	6:6
He smells an offering	8:21
He talks in His heart	8:21
Stylistic 7 & 40	10X.
7 pairs	2X. 7:2, 3
7 days	4X. 7:4, 10; 8:10,12
40 days & 40 nights	2X. 7:4, 12
40 days	2X. 7:17; 8:6

SIMILARITIES

BETWEEN THE JAHWIST CREATION ACCOUNT & THE JAHWIST FLOOD ACCOUNT

	J Creation	J Flood
LORD (<i>Yahweh</i>)	29X. 2:4, 5, 7, 8, 9, 15, 16, 18, 19, 21, 22; 3:1, 8 (2X), 9, 13, 14, 21, 22, 23; 4:1, 3, 4, 6, 9, 13, 15 (2X), 26	10X. 6:5, 6, 7, 8; 7:1, 5, 16b; 8:20, 21 (2X)
ground (<i>'ădāmā</i>)	14X. 2:5, 6, 7, 9, 19,; 3:17, 19, 23; 4:2, 3, 10, 11, 12, 14	6X. 6:7; 7:8, 23; 8:8, 13b, 21,
evil	2:9, 17; 3:5, 22	6:5 (2X) 8:21
curse/d	3:14, 17; 4:11	8:21
breath of life 'in nostrils'	2:7	7:22
man (<i>'îsh</i>) woman (<i>'ishshâ</i>)	2:23, 24	7:2 (2X)
offering	4:3, 4, 5	8:20
rain	2:5	7:4, 10; 8:2b
repeat/ed to (a verb)	4:2, 12	8:10, 21 (2X)
face of the ground	2:6; 4:14	6:7, 8:8, 13b
ratio of 'earth' (<i>'ereš</i>) to 'ground' (<i>'ădāmā</i>)*	9/14	15/6
*P Creation ratio: 16/1		
P Flood ration: 31/2		

Priestly Flood Account

A. NOAH & HIS SONS BEFORE THE FLOOD

6 ^{9b}Now Noah was a righteous man. He was blameless among his contemporaries. Noah walked with **GOD**.

¹⁰Noah fathered three sons: Shem, Ham, and Japheth. ¹¹The earth was corrupt in **GOD**'s sight and was filled with violence. ¹²**GOD** saw the earth. And behold, it was corrupt, for all flesh on earth had corrupted its ways.

B. PROMISE TO FLOOD EARTH & MAKING OF THE ARK TO SAVE LIFE

¹³**GOD** said to Noah, "I have determined to put an end to all flesh, for the earth is filled with violence because of them. So I am going to destroy them with the earth. ¹⁴Make yourself an ark of cypress wood; make rooms in the ark, and coat it inside and out with pitch. ¹⁵This is how you are to make it: The length of the ark 300 cubits, its width 50 cubits, its height 30 cubits. ¹⁶Make a roof for the ark, and finish it to 1 cubit above. Put a door in the side of the ark. Make lower, second, and third decks. ¹⁷Now behold, I am going to bring the flood of waters on the earth to destroy all flesh that has in it the breath of life from under the heavens; all that is on the earth will die.

C. GOD & THE COVENANT

¹⁸But I will establish my covenant with you, and you will enter the ark—you, and your sons, and your wife, and your sons' wives with you.

D. PRESERVATION OF LIFE & FOOD FOR SUSTAINING LIFE ON THE ARK

¹⁹From all the living, from all flesh, two from all you will bring into the ark to keep alive with you; they will be male and female. ²⁰From the bird according to its kind, and from the animal according to its kind, from the crawler of the ground according to its kind; two from all will come to you to be kept alive. ²¹But you: Take every food that is eaten, and store it. It is food for you and for them." ²²Noah did all that **GOD** commanded him; so he did.

E. NOAH, FAMILY & ANIMALS ENTER THE ARK

7 ⁶Now Noah was 600 years old when the flood waters came on the earth. ⁹Pairs came to Noah to the ark, male and female, as **GOD** commanded Noah. ¹¹On that day all the springs of the great deep burst forth, and the windows of the heavens were opened. ¹³On that very same day, Noah, and Shem, Ham and Japheth, the sons of Noah, and Noah's wife, and the three wives of his sons with them entered the ark; ¹⁴they and every wild animal according to its kind, and every domesticated animal according to its kind, and every crawler on the earth according to its kind, and every bird, and every wing. ¹⁵They came to Noah into the ark two by two from all flesh that has in it the breath of life. ^{16a}Those that came, male and female from all flesh, they entered just as **GOD** had commanded him.

F. MOUNTAINS COVERED BY FLOOD

^{18a}The waters triumphed and increased greatly over the earth. ¹⁹The waters triumphed greatly over the earth, and all the high mountains were covered that were under all the heavens. ²⁰To a depth of 15 cubits the waters triumphed and the mountains were covered.

G. 150 DAYS THE WATERS PREVAIL

²¹All flesh that crawls on the earth died—consisting of every bird, and consisting of every domesticated animal, and consisting of every wild animal, and consisting of every swarmer swarming on the earth, and all man.

²⁴The waters triumphed over the earth **150 days**.

CENTRE OF CHIASM:

8 ¹**GOD** remembered Noah & every wild animal & every domesticated animal that were with him in the ark.

CENTRE OF CHIASM:

8 ¹**GOD** remembered Noah & every wild animal & every domesticated animal that were with him in the ark.

G' 150 DAYS THE WATERS DECREASE

He sent a great wind over the earth, and the waters subsided. ^{2a}The springs of the deep and the windows of the heavens were closed. ^{3b}The waters decreased at the end of **150 days**.

F' MOUNTAINS UNCOVERED

⁴The ark rested on the mountains of Ararat. ⁵The waters continued to decrease until the tops of the mountains were seen. ⁷He sent out a raven, and it went back and forth until the waters were dried up from on the earth. ^{13a}And it was the waters were dried from on the earth. ¹⁴The earth was completely dry.

E' NOAH, FAMILY & ANIMALS LEAVE THE ARK

¹⁵**GOD** spoke to Noah, saying, ^{16a}"Come out of the ark, you, and your wife, and your sons, and the wives of your sons with you, ¹⁷all the living that is with you from all flesh—consisting of every bird, and consisting of every animal, and consisting of every crawler crawling on the earth. Bring them out with you so that they can swarm on the earth and be fruitful and increase on the earth." ¹⁸Noah came out, and his sons, and his wife, and his sons' wives with him; ¹⁹all the living, every crawler, and every bird, every crawler on the earth, according to their clans, they came out from the ark.

D' MULTIPLICATION OF LIFE & FOOD FOR SUSTAINING LIFE AFTER THE ARK

9 ¹**GOD** blessed Noah and his sons. He said to them, "Be fruitful and increase and fill the earth. ²The fear and dread of you will be on all the life of the earth, and on every bird of the heavens, on all that crawls the ground, and on all the fishes of the sea; into your hands they are given. ³Every crawler that lives will be food for you, as I gave you the green plants, to you everything. ⁴But flesh with its life, its blood, you must not eat. ⁵But surely, I will demand your blood for breaths of you, from the hand of all life I will demand, and from the hand of man, from the hand of a man his brother I will demand the breath of the man. ⁶Whoever sheds the blood of man, by man his blood will be shed; because in the Image of **GOD** He made man. ⁷But as for you, be fruitful and increase; swarm on the earth and increase on it."

C' GOD & THE COVENANT

⁸**GOD** said to Noah and to his sons with him, saying, ^{9a}"Behold, I establish my covenant with you and with your descendants after you ¹⁰and with all breath of life that was with you—with every bird, with every domesticated animal, and with every wild animal, of all those that came out of the ark, with all life of the earth.

B' PROMISE NEVER TO FLOOD EARTH AGAIN & MAKING OF THE COVENANT TO SAVE LIFE

¹¹I establish my covenant with you. Never again will all flesh be cut off by waters of the flood. Never again will there be a flood to destroy the earth."¹²**GOD** said, "This is the sign of the covenant I am making between me and you and every living breath that is with you, a covenant for generations to come: ¹³I have set my bow in the cloud, and it will be the sign of the covenant between me and the earth. ¹⁴When I bring clouds over the earth and the bow is seen in the clouds, ¹⁵I will remember my covenant that is between me and you, and between every living breath, and with all flesh. Never again will the waters become a flood to destroy all flesh. ¹⁶When the bow is in the clouds, I will see it and remember the everlasting covenant between **GOD** and every living breath and with all flesh that is on the earth." ¹⁷**GOD** said to Noah, "This is the sign of the covenant that I have established between me and all flesh that is on the earth."

A' NOAH & HIS SONS AFTER THE FLOOD

^{18a}The sons of Noah who came out of the ark were Shem, Ham, and Japheth. ¹⁹These were the three sons of Noah, and from these all the earth was populated. ¹⁰ ^{1b}And they became fathers to sons after the flood.

TERMS, PHRASES & STYLISTIC FEATURES

IN THE PRIESTLY FLOOD ACCOUNT

GOD (<i>'Ēlōhîm</i>)	15 X. See below for verses
all flesh	13X. 6:12, 13, 17, 19; 7:15, 21, 15 (2X); 9:11,15 (2X), 16, 17
covenant	9X. 6:18; 9:9, 11, 12 (2X), 13, 15, 16, 17
remember	3X. 8:1; 9:15, 16
bow in the clouds	3X. 9:13, 14, 16
never again will . . .	3X. 9:11 (2X), 15
springs of great deep & windows of heavens	2X. 7:11, 8:2
mountains	4X. 7:19, 20; 8:4, 5
waters triumphed over the earth	3X. 7:18, 19, 24; also see 7:2
two from all, two by two from all	3X. 6:19, 20; 7:15
food	3X. 6:21 (2X), 9:3
cubits	5X. 6:15 (3X), 16; 7:20
stylistic number 5 & multiples of 5	
use of GOD (<i>'Ēlōhîm</i>)	15 times = 3 X 5
depth of waters over mountains	15 cubits = 3 X 5
height of ark	30 cubits = 6 X 5
width of ark	50 cubits = 10 X 5
length of ark	300 cubits = 60 X 5
total duration of flood	300 days = 60 X 5
period of flooding	150 days = 30 X 5
period of drying	150 days = 30 X 5
age of Noah	600 years = 120 X 5

SIMILARITIES

BETWEEN THE PRIESTLY CREATION ACCOUNT & THE PRIESTLY FLOOD ACCOUNT

	P Creation	P Flood
GOD (<i>'Ēlōhîm</i>)	35X. 1:1, 2, 3, 4 (2X), 5, 6, 7, 8, 9, 10 (2X), 11,12, 14, 16, 17, 18, 20, 21 (2X), 22, 24, 25 (2X), 26, 27 (2X), 28 (2X), 29, 31; 2:2, 3 (2X)	15X. 6:9b, 11, 12, 13, 22; 7:9, 16a; 8:1, 15; 9:1, 6, 8, 12, 16, 17
man made in Image of God according to its/their kind/s	1:26-27 [also 5:1-3] 1:11, 1:12 (2X), 1:21 (2X), 1:24 (2X), 1:25 (3X)	9:6 6:20 (3X), 7:14 (3X)
male (<i>zākār</i>) and female (<i>neqēbah</i>)	1:27	6:19; 7:9, 16
be fruitful & increase	1:28	8:17, 9:2, 9:7
God blessed	1:22, 28; 2:3; [also 5:2]	9:1
wild & domesticated animals	1:24, 1:25	7:14, 7:21, 8:1, 9:10
birds referred to as 'wing'	1:21	7:14
crawler crawling on earth	1:26	7:14, 8:17
swarm	1:20, 1:21	8:17, 9:7
green plants for food	1:29-30	9:3
the deep	1:2	7:11, 8:2

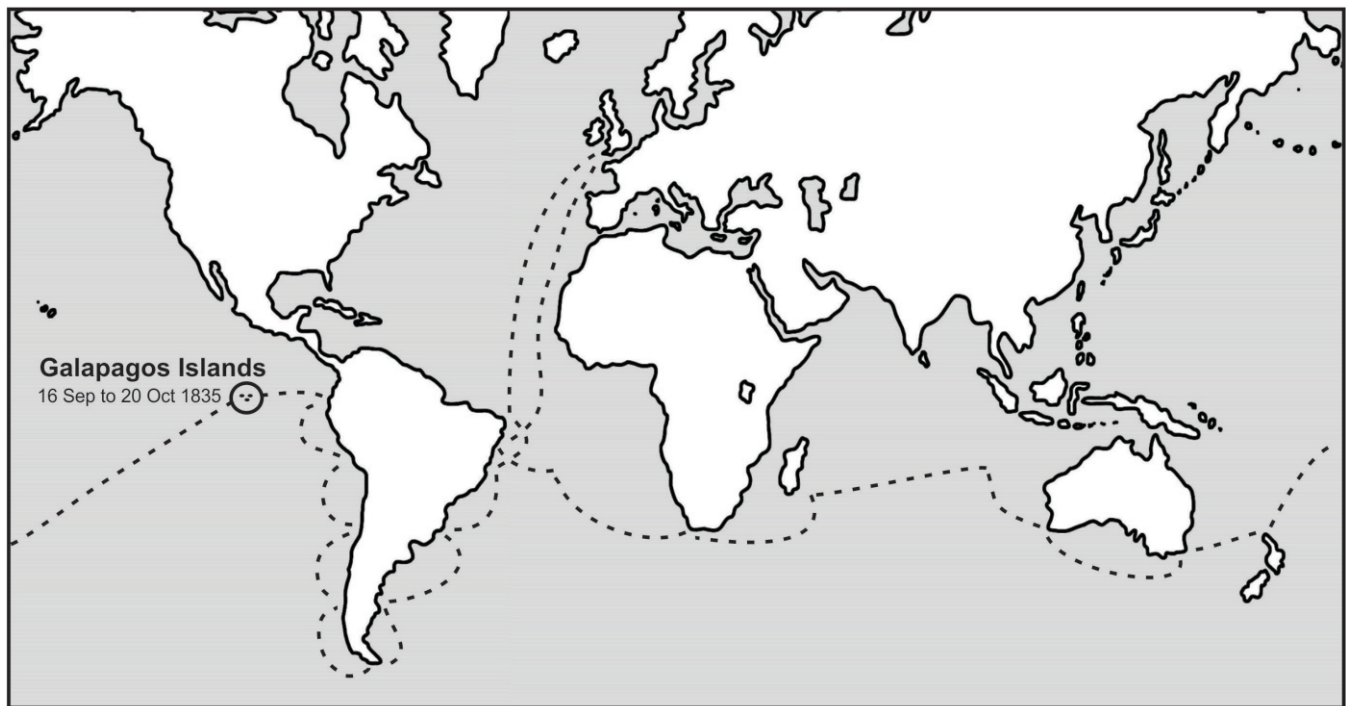
MESSAGE-INCIDENT PRINCIPLE

NEW APPLICATION



DARWIN'S HMS BEAGLE VOYAGE

27 December 1831 to 2 October 1836



Redrawn from P Bowler, *Charles Darwin*
(Cambridge: U Press, 1990), 54

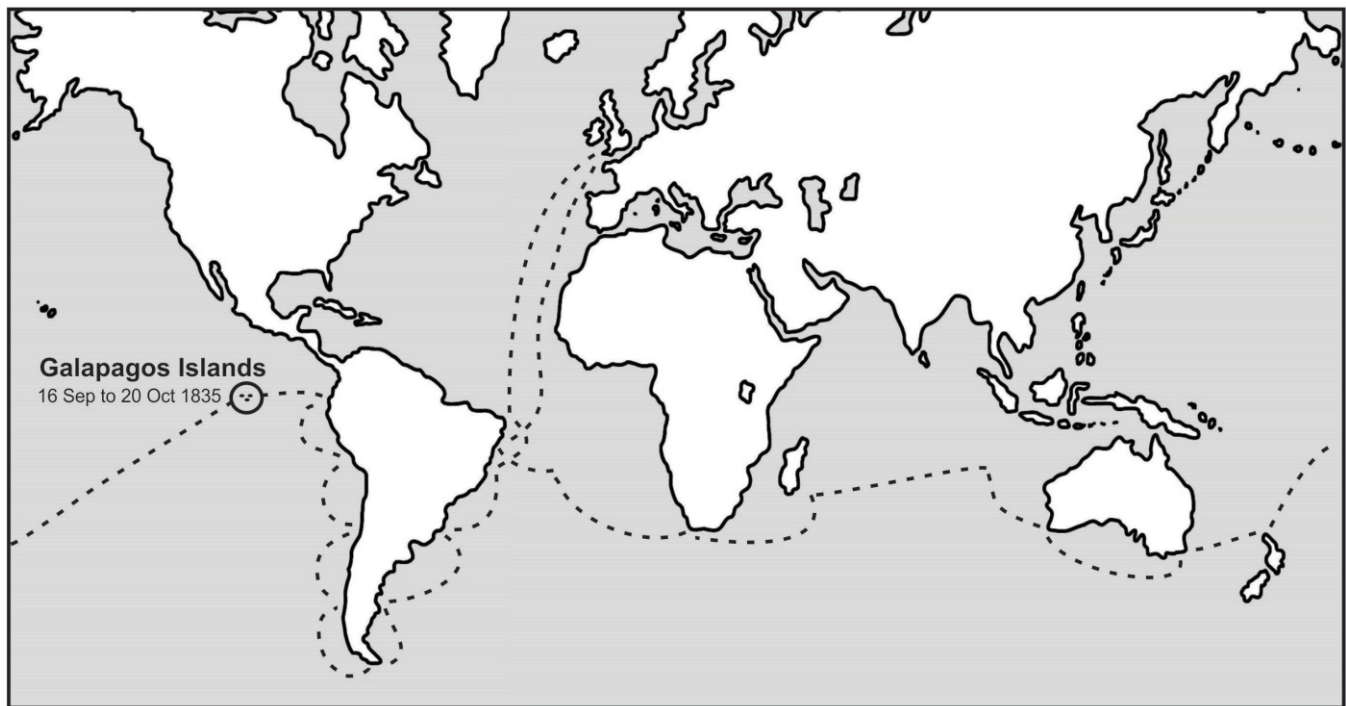
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NEW APPLICATION



DARWIN'S HMS BEAGLE VOYAGE

27 December 1831 to 2 October 1836



Redrawn from P Bowler, *Charles Darwin*
(Cambridge: U Press, 1990), 54

Private

DAR. 270.1:25

Down Beckenham

Kent

May 7th 1879

Dear Sir

It seems to me absurd to doubt that a man may be an ardent Theist & an evolutionist. — You are right about Kingsley. Asa Gray, the eminent botanist, is another case in point — What my own views may be is a question of no consequence to any one except myself.

But as you ask, I may state that my judgment often fluctuates. Moreover whether a man deserves to be called a theist depends on the definition of the term, which is much too large a subject for a note. 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 (& more & more so as I grow older) but not always, that an agnostic would be the most correct description of my state of mind.

Dear Sir

Yours faithfully

Ch. Darwin

Down Beckenham | Kent May 7th 1879

Dear Sir

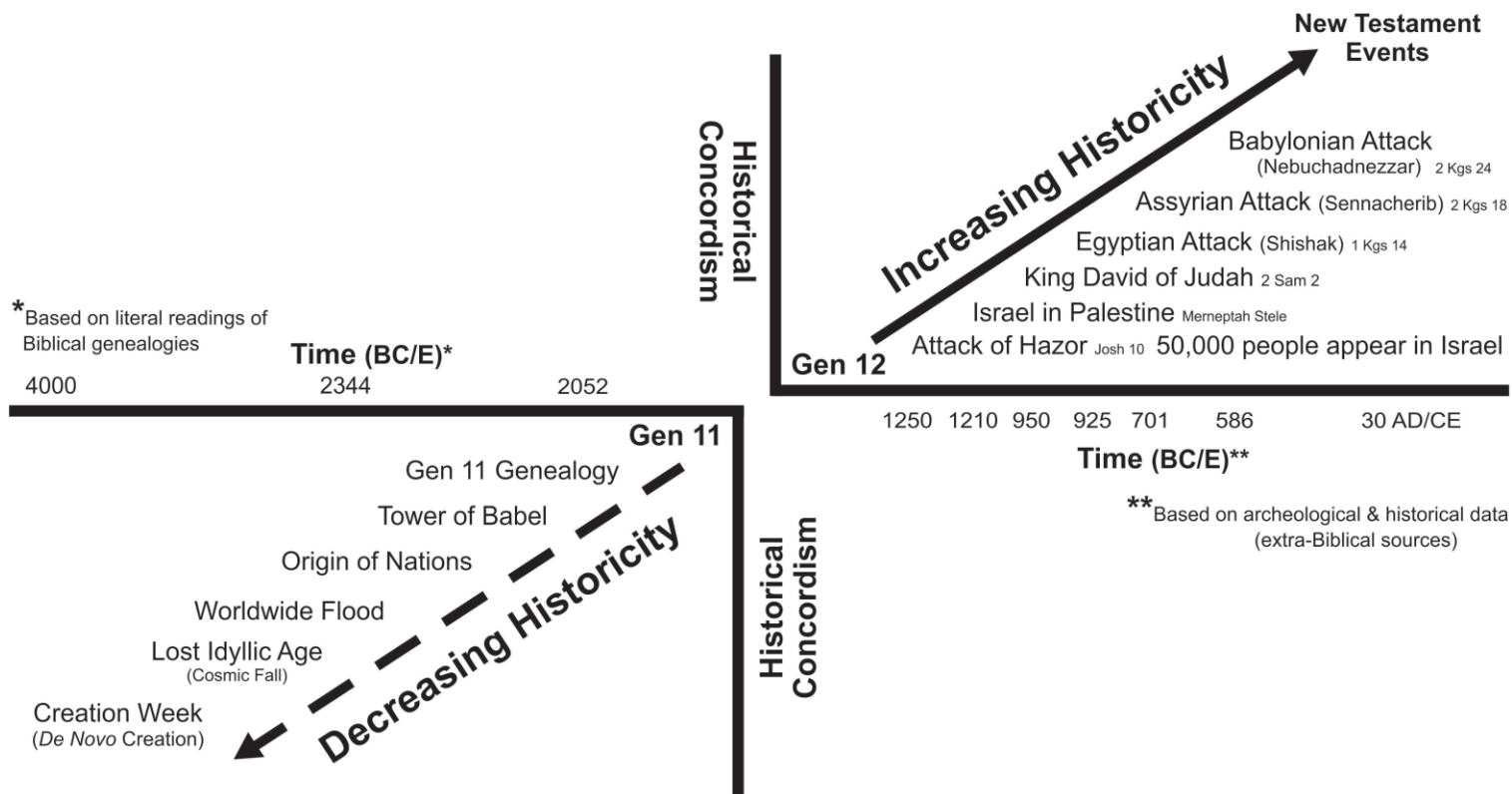
It seems to me absurd to doubt that a man may be an ardent Theist & an evolutionist. — You are right about Kingsley. Asa Gray, the eminent botanist, is another case in point — What my own views may be is a question of no consequence to any one except myself. — But as you ask, I may state that my judgment often fluctuates. Moreover whether a man deserves to be called a theist depends on the definition of the term: which is much too large a subject for a note. 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 (& more and more so as I grow older) but not always, that an agnostic would be the most correct description of my state of mind.

Dear Sir | Yours faithfully | Ch. Darwin

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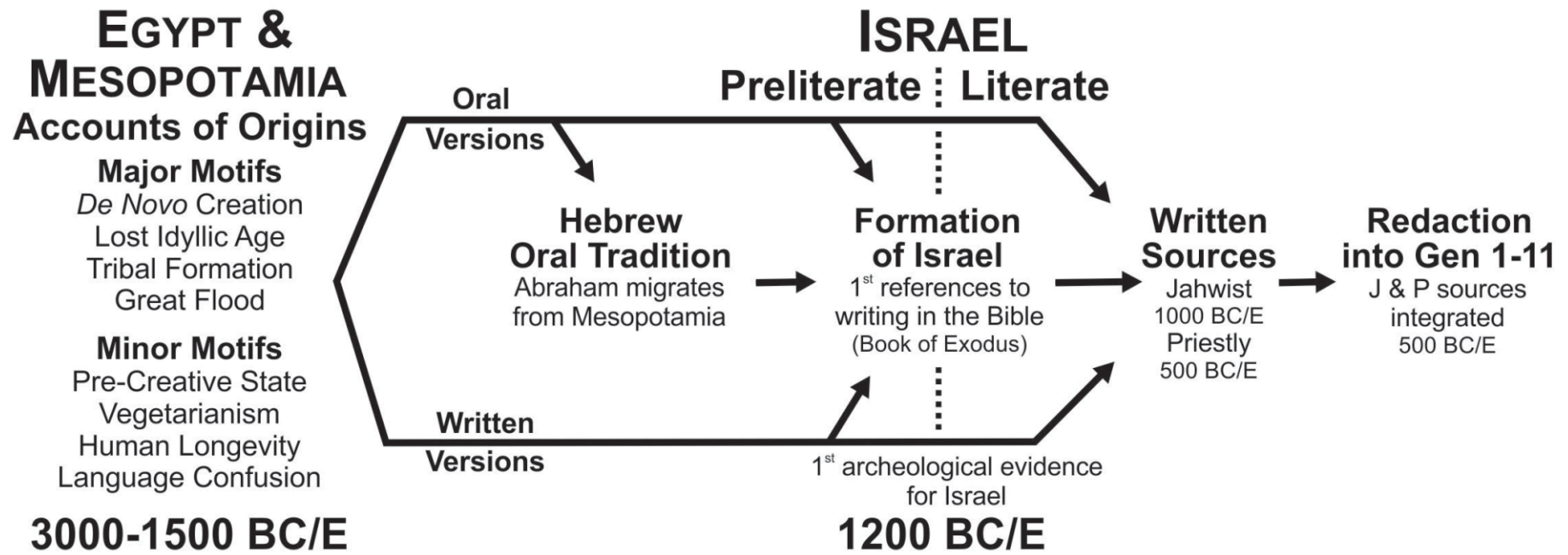


GENESIS 11-12 REAL HISTORY “BOUNDARY”



ORIGIN OF GENESIS 1-11

RE-CYCLED & RE-INTERPRETED MOTIFS OF ORIGINS THEORY



The accounts of origins in both Egypt and Mesopotamia predate Israel and Gen 1–11 by hundreds of years. It is not possible to determine with complete certainty when the motifs in these pagan accounts were conceived. Some undoubtedly arose in early oral traditions that were later written down after the invention of writing in around 3000 BC. Written records from these two civilizations reveal that major origins motifs were well established throughout the ancient Near East at the latest by 1500 BC/E. Concepts like *de novo* creation, lost idyllic age, tribal formation, and great flood were the main scientific and historical paradigms-of-the-day. The striking similarities between the Egyptian and Mesopotamian origins motifs and those in Gen 1–11 is strong evidence that Israel inherited these motifs from her neighbors. There are a number of probable explanations for how these motifs entered the Hebrew community. Abraham came from Ur and likely used Mesopotamian origins motifs. Moses was raised by Egyptian royalty and would have been exposed to many ancient Near Eastern origins accounts and their motifs. He was literate and might have written one of the earliest sources of Gen 1–11. And since Israel was geographically positioned between Egypt and Mesopotamia, she undoubtedly heard about their motifs since travel and trade between them was common. Israel began as a preliterate people and the oral environment would have facilitated the re-cycling and re-interpretation of the motifs she inherited. Under the inspiration of the Holy Spirit, the oral tradition behind Gen 1-11 was conceived, later written down, and these sources were eventually redacted together.

TRANSLATIONS OF GENESIS 1:1-3

King James Version (1611)

¹ *In the beginning* God created the heaven and the earth.

² And the earth was without form, and void; and darkness was upon the face of the deep.
And the Spirit of God moved upon the face of the waters.

³ And God said, Let there be light: and there was light.

FOOTNOTE: none

American Standard Version (1901)

¹ *In the beginning* God created the heavens and the earth.

² And the earth was waste and void; and darkness was upon the face of the deep: and the Spirit of God moved upon the face of the waters.

³ And God said, Let there be light: and there was light.

FOOTNOTE: none

Revised Standard Version (1952)

¹ *In the beginning* God created the heavens and the earth.

² The earth was without form and void, and darkness was upon the face of the deep; and the Spirit of God was moving over the face of the waters.

³ And God said, "Let there be light," and there was light.

FOOTNOTE: or *When God began* to create

New American Standard Bible (1960)

¹ *In the beginning* God created the heavens and the earth.

² And the earth was formless and void, and darkness was over the surface of the deep; and the Spirit of God was moving over the surface of the waters.

³ Then God said, "Let there be light"; and there was light.

FOOTNOTE: none

Jewish Bible Society (1970)

¹ *When God began* to create the heaven and the earth

² —the earth being unformed and void, with darkness over the surface of the deep and a wind from God sweeping over the water—

³ God said, "Let there be light," and there was light.

FOOTNOTE: or *In the beginning* God created

New International Version (1978)

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.

FOOTNOTE: none

New Jerusalem Bible (1985)

¹ *In the beginning* God created heaven and earth.

² Now the earth was a formless void, there was darkness over the deep, with a divine wind sweeping over the waters.

³ And God said, "Let there be light," and there was light

FOOTNOTE: or *When God began* creating

New Revised Standard Version (1991)

¹ *In the beginning when* God created the heavens and the earth,

² the earth was a formless void and darkness covered the face of the deep, while a wind from God swept over the face of the waters.

³ Then God said, "Let there be light"; and there was light.

FOOTNOTE: or *When God began* to create
or *In the beginning* God created

King James Version (Cleveland: World Publishing, [1611] 1954)

American Standard Version (1901)

Revised Standard Version (New York: Thomas Nelson & Sons, 1952)

New American Standard Bible (La Habra, CA: Lockman Foundation, 1960)

Jewish Bible Society (1970)

New International Version (New York: New York International Bible Society, 1978)

New Jerusalem Bible (Garden City, NY: Doubleday, 1985)

New Revised Standard Version: Catholic Edition (Nashville: Catholic Bible Press, 1991)

GENESIS 1

CREATION ACCOUNT PARALLEL PANELS

1ST PANEL

Formless

תֹהוּ

tōhû

Day 1

Separate

Light
Darkness

Day 2

Separate

Waters Above
Waters Below

Day 3

Separate

Water
Land
(Plants)

2ND PANEL

Empty

בֹהוּ

bōhû

Day 4

Fill with

Sun
Moon & Stars

Day 5

Fill with

Birds
Sea Creatures

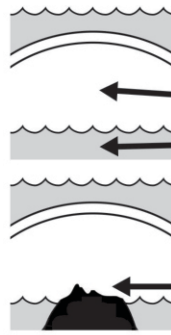
Day 6

Fill with

Land Animals
Humans
(Plants for Food)

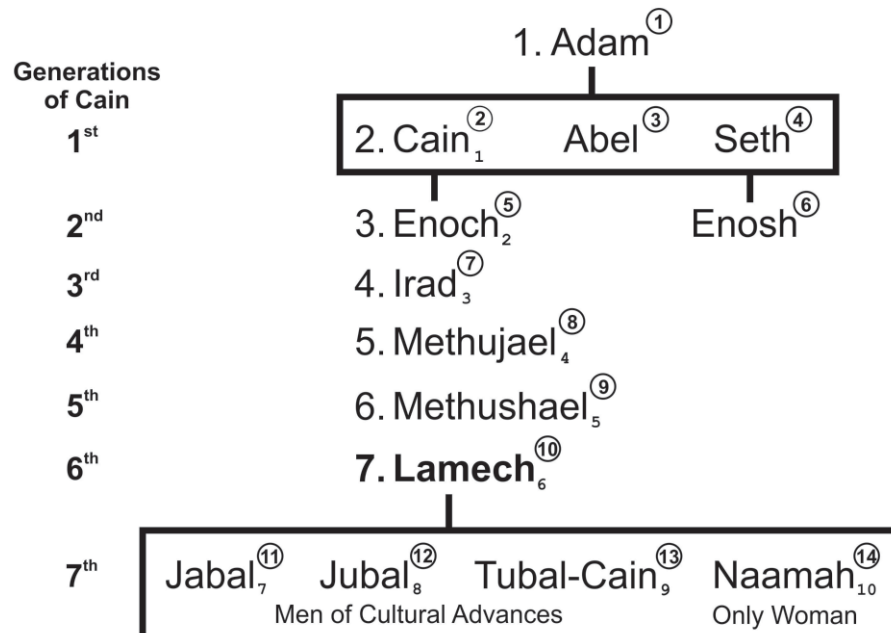
Day 7

The Sabbath
Day of Rest



GENESIS 4

NON-HEBREW GENEALOGY BEFORE THE FLOOD



GENESIS 5

HEBREW GENEALOGY BEFORE THE FLOOD

	Age at Son's Birth (Yrs)	Period Lived after Birth (Yrs)
1. Adam	130	800
2. Seth	105	807
3. Enosh	90	815
4. Kenan	70	840
5. Mahalalel	65	830
6. Jared	162	800
7. Enoch	65	300
8. Methuselah	187	782
9. Lamech	182	595
10. Noah	500	[450]

[]: from Gen 9:29

GENESIS 11

HEBREW GENEALOGY AFTER THE FLOOD

	Age at Son's Birth (Yrs)	Period Lived after Birth (Yrs)
1. Shem	100	500
2. Arpachshad	35	403
3. Shelah	30	403
4. Eber	34	430
5. Peleg	30	209
6. Reu	32	207
7. Serug	30	200
8. Nahor	29	119
9. Terah	70	[135]
10. Abram	[100]	[75]

[]: from Gen 11:32, 21:5, 25:7

WELD-BLUNDEL 444

SUMERIAN KING LIST BEFORE THE FLOOD

KING	Reign (Years)	'60 ² Times X' Formula
Alulim	28,800	$60^2 \times 8$
Alagar	36,000	$60^2 \times 10$
Enmenluanna	43,200	$60^2 \times 12$
Enmengalanna	28,800	$60^2 \times 8$
Dumuzi	36,000	$60^2 \times 10$
Ensipazianna	28,800	$60^2 \times 8$
Enmenduranna	21,000	*
Ubartutu	18,600	*

* does not fit formula,
but divisible by 60

WELD-BLUNDEL 444

SUMERIAN KING LIST AFTER THE FLOOD

KING	Reign (Years)	'60 Times X' Formula		
Ga . . . ur	1200	60×20	En-men-barage-si	900 60×15
Nidaba	960	60×16	Aka	629 —
Bu.an . . .	840	60×14	Mes-kiag-gasher	324 —
Kalibum	960	60×16	En-me-kar	420 60×7
Qalumum	840	60×14	Lugalbanda	1200 60×20
Zuqapiq	900	60×15	Dumunzi	100 —
Atab	600	60×10	Gilgamesh	126 —
Masha	840	60×14	Ur-Nungal	30 —
Arwi'um	720	60×12	Utul-kalama	15 —
Etana	1560	60×15	Labah . . .	9 —
Balih	400	—	En-nun-dara-Anna	8 —
En-me-nunna	660	60×11	Mes . . . he	36 —
Melam-Kishi	900	60×15	Melam-Anna	6 —
Bar-sal-nunna	1200	60×20	Lugal-ki-tun	36 —
Samug	140	—	Mes-Anne-pada	80 —
Tizkar	305	—	Mes-kiag-Nanna	36 —
Ilku'	900	60×15	Elulu	25 —
Ilta-sadum	1200	60×20	Balulu	36 —

"—" does not fit formula

GENESIS 6-9

FLOOD ACCOUNT CHIASM

Priestly Author

- A Noah & his Sons before the Flood (6:9b-12)
- B Promise to Flood & Making of the Ark (13-17)
- C God & the Covenant (18)
- D Preservation of Life & Food for Sustenance (19-22)
- E Entering the Ark (7:6, 9, 11, 13-16a)
- F Mountains Covered (18-20)
- G **150 Days** Waters Prevail (21, 24)
- CENTER GOD REMEMBERS NOAH** (8:1a)
- G' **150 Days** Waters Decrease (1b, 2a, 3b)
- F' Mountains Uncovered (4-5, 7, 13a, 14a)
- E' Leaving the Ark (15-18)
- D' Multiplication of Life & Food for Sustenance (9:1-7)
- C' God & the Covenant (9:8-10)
- B' Promise Never to Flood & Making of Covenant (11-17)
- A' Noah & his Sons after the Flood (18a, 19, 10:1b)

GENESIS 10

THE TABLE OF NATIONS



Boxes Sons of Japheth
Ovals Sons of Ham
None Sons of Shem

Redrawn from D & P Alexander,
Eerdmans' Handbook to the Bible
 (Grand Rapids, 1973), 134

VERSE DISTRIBUTION
IN
TABLE OF NATIONS
GENESIS 10
(POST-FLOOD ACCOUNT)

J VERSES	P VERSES
9:18b, 20-27	
	10:1-7
10:8-19	
	10:20
10:21	
	10:22-23
10:24-30	
	10:31-32

Priestly Table of Nations

^{10:2}**SONS OF JAPHETH:**

Gomer, Magog, Madai, Javan, Tubal, Meshek & Tiras.

³Sons of Gomer: Ashkenaz, Riphath & Togarmah.

⁴Sons of Javan: Elishah, Tarshish, Kittim & Dodanim.

⁵From these the maritime nations spread into their lands each with its own **language** by their clans within their nations.

⁶**SONS OF HAM:**

Cush, Egypt, Put and Canaan.

⁷Sons of Cush: Seba, Havilah, Sabtah, Raamah & Sabteka.

²⁰These are the sons of Ham by their clans and by their **languages**, in their lands and in their nations.

²²**SONS OF SHEM:**

Elam, Asshur, Arpachshad, Lud & Aram.

²³Sons of Aram: Uz, Hul, Gether & Meshek.

³¹These are the sons of Shem by their clans and by their **languages**, in their lands and by their nations.

³²These are the clans of Noah's sons, by their lines, in their nations.
From these the nations spread on the earth after the flood.

NOAH

Japheth	Ham	Shem
1. Gomer →	1. Cush →	1. Elam
2. Magog	2. Egypt	2. Asshur
3. Madai	3. Put	3. Arpachshad
4. Javan →	4. Canaan	4. Lud
5. Tubal		5. Aram →
6. Meshech		1. Uz
7. Tiras		2. Hul
		3. Gether
		4. Mash
15	10	10
Total: 35		

Jahwist Table of Nations

⁹^{18b} **HAM** he was the father of Canaan. ²⁰Noah, a man of the ground, proceeded to plant a vineyard. ²¹He drank from the wine and became drunk and lay uncovered inside his tent. ²²Ham, the father of Canaan, saw his father's nakedness and told his two brothers outside. ²³Shem and Japheth took the garment and laid it across their shoulders; then they walked backward and covered their father's nakedness. Their faces were turned away so that they would not see their father's nakedness. ²⁴When Noah awoke from his wine and found what his youngest son had done to him, ²⁵he said, "Cursed be Canaan! Slave of slaves he will be to his brothers." ²⁶He also said, "Blessed be the **LORD**, the God of Shem. May Canaan be a slave to him. ²⁷May God enlarge Japheth, and may he live in the tents of Shem; and may Canaan be a slave to him."

¹⁰⁸ **Cush** fathered Nimrod. He was first to be mighty on the earth. ⁹He was a mighty hunter before the **LORD**. For this it is said, "Like Nimrod, a mighty hunter before the **LORD**." ¹⁰The first of his kingdom was Babel, Uruk, Akkad, and Calneh, in land of Shinar. ¹¹ From that land he went to Assyria and he built Nineveh, Rehoboth-Ir, Calah ¹²and Resen, between Nineveh and between Calah, that great city.

¹³**Egypt** fathered Ludim, Anamim, Lehabim, Naphtuhim, ¹⁴ Pathrusim, Casluhim from which came the Philistim and Caphtorim.

⁵**Canaan** fathered Sidon his firstborn, and of Heth, ¹⁶and the Jebusite, the Amorite, the Girgashite, ¹⁷the Hivite, the Arkite, the Sinite, ¹⁸the Arvadite, the Zemarite and Hamathite. Later the clans of the Canaanite clans scattered. ⁹Border of Canaanite went from Sidon to Gerar as far as Gaza, and went to Sodom, Gomorrah, Admah and Zeboyim, as far as Lasha.

²¹**SHEM** became a father; he also was the father of all the sons of Eber. Older brother was **JAPHTETH**.

²⁴**Arpachshad** fathered Shelah.

Shelah fathered Eber.

²⁵**Eber** became a father of two sons. Name of one was Peleg because in his days the earth was divided. Name of his brother was Joktan.

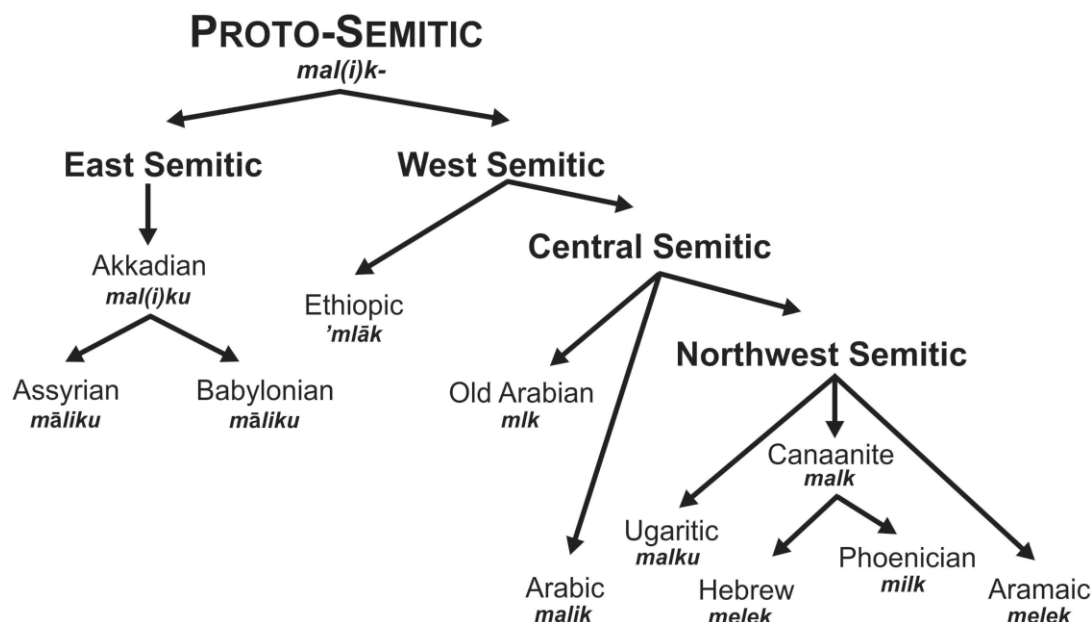
²⁶**Joktan** fathered Almodad, Sheleph, Hazarmaveth, Jerah, ²⁷ Hadoram, Uzal, Diklah, ²⁸ Obal, Abimael, Sheba, ²⁹Ophir, Havilah, and Jobab. All of these were sons of Joktan. ³⁰Their region goes from Mesha to Sephar of hill of the east.

NOAH

Japheth	Ham	Shem
No Mention of Descendants	1. Cush 1. Nimrod 1. Babel 2. Erech 3. Akkad 4. Calneh 2. Egypt 1. Ludim 2. Anamim 3. Lehabim 4. Naphtuhim 3. Canaan 1. Sidon 2. Heth 3. Jebusite 4. Amorite 5. Girgashite 6. Hivite	1. Arpachshad 1. Shelah 1. Eber 1. Peleg 2. Joktan 1. Almodad 2. Sheleph 3. Hazarmaveth 4. Jerah 5. Hadoram 6. Uzal 7. Diklah 8. Obal 9. Abimael 10. Sheba 11. Ophir 12. Havilah 13. Jobab
	5. Nineveh 6. Rehoboth Ir 7. Calah 8. Resen 5. Pathrusim 6. Caphtorim 7. Casluhim 1. Philistim 7. Arkite 8. Sinite 9. Arvadite 10. Zemarite 11. Hamathite	

LINGUISTIC EVOLUTION

ANCIENT SEMITIC (COGNATE) LANGUAGES



The word 'king' is an example of how these languages have changed over time. The three basic consonants m-l-k remain the same while the vowels change.

GENESIS 5 & 11

GENEALOGICAL FRAMEWORK OF THE HEBREWS

Priestly Author

The 21 individuals come from passages written by the Priestly author. Only the people in a direct line from Adam to Isaac have their ages mentioned using stylistic numbers in order to emphasize the importance of the origin of the Hebrews.

Total Number: 25 (5 X 5)

Noah: 10th (5 X 2)

Abram: 20th (5 X 4)

Adam to Isaac: 21 (7 X 3)

Enoch: 7th (7 X 1)

Eber: 14th (7 X 2)

Isaac: 21st (7 X 3)

1. Adam
2. Seth
3. Enosh
4. Kenan
5. Mahalalel
6. Jared
7. Enoch
8. Mathuselah
9. Lamech
10. Noah

11. Shem	Ham	Japheth
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12. Arpachshad

13. Shelah

14. Eber

15. Peleg

16. Reu

17. Serug

18. Nahor

19. Terah

20. Abram	Nahor	Haran
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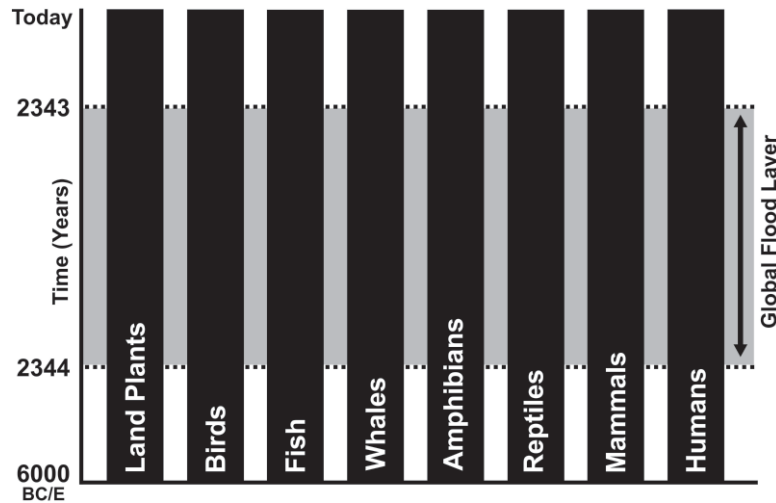
21. Isaac

CATEGORIES ON THE ORIGIN OF THE UNIVERSE & LIFE

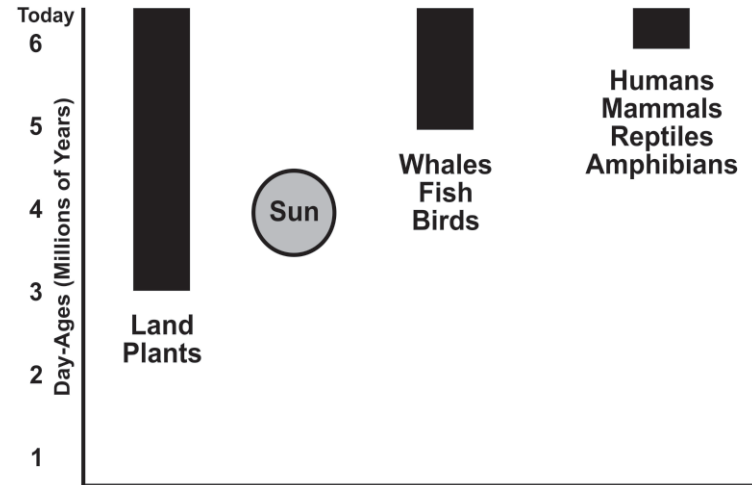
	YOUNG EARTH CREATION "Creationist" Position Creation Science	PROGRESSIVE CREATION Old Earth Creation Day-Age Theory	EVOLUTIONARY CREATION Theistic Evolution	DEISTIC EVOLUTION "God without Religion" "Theistic" Evolution	DYSTELEOLOGICAL EVOLUTION "Evolutionist" Position Atheistic Evolution
Teleology	Yes	Yes	Yes	Yes	No Plan & purpose an illusion
Intelligent Design	Yes Points to a Designer	Yes Points to a Designer	Yes Points to a Designer	Yes Points to a Designer	No Design an illusion
Age of the Universe	Young 6000 yrs	Old 13.7 billion yrs	Old 13.7 billion yrs	Old 13.7 billion yrs	Old 13.7 billion yrs
Evolution of Life	Rejects macro-evolution Accepts micro-evolution	Rejects macro-evolution Accepts micro-evolution	Accepts macro-evolution	Accepts macro-evolution	Accepts macro-evolution
God's Activity in the Origin of the Universe & Life	Yes Direct Interventions over 6 days	Yes 1. Direct for basic "kinds" of life Interventions over billions of yrs 2. Indirect for inanimate universe <i>Ordained & Sustained natural processes</i>	Yes Indirect <i>Ordained & Sustained natural processes</i>	Yes Indirect Ordained natural processes God never enters the world	No Natural processes driven only by blind chance No God God a delusion
God's Activity in the Lives of Men & Women	Yes Personal God Dramatic & subtle	Yes Personal God Dramatic & subtle	Yes Personal God Dramatic & subtle	No Impersonal God God never enters the world	No No God God a delusion
View of the Bible	Word of God Inspired by Holy Spirit	Word of God Inspired by Holy Spirit	Word of God Inspired by Holy Spirit	Human beliefs about God Rejects divine revelation God never enters the world	Human superstitions Rejects divine revelation God a delusion
Characteristics of Genesis 1-11 Spiritual Correspondence Scientific Concordism Historical Concordism	Yes Yes Yes	Yes Yes Yes	Yes No No	No No No	No No No
Interpretation of Genesis 1-11	Strict literalism Creation days = 24 hrs Global flood	General literalism Creation days = geologic ages Local flood	1. Spiritual Truths 2. ancient cosmogony 3. ancient historiography 4. ancient poetry 5. ancient story/allegory	Irrelevant origins myth	Irrelevant origins myth
Origin of Humanity	Accepts Image of God & human sin Accepts Adam & Eve Rejects human evolution	Accepts Image of God & human sin Accepts Adam & Eve Rejects human evolution	Accepts Image of God & human sin Rejects Adam & Eve Accepts human evolution	Rejects Image of God & human sin Rejects Adam & Eve Accepts human evolution	Rejects Image of God & human sin Rejects Adam & Eve Accepts human evolution
Cosmic Fall	Yes	No	No	No	No
Theology/ Philosophy	Conservative Christianity Accepts Incarnation & Physical Resurrection	Conservative Christianity Accepts Incarnation & Physical Resurrection	Conservative Christianity Accepts Incarnation & Physical Resurrection	Deism & Liberal Christianity Rejects Incarnation & Physical Resurrection	Atheism Rejects Incarnation & Physical Resurrection
Ethics	Biblical	Biblical	Biblical	Humanism	Humanism
Example	Ken Ham	Hugh Ross	Francis Collins	Antony Flew	Richard Dawkins

FOSSIL PATTERN PREDICTIONS OF CHRISTIAN VIEWS OF ORIGINS & THE FOSSIL RECORD

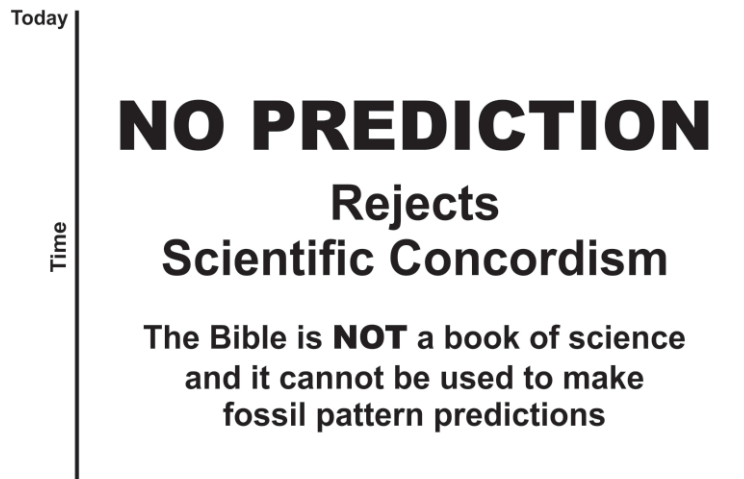
Young Earth Creation



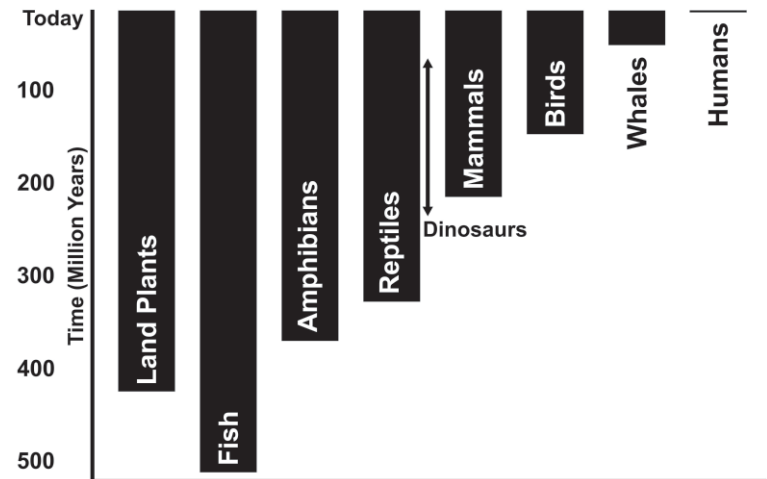
Progressive Creation



Evolutionary Creation



The Fossil Record



FAILURE OF SCIENTIFIC CONCORDISM THROUGH THE BIBLE

Heavens & Earth

Structures

Firmament overhead in heaven & set on foundations	No
Sun, moon & stars set in firmament	No
Sea of waters above in heaven held up by firmament	No
Beams of divine dwelling set in waters above	No
Flat circular earth with ends, foundations & underworld	No
Flat circumferential sea around earth & bordered by horizon	No

Operations

Earth is immovable	No
Sun moves daily across sky	No
Sun, moon & stars move through firmament	No
Stars occasionally fall to earth	No

Plants, Animals & Humans

Structures

Mustard seed is the smallest seed	No
Bats are birds	No
Male seed contains a miniature person	No
Female reproductive organs are seedless	No
Female womb like a field for male seed	No

Operations

Seeds die before germination	No
Earth only cause of seed growth	No
Females only cause of infertility	No
Demons cause of epilepsy, blindness, etc	No

FAILURE OF SCIENTIFIC & HISTORICAL CONCORDISM IN GENESIS 1-11

Origin of Universe & Life

<i>De novo</i> creation of heavens & earth	No
Firmament raised waters above	No
Sun, moon & stars set in firmament	No
Divine dwelling set in waters above	No
<i>De novo</i> creation of living organisms	No
Birds created before land animals	No

History of Humanity

<i>De novo</i> creation of humans	No
Origin of suffering & death after humans	No
Origin of cultural advances in one generation	No
Human lifespan average 912 years before flood	No
Pairs of all air-breathing animals fit into ark	No
Flood rose above Ararat Mountains	No
Destruction of all humans on earth by flood	No
Repopulation of earth from ANE after flood	No
Origin of ANE nations & cities after flood	No
Origin of languages in ANE in one generation	No
Human lifespan average 333 years after flood	No

PROGRESSIVE CREATION

EVIDENCES PRESENTED BY GEOLOGY & PALEONTOLOGY					FRAMEWORK PRESENTED BY THE BIBLE		INTERPRETATION	
ERA	PERIOD AGE IN MILLIONS OF YEARS	EPOCH	ANIMAL KINGDOM	PLANT KINGDOM	GENESIS 1 VERSES 1-26		ANIMAL & PLANT KINGDOMS	WORLD CLIMATIC CONDITIONS
CENOZOIC	QUATERNARY 2.5	RECENT ICE AGE 5000 yrs	AGE OF MAN MANY EXTINCTIONS	AGE OF ANGIOSPERMS (TRUE FLOWERING PLANTS)	7th DAY	GOD SAID "LET US MAKE MAN" VS. 26	1. MAN 2. CATTLE 3. BEASTS OF THE EARTH (MAMMALS) 4. CREEPING THINGS	THE FLOOD
	TERTIARY 65	PLEISTOCENE PLIOCENE MIOCENE OLIGOCENE Eocene PALEOCENE LARAMIDE OROGENY	AGE OF MAMMALS	FIRST DECIDUOUS TREES	6th DAY	GOD MADE THE BEASTS OF THE EARTH, THE CATTLE & EVERY CREEPING THING AFTER HIS KIND VS. 25		
MESOZOIC	Upper CRETACEOUS 136	MANY EXTINCTIONS OF MESOZOIC LIFE ALBIAN FIRST FLOWERING PLANTS.	AGE OF BIRDS & REPTILES		5th DAY	GOD CREATED GREAT WATER MONSTERS VS. 13 GOD SAID "LET THE WATERS SWARM WITH SWARMS OF THE LIVING CREATURES ... AFTER HIS KIND" VS. 21 "LET WINGED THINGS FLY." VS. 20	1. GREAT MONSTERS: - DINOSAURS 2. EVERY LIVING CREATURE WHICH THE WATERS BROUGHT FORTH: - MARINE REPTILES 3. WINGED THINGS THAT FLY: - FLYING REPTILES - BIRDS	ATMOSPHERE RELATIVELY FREE OF CLOUDS
	Lower JURASSIC 190	PLESIOSAURS BIRDS PTEROSAURS DINOSAURS SEASONAL RINGS		AGE OF CONIFERS (SPRUCE, PINE)				
	TRIASSIC 225	THECODONT		GINGKOE & CYCAD TREES				
	PERMIAN 280	MANY EXTINCTIONS OF PALEOZOIC LIFE GREAT CLIMATIC CHANGES ICE AGE	AGE OF FISH & AMPHIBIANS	AGE OF SPORE & SEED BEARING PLANTS.	4th DAY	GOD SAID "LET THE LIGHTS (SUN, MOON & STARS) ... DIVIDE THE DAY FROM THE NIGHT & LET THEM BE FOR SIGNS, SEASONS, DAYS & YEARS." VS. 15		GREAT CLIMATIC CHANGES
CARBONIFEROUS 325 PENNSYLVANIAN 365 MISSISSIPPIAN	SIGILLARIA HORSE TAILS LEPIDODENDRON CORDAITES FERN FISH STEGOCEPHALIAN	FIRST PLANTS WITH VASCULAR BUNDLES					LUSH VEGETATION (MOIST, SWAMPY CONDITIONS) CREATION OF LAND PLANTS	EARTH BLANKETED BY CLOUDS (GREENHOUSE EFFECT PRODUCED)
PALEOZOIC	DEVONIAN 395	1st LAND PLANTS CALEDONIAN OROGENY	WORLDWIDE EMERGENCE OF LAND		3rd DAY	GOD SAID "LET THE EARTH BRING FORTH SPROUTAGE ... AFTER HIS KIND." VS. 11 LET THE WATERS BE GATHERED TOGETHER INTO ONE PLACE. LET THE DRY LAND APPEAR VS. 9		
	SILURIAN 430							
	ORDOVICIAN 500	ICE AGE. GREAT CLIMATIC CHANGES	AGE OF MARINE INVERTEBRATES	AGE OF SEAWEEDS	2nd DAY	GOD SAID "LET THE FIRMAMENT (ATMOSPHERE) DIVIDE THE WATERS ABOVE (CLOUDS) FROM THE WATERS BELOW (OCEAN)" VS. 6	MARINE LIFE IN PROCESS OF BEING CREATED, FORMED & NOURISHED. (GEN. 1:2)	GREAT CLIMATIC CHANGES.
	CAMBRIAN 570	GASTROPODS BRACHIOPODS TRILOBITES	9 GROUPS & ≈ 2800 SPECIES IDENTIFIED FIRST ANIMAL LIFE					ATMOSPHERE RELATIVELY FREE OF CLOUDS (SUN SHINING ON EARTH)
PRECAMBRIAN	PROTEROZOIC (SEDIMENTARY) 3000	ICE AGE ALGAE ICE AGE BACTERIA		RED & BROWN ALGAE GREEN ALGAE BLUE-GREEN ALGAE & BACTERIA	1st DAY	GOD SAID "LET THERE BE LIGHT." GEN. 1:2 SPIRIT OF GOD BROODED OVER THE FACE OF THE WATERS GEN. 1:2 DARKNESS UPON THE FACE OF THE (ROARING) DEEP. OCEANS BORN (JOB. 38:8) FOUNDATIONS LAID (JOB 38:4) CORNSTONE LAID JOB 38:6 EARTH UNFORMED & VOID GEN. 1:2 GOD CREATED THE EARTH. GEN. 1:1	1st INHABITANTS ARRIVE (JOB 38:7) A BEAUTIFUL, MAGNIFICENT PLACE SOLID CRUST FORMS HOT	EARTH BLANKETED BY CLOUDS
	ARCHEAN (CRYSTALLINE) 4600	OCEANS PRESENT (MOIST & HOT)						
	HADEAN 7	EXTREMELY HOT						LIQUID STATE GASEOUS STATE

Courtesy of HD Daae, "Bridging the Gap" Genesis International Research Association Tract (1975)

LAMOUREUX'S PERSONAL STORY

24 April 73

It seems that when ever one does something it can be explained by examining the individuals back ground. The more I study this the more it seems that man is but a mere chemical reaction Programmed by DNA.

But there's more;

I'm sure.

June 20/77

Love at first response chara.
of all animals, except expressed
to greater levels in man because
of his superior intelligence

Creation Science

Dialogue

DIALOGUE Winter Quarterly 1981

Vol 8 No. 3

By Dr. Denis Lamoureux
B.Sc, D.DS

Philosophy versus Science

Whether we care to concede it or not we are born into a society that upholds a philosophical, or world view. I was the tragic end product of the current humanism which permeates the western hemisphere.

Formally educated in the health sciences I firmly understood that I was indeed a marvelous biomolecular machine, morally free, in an eternal expanding and contracting cosmos. Neo-Darwinian and Skinnerian theories explained physically and psychologically what I was. While J.P. Satre and Albert Camus told me not to worry about such weighty matters; after all everything is absurd. Rather, one should live for the moment. Fluctuating between atheism and agnosticism my "Normal" department was definitely marked by materialism and hedonism.

In quest for comic relief, one obscure afternoon in 1976 I decided to attend an "evolution vs creation" debate on campus. I walked away laughing at the Bible nut, but deeply inside I realized my foundation was under attack; not by theology, but with my own armamentarium: science. After intensive personal research the facts clearly showed the creation model to be superior in light of the data concerning origins. A review of the development of theology and philosophy in this past century also provided conclusive evidence of the magnanimous impact of this apparently innocuous doctrine.

I challenge anyone who prides their objectivity to seriously entertain scientific creationism. It may very well be the most important study of your life.

Registration Day
Regent College
UBC.

30 AUG 84

THE GRAND PLAN:

Declare absolute + pure hell
on the "Theory"

POSTSCRIPTUM

I entered Regent College in September of 1984 as a fire-breathing, dragon-slaying, card-carrying, young earth creationist. It seems appropriate, nay, maybe even ordained that my last paper after three years at this college is this one. How I have fallen from grace!

My parting thoughts on this issue of origins are now in a suspended state. I do not regress to my earlier atheism where, "In the beginning, hydrogen..." The idea of molecules into people defies all known biochemical laws. The socio-biological implications of the naked ape makes me wonder how man could be the apple of God's eye if humanity came about through evolution. Yet now, as a student of the Old Testament, I am beginning to question the "narrative-ness" of the opening chapters of the Bible. There seem to exist masterfully constructed, almost poetic, literary structures in this section of God's Word. It may well be that, through the creation, the fall, the sons of God, the flood and the tower of Babel, God has given us stories which bear significant truths. In other words, the first part of Genesis may well be mythopoeetry.

It's funny, you know. I once met a theological hockey expert who told me that examining evolution in the light of the Bible was "an irrelevant abstraction." He may be right.

Note Books on Immutability

4 Dec 90

A Humble title, eh?

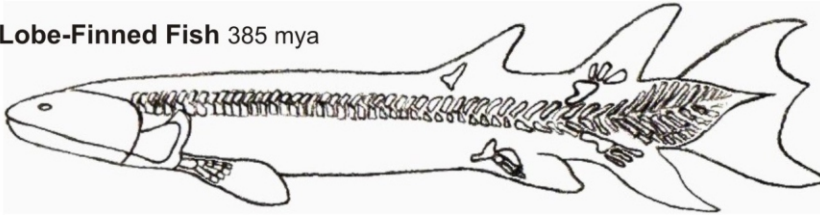
There may be a teleological evolution, but the fact remains species do not transmute on their own: they are indeed immutable in this sense

Date: Sat, 31 Dec 1994 23:49:26 -0700 (MST)
 From: Denis Lamoureux <dlamoure@gpu.srv.ualberta.ca>
 To: grayt@Calvin.EDU
 Subject: Falling From Grace

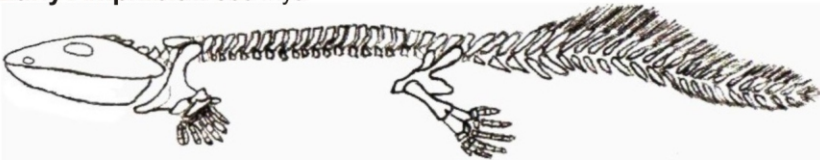
Dear Terry,
 Well its 1995 in your part of the continent--Happy New Year! I spent this last day of 1994 examining the fin/limb structure of the sarcopterygian Eusthenopteron. Considering this anatomy in the light of the latest work on limb development (i.e., the manifestation of Sonic Hedge Hog in the ZPA), and following Howard Van Till in debate with others on the reflector (he's so gracious), I end the last moments of 1994 as an apostate.

Blessings,
 Denis.

Lobe-Finned Fish 385 mya



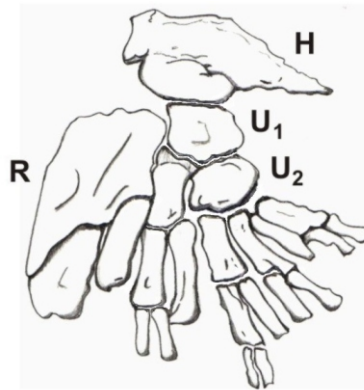
Early Amphibian 360 mya



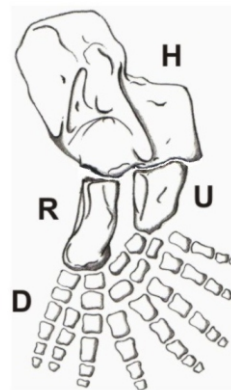
Redrawn from R. Carroll, *Patterns & Processes of Vertebrate Evolution* (Cambridge: U Press, 1998), 300



Lobe-Finned Fish
385 mya

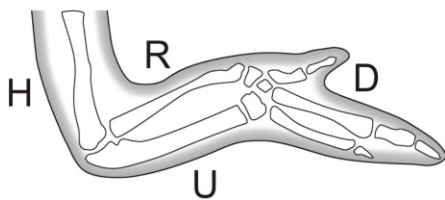


Fish with "Fingers"
370 mya

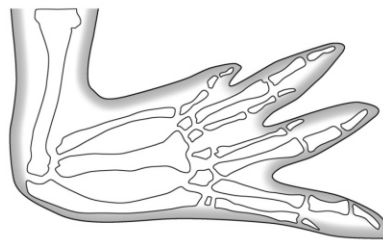


Early Amphibian
360 mya

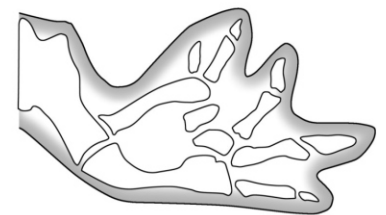
Redrawn from M Coates, J Jeffrey & M Rut, "Fins to Limbs" *Evolution and Development* 4 (2002), 392 [Right] E Daeschler & N Shubin, "Fish with Fingers?" *Nature* 391 (8 Jan 1997), 133 [Middle] R Carroll, *Ibid*, 233 [Left]



Normal Limb

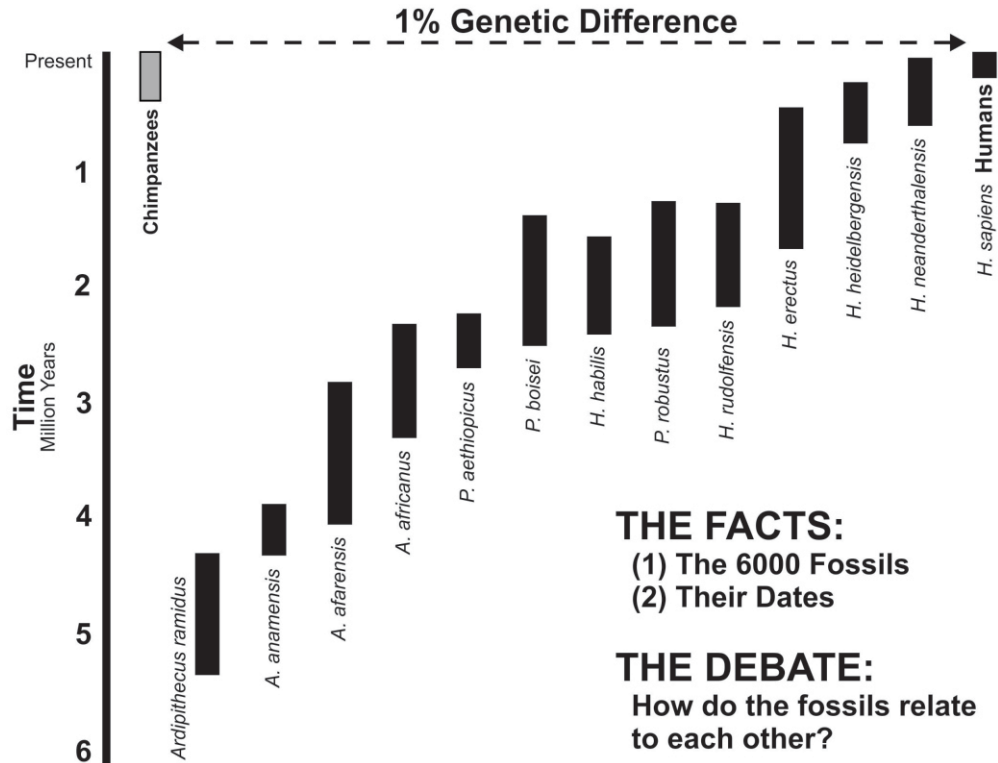


Experimental Limbs

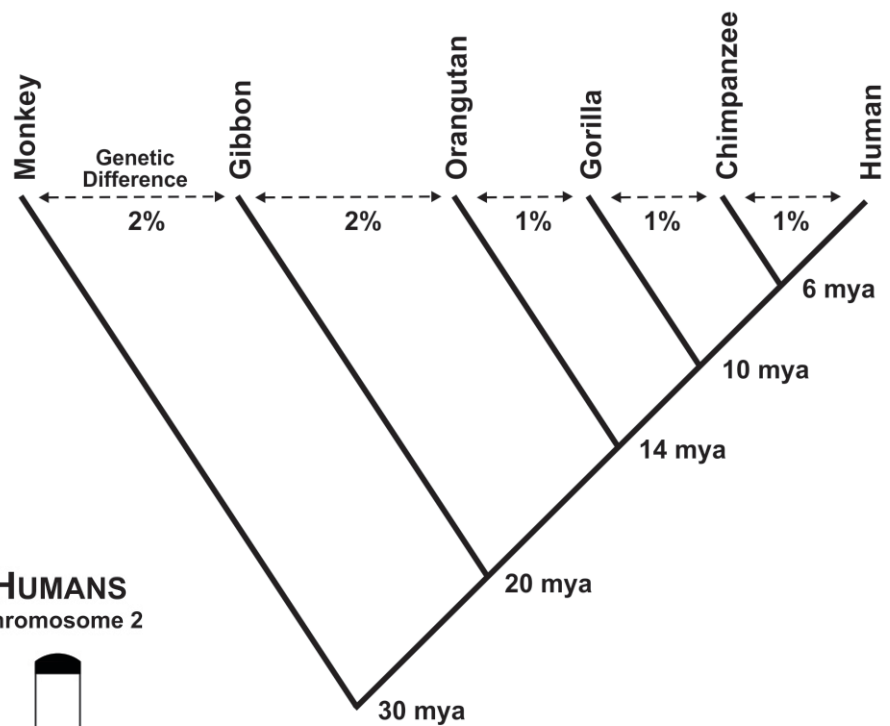


Redrawn A Hornbruch & L Wolpert, "Positional Signaling by Henson's Node when Grated to the Chick Limb," *Journal of Experimental Morphology* 94 (1986), 261

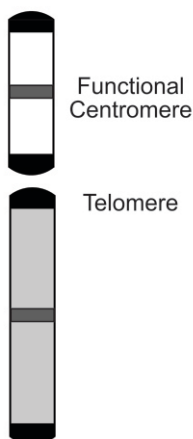
Pre-Human & Human Fossil Record



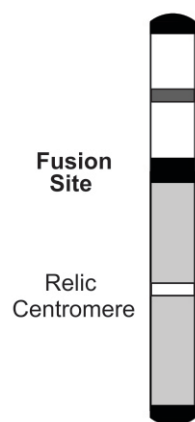
Primate Genetic Similarities



GREAT APES 2 Chromosomes



HUMANS Chromosome 2



Vitamin C Gene

Pseudogene (Defective Gene)

Human ...TCACCTG__GACGATGACA...

Chimp ...TCACCTG__GACGATGACA...

__ : missing 'A' (mutation)

Functioning Gene

Rat ...TCACCCG**A**GACGATGACA...

HUMAN ORIGINS

METAPHYSICS-PHYSICS PRINCIPLE

METAPHYSICS

God Created Humans

Ordained & Sustained

Image of God & Sinful



PHYSICS

Human Evolutionary Sciences

Paleo-Anthropology, Geology,

Archeology, Genetics

HUMAN ORIGINS

MANIFESTATION OF SPIRITUAL REALITIES

CHIMPANZEES

No Image of God
& Not Sinful

HUMANS

Image of God
& Sinful

**BEHAVIORALLY
MODERN HUMANS**
Image of God
& Sinful

50,000 ya

**ANATOMICALLY
MODERN HUMANS**
No Image of God
& Not Sinful

200,000 ya

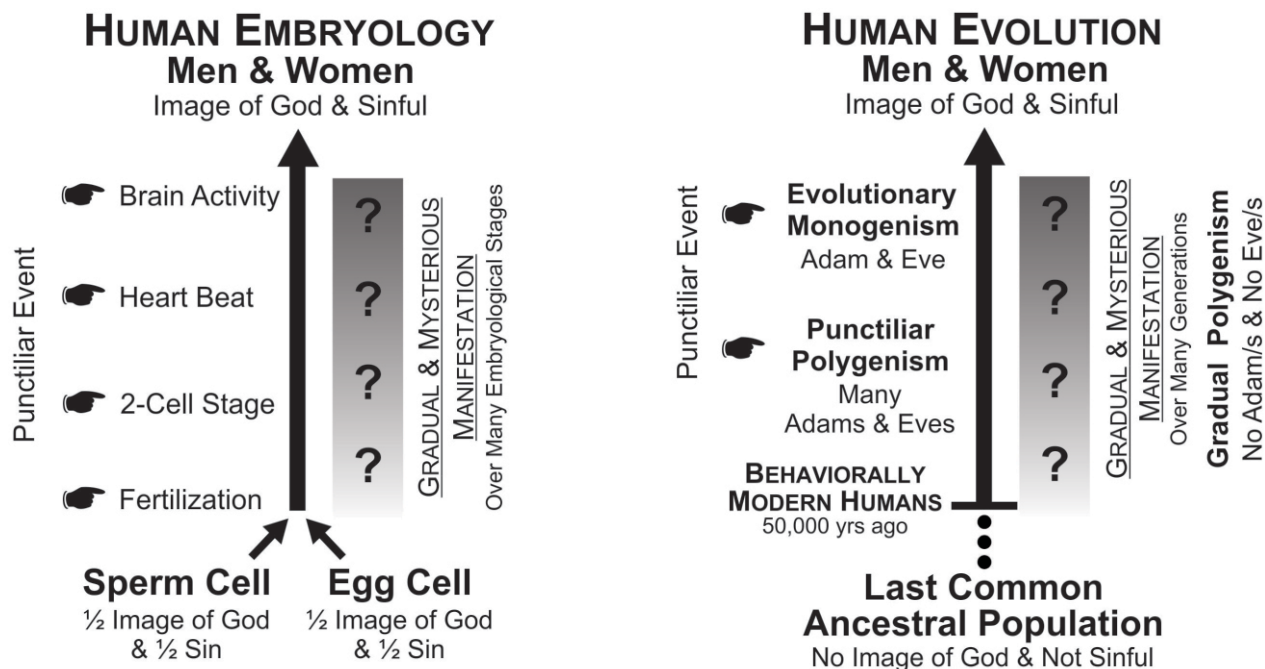
6000 Fossils

LAST COMMON ANCESTRAL POPULATION

No Image of God & Not Sinful
6 Million Years Ago

HUMAN ORIGINS

EMBRYOLOGY-EVOLUTION ANALOGY



HUMAN ORIGINS

MESSAGE-INCIDENT PRINCIPLE

Genesis
1-3

MESSAGE

Spiritual Truths

God Created Humans
Humans Bear Image of God
Humans Are Sinful
God Judges Humans for Sin

INCIDENT

Ancient Biology & Ancient Historiography

ORIGIN OF LIFE

De Novo Creation Motif
Tribal Formation Motif

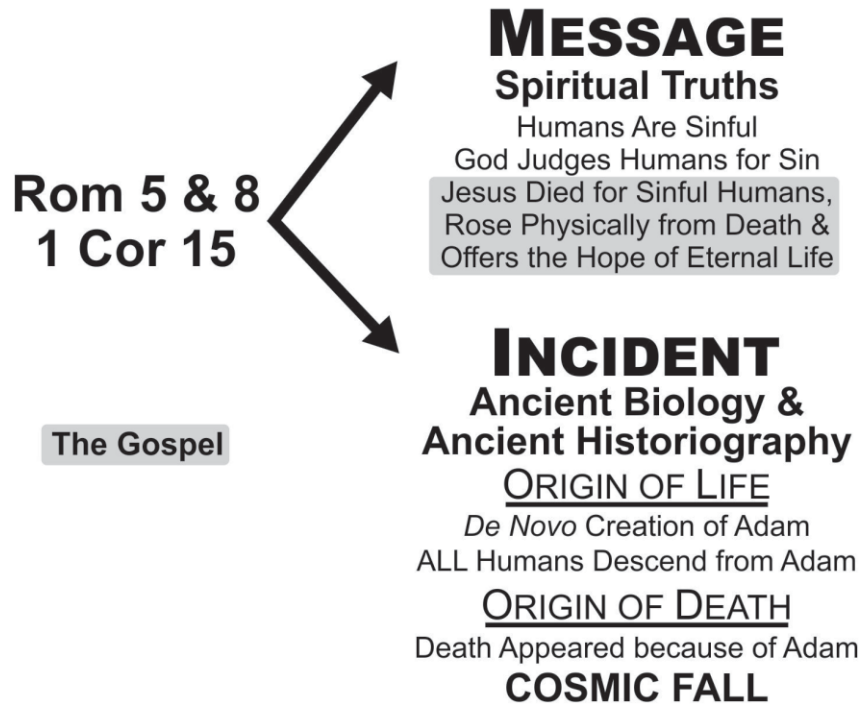
ORIGIN OF DEATH

Lost Idyllic Age Motif

COSMIC FALL

HUMAN ORIGINS

THE APOSTLE PAUL & MESSAGE-INCIDENT PRINCIPLE



TWO DIVINE BOOKS

COMPLEMENTARY RELATIONSHIP

WITH EMPHASIS ON THE EVOLUTIONARY SCIENCES

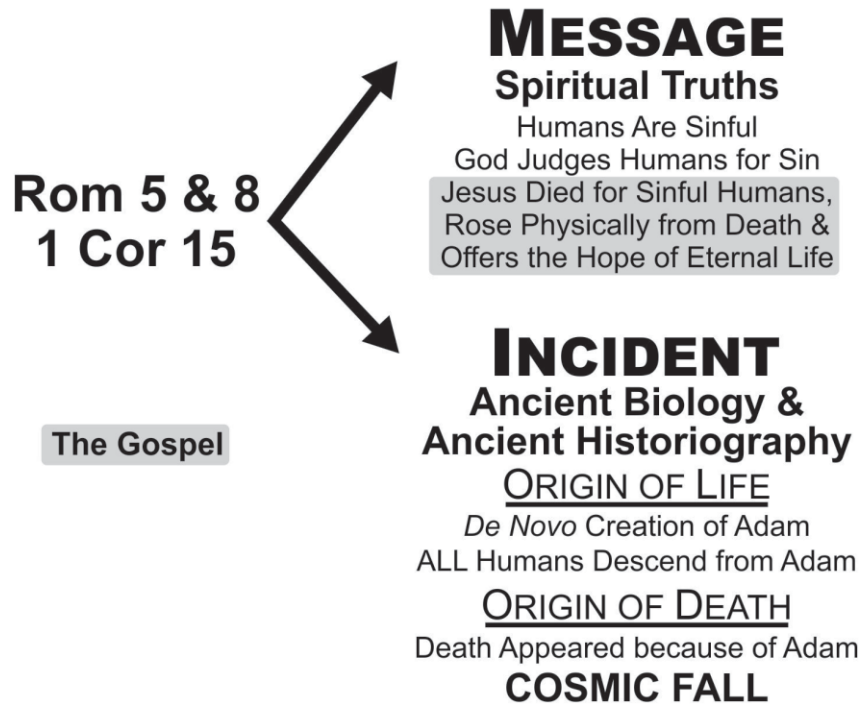
BOOK OF GOD'S WORDS
Spiritual Truths
INERRANT

Intuition ↓↑ **FAITH** ↑↓ *Reason*

BOOK OF GOD'S WORKS
Scientific Facts
Evolutionary Sciences
Cosmology, Geology & Biology

HUMAN ORIGINS

THE APOSTLE PAUL & MESSAGE-INCIDENT PRINCIPLE



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Intuition ↓↑ **FAITH** ↑↓ *Reason*

BOOK OF GOD'S WORKS
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GREEK ALPHABET

α	a alpha	ι	i iota	ρ	r rho
β	b beta	κ	k kappa	σ	s sigma
γ	g gamma	λ	l lambda	τ	t tau
δ	d delta	μ	m mu	υ	u upsilon
ε	e epsilon	ν	n nu	φ	ph phi
ζ	z zeta	ξ	x xi	χ	ch chi
η	ē eta	ο	o omicron	ψ	ps psi
θ	th theta	π	p pi	ω	ō omega

ι η σ ο υ ς
 χ ρ ι σ τ ο ς
 θ ε ο ς
 υ ι ο ς
 ς ω τ η ρ

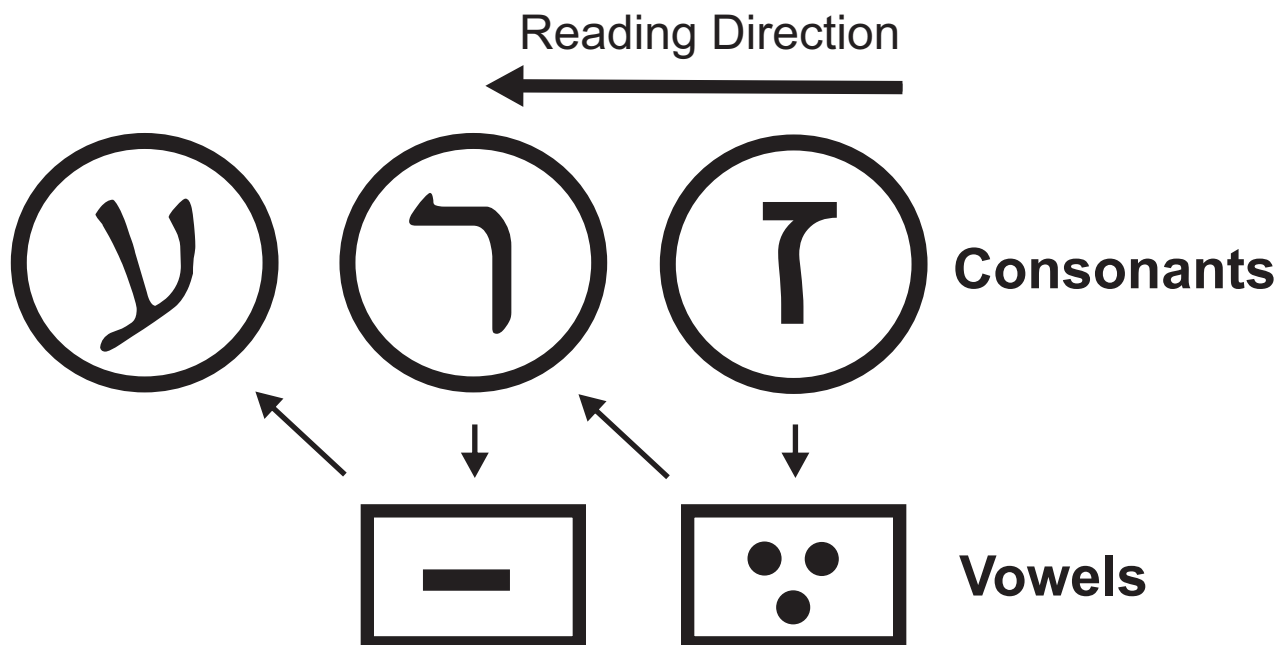
HEBREW CONSONANTS

Gematria											
א	'	aleph	1	ט	ṭ	tet	9	פ	p	peh	80
ב	b	bet	2	י	y	yod	10	צ	ts	sadeh	90
ג	g	gimel	3	כ	k	kap	20	ק	q	qop	100
ד	d	dalet	4	ל	l	lamed	30	ר	r	res	200
ה	h	he	5	מ	m	mem	40	ש	ś	sin	300
ו	w	waw	6	נ	n	nun	50	שׁ	sh	shin	300
ז	z	zayin	7	ס	s	samek	60	ת	t	taw	400
ח	ḥ	het	8	ע	‘	ayin	70				

HEBREW VOWELS

Patah	—	a	מַ	Hireq	.	i	מִ
Qamets	ֿ	ā	מָ	Hireq & Yod	יְ	î	מֵי
Sere	ֿֿ	ē	מֶ		ִ	ō	מֹ
Seghol	ֿֿֿ	e	מֵ	Holem & Waw	וֹ	ô	מִו
Sheva	ֿֿֿֿ	ə	מְ	Shureq	וּ	û	מִוּ

HEBREW WORD STRUCTURE



ע ר ז

zera' noun

1. seed:
 - a. in farming
 - b. in sex (only males)
2. offspring, family

ע ר ז

zāra' verb

1. to sow seed in fields
2. to be made pregnant
(only females)

Agriculture Context:

"The seed [*zera'*] you seed [*zāra'*] in the ground" Is 30:23

Human Reproductive Context:

"A woman shall be seeded [*zāra'*] with seed [*zera'*]" Num 5:28

GEMATRIA

This calls for wisdom: If anyone has insight, let them calculate the number of the beast, for it is man's number. His number is **666**.

Rev 13:18

New International Version

ψηφίζω *psēphizō* to count up

ר	ס	ק	נ	ו	ר	נ
R	A	S	E	Q	N	O
200	60	100	50	6	200	50

This calls for wisdom: let anyone with understanding calculate the number of the beast, for it is the number of a person. Its number is **666**.

Rev 13:18

New Revised Standard Version

Footnote: manuscript variation **616**

ר	ס	ק	ו	ר	נ
R	A	S	E	Q	O
200	60	100	6	200	50

GENESIS 1:1

Greek Old Testament

Septuagint (LXX)



Reading Direction

Εν αρχη εποιησεν θεος

In beginning made God

τον ουρανον και την γην

the heaven and the earth

Hebrew Old Testament

Text Massoretic (MT)



Direction Reading

בְּרֵאשִׁית בָּרָא אֱלֹהִים

God created beginning In/
When

אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ

earth the Direct Object Marker and heavens the Direct Object Marker

CREATION DAY 2

GREEK OLD TESTAMENT (GEN 1:6-8)

⁶ και ειπεν ο θεος γενηθητω στερεωμα εν μεσω του υδατος και
and said the God let there be firmament in middle of the water and
εστω διαχωριζον ανα μεσον υδατος και υδατος και εγενετο
let be separation up middle water and water and it was
ουτως ⁷ και εποιησεν ο θεος το στερεωμα και διεχωρισεν ο
so and made the God the firmament and separated the
θεος ανα μεσον του υδατος ο ην υποκατω του στερεωματος
God up middle the water which was under the firmament
και ανα μεσον του υδατος του επανω του στερεωματος ⁸ και
and up middle the water of which was above the firmament and
εκαλεσεν ο θεος το στερεωμα ουρανον και ειδεν ο θεος οτι
called the God the firmament heaven and saw the God that
καλον και εγενετο εσπερα και εγενετο πρωι ημερα δευτερα
good and there was evening and there was morning day two

PSALM 19:1b ποιησιν χειρων αυτου αναγγελλει το στερεωμα
works hands of His (God's) proclaims the firmament

CREATION DAY 2

HEBREW OLD TESTAMENT (GEN 1:6-8)

וַיֹּאמֶר אֱלֹהִים יְהִי רָקִיעַ בֵּין הַמַּיִם⁶
water the between firmament let there be God said and

וַיְהִי מַבְדִּיל בֵּין מַיִם לַמַּיִם⁷ וַיַּעַשׂ⁷
made and waters to waters between separating let there be and

אֱלֹהִים הָרָקִיעַ וַבְּדִיל בֵּין הַמַּיִם אֲשֶׁר
which waters the between separated and firmament the God

מֵעַל לָרָקִיעַ וּבֵין הַמַּיִם אֲשֶׁר מֵעַל
above from which waters the between and firmament to below from

לָרָקִיעַ וַיְהִי כֵן⁸ וַיִּקְרָא אֱלֹהִים לָרָקִיעַ
firmament to God called and so it was and firmament to

שָׁמַיִם וַיְהִי עֶרֶב וַיְהִי בֹקֶר יוֹם שֵׁנִי
second day morning it was and evening it was and heavens

וּמַעֲשֵׂה יָדָיו מַגִּיד הָרָקִיעַ PSALM 19:1b
firmament the proclaims hands works and

GREEK & HEBREW VOCABULARY

1ST HALF OF THE COURSE

θεος

(*theos*) God

λογος

(*logos*) word

επιστημη

(*epistēmē*) knowledge

μετα

(*meta*) behind, after, beyond

φυσις

(*phusis*) nature

εις

(*eis*) in, into

εκ

(*ek*) out, out of

ηγεομαι

(*ēgeomai*) to guide

φαινομαι

(*phainomai*) to guide

καταχθονιος

(*katachthovios*) underworld

κατα (*kata*) down

χθονιος (*chthovios*)

underworld. chthonic realm
subterranean world

σπερμα (*sperma*)

1. seed:

a. in sex (only males have seed)

b. in farming

2. offspring, family

καταβαλλω (*kataballō*)

to throw down

ΚΑΤΑ (*kata*) down

βαλλω (*ballō*) to throw

σπερμα + καταβαλλω

to ejaculate (only males)

στερεος (*stereos*)

hard, firm

στειρος (*steiros*)

1. barren, infertile (only women are barren)

2. barren fields in farming

זֶרַע

zera' noun

1. seed:

a. in farming

b. in sex (only males)

2. offspring, family

זָרַע

zāra' verb

1. to sow seed in fields

2. to be made pregnant
(only females)

עֲקָרָה

‘āqār adjective

1. barren, infertile

(only women are barren)

2. barren fields

עָקַר

‘āqar Verb

to pluck up, to uproot

GREEK & HEBREW VOCABULARY

2ND HALF OF THE COURSE

στερεωμα (*stereōma*) firmament

στερεος (*stereos*) firmament

γη (*gē*) earth

ουρανος (*ouranos*) heaven

αρχη (*archē*) beginning

ποιεω (*poieō*) to make

ημερα (*ēmera*) 1. day (24 hrs)
2. period of time

δικη (*dikē*) justice

και (*kai*) and

εν (*en*) in

T _ or T _ _ the

אֱלֹהִים *‘Elōhîm*
God

יהוה *Yahweh*
Lord

בָּרָא *bārā’*
to create, cut, split
separate, form

רֵאשִׁית *rēshîṭ*
beginning

יוֹם *yōm*
1. day (24 hrs)
2. period of time

תְּהוֹ *tōhu*
formless

בְּהוֹ *bōhu*
empty

רָקִיעַ *rāqîa*
firmament

רָקַע *rāqa*
to flatten, stamp down

אֶרֶץ *‘eres*
earth

שָׁמַיִם *shāmayim* (only in dual; 400X)
heavens
1. upper heavens: God’s abode
2. lower heavens: a. firmament
b. air space

מַיִם *mayim* (only in dual; 600X)
waters

יָם *-ayim*
dual ending
used for things occurring in
pairs in nature

אָדָם *‘ādām*
man, Adam

אֲדָמָה *‘adāmāh*
earth, dirt

ו *w*
and

ה *h*
the

ב *b*
in, when

Hermeneutical Principles

S1-2

1. LITERALISM

Hermeneutical Commandment #1

Thou shall not believe that the Bible is 100% literal!!!

"God will cover you with **his feathers** & under **his wings** you will find refuge."

Is God a cosmic chicken?!?

Ps 91:4

JESUS: "I say to you that anyone who looks at a woman with lust has already committed adultery with her in his heart. If your right eye causes you to sin, **tear it out and throw it away**; it is better for you to lose one of your members than for your whole body to be thrown into hell."

Are churches filled with blind men?!?

Matt 5:28-29

COMMENTS

- it is impossible to read the Bible literally 100% of the time
- Jesus did NOT speak literally 100% of the time

JESUS: "Though I have been speaking **figuratively**, a time is coming when I will no longer use this **kind of language**, but will tell you **plainly** about my Father" ... Then Jesus' disciples said, "Now you are speaking **clearly** & without **figures of speech**."

John 16:25 & 29

- literal language in the Bible is NOT more important or holier than the non-literal language because Jesus used both

☞ Jesus used parables → the stories are NOT to be read literally

THE QUESTION:

When do we read a biblical passage literally or non-literally?

CONCLUSION

- everyone is forced to make a hermeneutical decision on whether or not a biblical passage is to be read literally.
- are you aware of your hermeneutical decisions?
- can you justify your hermeneutical decisions?
- will your science help you to interpret the Bible?

GENESIS 1-11

Should Gen 1-11 be read literally? Why? Or why not?

S3

S4

S5

S6

S7

S8

S9

S10

S11

S12

S13

2. LITERARY GENRE

DEF: the type of literature

EG poetry, narrative, parable, allegory, history, letters, proverbs, laws, sermons, hymns, prophecies, etc

NB: The Bible is like an ANTHOLOGY

roughly **50 authors** & written over roughly **1500 years**

Lust & Tearing Out Eyeballs Passage

found in the **Sermon on the Mount** (Matt 5:21-43)

what type of literature is this?

this literary unit has similar passages:

JESUS: "If your right hand causes you to sin, cut it off and throw it away." Matt 5:30

Are churches filled with handless Christians?!?

JESUS: "Do not resist an evil person. If someone strikes you on the right cheek turn to him the other." Matt 5:38

Is this verse against protecting ourselves?!?

Features of this type of literature:

Hyperbole

uses exaggeration

☞ do not interpret literally

Dialectical Greek *dia*: between; *legō*: to talk continually talks to us & challenges us

☞ God's Spirit works through it

CONCLUSION

- literary genre DICTATES interpretation
- identification of the literary genre is one of the 1st & most important decisions in hermeneutics
- the challenge for us today is to identify ANCIENT literary genres some will seem "unusual" because we do not use them today

GENESIS 1-11

What is the literary genre is Gen 1-11?

EG Garden of Eden Account (Gen 3)

fast-talking snake

mystical trees: one imparts eternal life

one imparts knowledge of good & evil

History? Allegory? Fairy Tale?

S1

S2

S3

S4

S5

S6

S7

S8

3. ACCOMMODATION

DEF: God descending to the level of humans in order to reveal himself revealing Spiritual Truths so that humans can understand them

Smallest Seeds

JESUS: "With what can we compare the *Kingdom of God*, or what **parable** will we use for it? It is like a mustard seed, which, when sown upon the ground, **is the smallest of all the seeds on the earth**; yet when it is sown it grows up and becomes the greatest of all shrubs, and puts forth large branches, so that the birds of the air can make nests in its shade."
Mk 4:30-32 (NRSV)

- is the mustard seed "the smallest of all the seeds on the earth"?
NO. Orchids are much smaller.

DID JESUS MAKE A MISTAKE?

DID JESUS LIE?

OR

Was Jesus accommodating to his audience?

Was Jesus using the botany-of-the-day?

Ancient Botany?

Growing Seeds

JESUS: "This is what the *Kingdom of God* is like. A man scatters seed on the ground. Night and day, whether he sleeps or gets up, the seed sprouts, though he does not know how. **All by itself the soil** produces grain—first the stalk, then the head, then the full kernel in the head. As soon as the grain is ripe, he puts the sickle to it, because the harvest has come."
Mk 4:26-29

- does the soil produce grain "all by itself"?
NO. The DNA in the seed also contributes to plant growth

DID JESUS LIE?

OR

Is this accommodation?

Dying Seeds

JESUS: "The hour has come for the Son of Man to be glorified. I tell you the truth, unless a **kernel of wheat** falls to the ground and **dies**, it remains only a single seed. But if it **dies**, it produces many seeds."
John 12:23-24

- do seeds die before they germinate?
NO. Seeds are alive & function metabolically at a low rate

DID JESUS LIE?

OR

Was he accommodating & using the ancient botany of his listeners?

CONCERN

some Christians complain accommodation "waters down" Scripture

Arguments for Accommodation

- (1) Example of the **Incarnation** Latin *carnis*: flesh

DEF: God descended and became a human in the person of Jesus

☛ **GREATEST ACT OF ACCOMMODATION**

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

- (2) Jesus's Use of Parables

DEF: earthly story with heavenly meaning

Jesus used common ideas-of-the-day to teach spiritual truths

- (3) Personal Prayer

when God talks to you does he not accommodate and use:

YOUR language & YOUR categories?

- (4) Pedagogical (Teaching)

everyone does it when talking to a 4 yr old

Message-Incident Principle



- ☛ seeds understood from an ancient phenomenological perspective
NO microscopes!

CONCLUSION

Accommodation is the **Most Important Principle** in Science & Religion
reading beyond accommodation is COUNTERINTUITIVE

GENESIS 1-11

Did God accommodate when he inspired the ancient writers of Gen 1-11 and allow them to use their ancient understanding of origins?

4. TEXTUAL CRITICISM

DEF: use of ancient manuscripts of the Bible & commentaries on the Bible to establish the original biblical text
New Testament → over 5000 manuscripts

NOTE: though there are textual debates, the modern translations of the Bible are **VERY GOOD**.
☛ **ALL** preserve the Message of Faith

JESUS: "What shall we say the Kingdom of God is like, or what parable shall we use to describe it? It is like a mustard seed, which is **the smallest seed YOU PLANT in the ground.**" Mk 4:31 (NIV 1980)
New International Version → popular evangelical Bible

Interlinear Greek-English New Testament (NIV 1976)

micro	pan	sperma
μικροτερον	ον	παντων των σπερματων
smaller	being	all the seeds

g ē
επι της γης
on the earth

A. Marshall, *NIV Interlinear Greek-English New Testament* (Zondervan, 1976) 153

BUT
Where is the personal pronoun **YOU**?
σου singular
υμεις plural
Where is the verb **PLANT**?
φυτευω

Greek New Testament Manuscript Variants

ως . . . σιναπεως
as mustard seed

K. Aland, et al, *Greek New Testament*, 3rd ed (W. Germany: United Bible Societies, 1983), 136
☛ NO variants with the pronoun or verb

QUESTIONS:
Are the translators of the NIV Bible incompetent? **NO!**
OR
Are NIV translators **ACCOMMODATING** for our generation? **YES**

GENESIS 1-11

Textual Debate over Gen 1:1. Two possible translations:
"In the beginning God created the heavens & the earth. Now the earth was ..."
OR
"When God began to create the heavens and the earth, the earth was ..."

5. DYNAMIC EQUIVALENT TRANSLATION

DEF: translations that use a modern INCIDENT & keep the MESSAGE
☛ **ACCOMMODATION** for today's generation

JESUS: "How can we picture God's kingdom? What kind of story can we use?
It's like a **pine nut**. When it lands on the ground it is quite small as seeds go, yet once it is planted it grows into a **huge pine tree** with thick branches. Eagles nest in it."
Mk 4:31
Eugene Peterson, *The Message New Testament* (NavPress, 1993) 82

- words "pine nut" & "pine tree" are NOT in original Greek text
- most Canadians & Americans have never seen a mustard seed BUT most have seen a pine nut & pine trees

Title page of *The Message New Testament*:
"The **Message** is a contemporary rendering of the Bible from the original languages, crafted to present its tone, rhythm, events, and ideas in **everyday language.**"
Ibid., 1

GENESIS 1-11

Can the MESSAGE of Gen 1 be **translated in a dynamic equivalent** way with an INCIDENT employing the modern science of origins?

Genesis 1:1-5

- 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.
- ⁴ God saw the light was good, and he separated the light from darkness.
- ⁵ God called the light "day" and the darkness he called "night."
And there was evening, and there was morning—the First Day.

Genesis 1:1-5 & Modern Science

- ¹ Over billions of years, **God created** the heavens, the earth, and the living organisms through evolution.
- ² Now the world did not exist before the creation of space, time, and matter. And the Spirit of God was ready to hover over the evolutionary process.
- ³ And God said, "Let there be an explosion." And there was an explosion.
- ⁴ God saw **it was good**. He separated the explosion from nothingness.
- ⁵ God called the explosion, "The Big Bang."
- This was the first cosmological epoch.

Message-Incident Principle UPDATED

MESSAGES OF FAITH:

God is the Creator & the creation is good

INCIDENTAL MODERN SCIENCE:

Evolution of the heavens, the earth & the living organisms

☛ **THAT** God created, not **HOW** God created

6. SUFFICIENCY OF THE BIBLE & PROFICIENCY OF ITS READERS

DEF: despite the challenges of hermeneutics, the Message of Faith is revealed to those seeking to meet God.

- Sufficiency → the Bible is sufficient in revealing God
- Proficiency → readers are proficient in grasping the main Messages

NOTE: there is a spiritual aspect to hermeneutics: "those seeking to meet God" not just intellectual

- ☛ it is a mystical & spiritual encounter hearing the "**Voice of God**" in Scripture

Lesson from Church History

The MESSAGE always got through to the Church
eg, Divinity of Jesus

The INCIDENT has led to a wide variety of views
eg, origin of the world in Gen 1

GENESIS 1-11

Is Gen 1-11 sufficient & are readers proficient? **YES! & YES!**
Christians through history have always grasped 6 main MESSAGES:

1. God created the universe & life
2. The universe & life are very good
3. God created humans in the Image of God
4. Humans are sinful
5. God judges humans for their sins
6. God chose Israel to bless the entire world

7. IMPLICIT SCIENTIFIC CONCEPTS

DEF: the science-of-the-day ASSUMED by **BOTH**:

- (1) Biblical Writers. EG, flat earth
- (2) Modern Readers. EG, spherical earth

Human Reproductive Problems (New Testament)

"But they had no children, because Elizabeth was **barren**." Lk 1:7

"For the days are surely coming when they will say, 'Blessed are the **barren**, and the wombs that never bore.'" Lk 23:29

"By faith Abraham, even though he was past age—and Sarah herself was **barren**—was enabled to become a father because he considered him [God] faithful who had made the promise." Heb 11:11

Greek

ancient science deeply embedded in ancient words

στειρος (*steiros*)

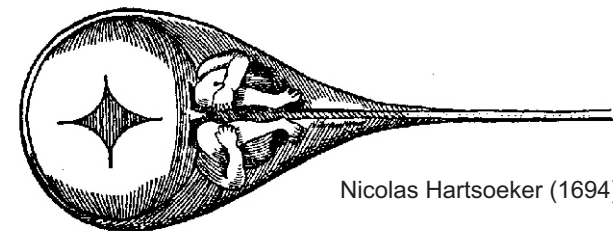
1. barren fields
2. barren women (women only → never men)
Feminine: στειρα (*steira*)

στερεος (*stereos*)

hard, firm

Ancient Science of Infertility & One "Seed" Theory (Preformatism)

- science of reproduction ASSUMED by Biblical writers
an entire human being is tightly packed within the "seed" of the male
the female is like a "field" in which male seed grows
categories come from agriculture
EG children called the "**fruit** of the womb" Ps 127:3, Lk 1:42
- a barren woman is like **HARD** ground → seed does not germinate
- ☛ women were ASSUMED to be the cause of infertility
- a scientific theory as late as 1700s even after 1st microscopes:



Nicolas Hartsoecker (1694)

Modern Science of Infertility

science of reproduction ASSUMED by modern readers

infertility: 35% male, 35% female, 20% both, 10% unknown

NB: DO NOT EISEGETICALLY force our view of infertility into the Bible

GENESIS 1-11

Does Gen 1 feature Implicit Scientific Concepts? **YES**

De Novo Creation Latin *de*: from *novus*: new

DEF: creation that is 'brand new' from the start

found in most creation accounts of ancient people

Features:

QUICK: within days

NOT over 100s of millions of years

COMPLETE: into fully mature forms

NOT through an evolutionary process

☛ KEY concept to understand anti-evolutionism

S11

S12

S13

8. SCOPE OF COGNITIVE COMPETENCE

DEF: intellectual tools thru which everyone sees & understands the world
a feature of **BOTH**: (1) Biblical Writers &

(2) Modern Readers of the Bible

Telescopes & Microscopes Hermeneutical Principle

Scope

visual metaphor → "field" of vision

implies limits & boundaries

THINK: telescopes & microscopes

S1

S2

S3

Cognitive Latin *cognitō*: to learn & acquire knowledge

cognition: mental processes in perceiving, reasoning & knowing

cognition impacted by:

intelligence & knowledge

culture, education & point in history

☛ **scientific instruments**

S4

Competence

being capable or having ability to perform correctly

Biblical Writers → **NARROW SCC**

limited field of vision → naked eye

no telescopes & no microscopes

Modern Readers → **WIDE SCC**

we see deeper into space & inside cells

we enjoy telescopes & microscopes

S5

Human Reproductive Problems (Old Testament)

"Now Sarai was **barren**; she had no child." Gen 11:30

"Isaac prayed to God for Rebekah, because she was **barren**." Gen 25:21

"Rachel was **barren**." Gen 29:31

S6

S7

S8

Hebrew

S9

עָקָר

'āqār adjective

1. barren women (women only → never men)

2. barren fields

עָקַר

'āqar verb

to uproot, to pluck up,

There is a time for everything: a time to be

born and a time to die, a time to plant and

a time to **uproot**.

Eccl 3:1-2

Ancient Science of Infertility & One "Seed" Theory (Preformatism)

S10

- only women were believed to be the cause of infertility

Why?

No microscopes

☛ **NARROW SCC**

Not competent to understand infertility

- perfectly logical conclusion for agricultural people

S11

Experience of Sex

men ejaculate & women do not

perception → sex like farming → men sow seed

women like fields → receive seed

Experience of Agricultural Fields

fields can be a problem

JESUS'S PARABLE OF THE SOWER

S12

A farmer went out to sow his **seed**. Some fell along the [1] **path**

and the birds came and ate it up. Some fell on [2] **rocky places**

and they withered because they had no root. Some fell among

the [3] **thorns**, which choked the plants. Some seed fell on

[4] **good soil**, where it produced a crop. Matt 13:3-9

perception → fields determine whether or not seeds work S13

EG Mk 4:28

"All by itself the soil produces grain"

Experience of Sowing Seed

S14

it was assumed that seeds were 100% efficient

worst germination rate of wheat & barley: 85%

perception → seeds ALWAYS work

Experience of Miscarriages

S15

they would have seen small partially developed fetuses

perception → a "seedling" **UPROOTED** from the womb

CONCLUSION

- ancient science of human reproductive problems:
caused by the “hard field” or “uprooted field” of a woman
not the “seed” of a man
- perfectly logical given the NARROW SCC of ancient people
NOT a slur against women

GENESIS 1-11

Does Gen 1-11 reflect a NARROW Scope of Cognitive Competence? **YES**

AGE OF THE UNIVERSE

- Short** → two genealogies of 10 people (Gen 5 & 11) from the creation of the world (Gen 1) to the appearance of Abraham (Gen 11)
☛ reflects an earlier oral tradition limited by human memory

LIVING ORGANISMS

Immutable (unchanging)

ancient people never saw a creature change into a different creature
Gen 1 → creation/reproduction is “according to their kinds” 10X

De Novo Creation & Immutability of Living Organisms

ancient people saw: a goat births → a goat which births → a goat ...
CONCLUDED that goats are immutable & never change

RETROJECTION Latin *retro*: backward; *jacere* to cast, throw

DEF: to cast back in time

EG crime scene investigation (CSI)

police take evidence **present** at the scene, and
cast it back in time to reconstruct the **past**

they RETROJECTED the ‘goat births goat ...’ data set back in time:

1st goat/s ever created ← goat ← goat ← goat ← a goat today

☛ *De Novo* (Quick & Complete) creation of a 1st goat/s

Excursus: The “Hermeneutical Brakes”

Were the biblical writers COMPETENT to know:

structure of the universe? **X**

size of mustard seeds compared to all other seeds? **X**

cause of human reproductive problems? **X**

OR were the biblical writers COMPETENT to know:

Jesus had changed water to wine (John 2:9)? **✓**

Jesus had healed an epileptic boy (Luke 9:42)? **✓**

Jesus had risen to life after he had died on the Cross (Mark 16:6)? **✓**

QUESTION:

Which group of questions are FOUNDATIONAL to Christianity?

9. HISTORICAL CRITICISM

DEF: understanding the Bible within its historical setting

use of ancient Near Eastern (ANE) literature to understand the context

Aeschylus, *Eumenides* (v. 658-661) 5th Century BC/E

“The mother of what is called her child is no parent of it, but the nurse only of the young life that is **sown** in her. The parent is the male, and she but a stranger, a friend, who, if fate spares his **plant**, preserves it till it puts forth.”

- 1-seed theory (preformationism)

- pagan theology → Fate

- agricultural language also found in the Bible with human reproduction:

“Blessed are you Mary & blessed is the **fruit of your womb** [Jesus]”
Lk 1:42

G.E. Ladd’s Aphorism

“*The Bible is the Word of God given in the words of men in history.*”

Message-Incident Principle

Message = “Word of God”

Incident = “words of men in history”

CONCLUSION

To fully grasp the **historically conditioned incidental** elements of the Bible, we need to read the literature of the ANE.

GENESIS 1-11

- is Gen 1-11 historically conditioned? **YES**

- are the accounts of origins in Gen 1-11 the *Word of God* given in the *words of men* in history? **YES**

- ☛ Gen 1-11 features major motifs found in ANE accounts of origins

Motif

DEF: recurring concept, symbol, character, phrase, theme, etc

MAJOR MOTIFS in ANE ACCOUNTS of ORIGINS

1. De Novo Creation [Gen 1 & 2]

quick and complete origin of the universe & life

2. Lost Idyllic Age [Gen 3]

disruption of an original creation & the origin of bad things

3. Tribal Formation [Gen 4, 5, 10 & 11]

origin of a community from a single founding male individual

4. Great Flood [Gen 6-9]

destruction of life & survival of a few humans & animals in a boat

ANCIENT NEAR EASTERN MOTIFS OF ORIGINS

ARE THE SCIENTIFIC & HISTORICAL PARADIGMS-OF-THE-DAY

QUESTION: did the Hebrews **Re-Cycle** & **Re-Interpret** ANE origins motifs?

10. AUTHORIAL INTENTIONALITY

DEF: the intended meaning of an author in a written work

The Bible has DUAL intentionality:

1. Divine Intention (Holy Spirit)
2. Human Intention

Structure of the Universe

“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. Phil 2:10-11

1. Divine Intention

Primary: Message of Faith

Jesus is Lord over the entire universe

Secondary:

Holy Spirit allowed the use of ancient science (3-tier universe)

☛ God **accommodated** to the level of ancient peoples

2. Human Intention

Primary: Message of Faith

Jesus is Lord over the entire universe

Secondary:

Apostle Paul views the lordship of Jesus within the categories of the **science-of-the-day** (3-tier universe)

QUESTION:

What other ancient science might be in Paul’s writings?

Ancient Biology?

GENESIS 1-11

Does Gen 1-11 feature DUAL authorial intentionality? **YES**

1. Divine Intention

Primary: Messages of Faith

1. God created the universe & life
2. The universe & life are very good
3. God created humans in the Image of God
4. Humans are sinful
5. God judges humans for their sins
6. God chose Israel to bless the entire world

S1

S2

S3 H6

S4

S5

S6

S7

S8

Secondary:

Holy Spirit allowed the use of ancient **Origins Motifs-of-the-Day**

ancient scientific & historical paradigms of origins

1. *De Novo* Creation
2. Lost Idyllic Age
3. Tribal Formation
4. Great Flood

☛ God **accommodated** to the level of ancient peoples

2. Human Intention

Primary: Messages of Faith

same 6 spiritual truths above

Secondary

human authors of Gen 1-11 viewed the origin of the universe & life through the 4 origins motifs-of-their-day

S9

S10

Message-Incident Principle

S11



ANCIENT NEAR EASTERN ORIGINS MOTIFS
ARE THE

SCIENTIFIC & HISTORICAL PARADIGMS-OF-THE-DAY

S12

QUESTION:

S13

The Hebrews appear LATE in the Ancient Near East (1200 BC/E).

Did the Hebrews **Re-Cycle** the Origins Motifs-of-the-Day &
Re-Interpret them under the inspiration of the Holy Spirit

by replacing the pagan theology with
inerrant Spiritual Truths?

11. THE BACONIAN HERMENEUTIC

DEF: the use of science in biblical interpretation

S1
S2

- everyone already does it whether or not they are aware of it
EG no one reads passages referring to the sun "moving" literally
WHY? we all accept modern astronomy
- operates at an incidental level
does NOT have an impact on the Message of Faith
- science assists in SEPARATING the Message from the incident
helps avoid CONFLATION

"Our Saviour [Jesus] says, 'You err, not knowing the scriptures, nor the power of God' [Matt 22:29], laying before us **two books or volumes** to study, if we will be secured from error; [1] first the **Scriptures**, revealing the will of God, and [2] then the **creatures** expressing his power; whereof **the latter is a KEY unto the former**: not only opening our understanding to conceive the **true sense of the scriptures**, by the general notions of reason and rules of speech; but chiefly opening our belief, in drawing us into a due meditation of the omnipotency of God, which is chiefly **signed and engraven** upon his works."

S3

Sir Francis Bacon
Advancement of Learning (1605) 1.6.16

COMMENTS

S5

- the **Creatures** (creation) HELP find the "true sense" of the **Scriptures**
they do not cancel the Scriptures
they do not replace the Scriptures

- Two Types of Divine Revelation → Two Divine Books

S6 H2

Special Revelation

Scriptures reveal "the will of God"

General Revelation → Natural Revelation & Intelligent Design

Creatures reveal "the omnipotency of God signed and engraven on his works"

QUESTION

S7

If science is used in biblical interpretation, then who best understands the structure, operation, and origin of nature?
scientists

OR

lawyers, historians, philosophers, engineers, MDs, DDSs(!) etc
☛ many of the leading scientific concordists & anti-evolutionists are not educated in the evolutionary sciences

GENESIS 1-11

S8

- will **evolutionary biology**, like modern botany and reproductive biology, help Christians in understanding the biblical accounts of origins in Gen 1 & 2?

- are Jesus' words in Matt 22:29 applicable today to:

S9

Scientific Concordists

"You are in error because you do not know the Scriptures."

- ☛ the Bible features ancient scientific & historical paradigms
the Holy Spirit accommodated to the level of ancient people

Anti-Evolutionists

S10

"You are in error because you do not know the power of God."

- ☛ God has the unfathomable power to create the universe & life through evolution and allow them to self-assemble

Spice for the Mid-Term Exam: Women in the Bible

Ephesians 5

"Wives, submit to your husbands as to the Lord." Eph 5:22

Proof-Text "Hermeneutics"

DEF: **tearing** ONE verse out of its context & **manipulating** it to mean something never intended by the author.

EG like sound-bite political reporting on TV

READ THE ENTIRE CHAPTER!!!

"Husbands, love your wives, just as Christ loved the Church and gave himself up for her. Eph 5:25

"In this same way husbands ought to love their wives as their own bodies. Eph 5:28

"Each one of you must love his wife as he loves himself." Eph 5:33

Proverbs 31:10-31 (abridged)

A wife of noble character who can find?

She is worth far more than rubies . . .

She considers a field and buys it; out of her earnings she plants a vineyard.

She sets about her work vigorously; and her arms are strong for her tasks.

She sees that her trading is profitable. . . .

She opens her arms to the poor and extends her hands to the needy. . . .

She is clothed with strength and dignity, she can laugh at the days to come.

She speaks with wisdom and faithful instruction is on her tongue. . . .

Her children arise and call her blessed; her husband also, and he praises:

Many women do noble things, but you surpass them all.

Charm is deceptive, and beauty fleeting;

but a woman who fears the Lord is to be praised

Give her the reward she has earned,

and let her works bring her praise at the city gate.

12. ST. AUGUSTINE'S PASTORAL ADVICE ON SCIENCE & RELIGION

In science-religion debates, Augustine reminds us: Never lose perspective on what is most important to Christianity—our faith, NOT science

“It is also **frequently** asked what our belief must be about the form and shape of heaven **according to Sacred Scripture**. Many scholars engage in **lengthy** discussions on these matters, but the sacred writers with their deeper wisdom have omitted them. Such subjects are of **no profit** for those who seek beatitude, and, what is worse, they **take up precious time** that ought to be given to what is **spiritually beneficial**. What concern is it of mine whether:

[1] heaven is like a sphere and the earth is enclosed by it and suspended in the middle of the universe, or whether

[2] heaven like a disk above the earth covers it over on one side? ...

The Spirit of God, who spoke through them [sacred writers], did not wish to teach men these facts that would be of **no avail for their salvation**.”

St. Augustine, “Shape of the **Material** Heaven”
Literal Meaning of Genesis (415), IX:20

COMMENTS

- Christianity concerns spirituality, NOT science
“beatitude” “spiritually beneficial” “salvation”
- scientific concordism was entrenched in the early Church
“form and shape of heaven **according** to Sacred Scripture”
“many scholars” “frequently asked” “lengthy discussions”

- Science-Scripture debate over astronomy:

[1] Greek Geocentric Universe

Heaven → Sphere

science-of-the-day in 5th century

[2] Ancient 3-Tier Universe

Heaven → Disk

1st conception of the structure of the universe

- no one today holds either view of the structure of the universe
☞ debates over concordism in Augustine's day were a WASTE OF TIME

GENESIS 1-11

- do “lengthy” & “frequent” discussions today on scientific concordism in Gen 1-11 “take up precious time” & they are of “no profit” spiritually?

Are debates over scientific concordism in Gen 1-11 a WASTE OF TIME?

13. ANCIENT PHENOMENOLOGICAL PERSPECTIVE OF NATURE: THE 3-TIER UNIVERSE

DEF: nature as it **appears** to the naked eye & natural senses
φαινόμενον (*phainōmenon*): appearance

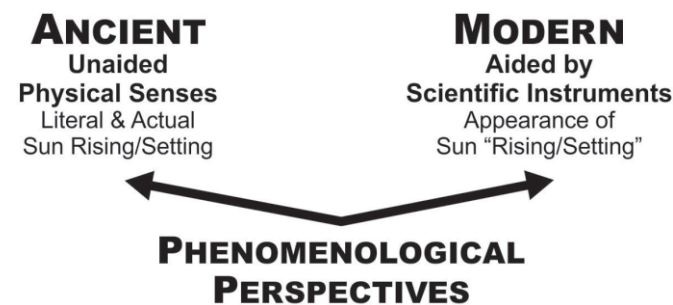
CATEGORIES OF PHENOMENOLOGICAL PERSPECTIVE

Ancient Phenomenological Perspective

- what the ancients saw, they believed was LITERAL & ACTUAL:
sun literally & actually moves across the sky daily
earth literally & actually does not move
- lasts as late as the 1600s
Proof → Galileo Affair

Modern Phenomenological Perspective

- what we see, we know to be only an APPEARANCE:
so-called “movement” of the sun across the sky is a visual effect
due to rotation of the earth
so-called “immovability” of earth is a sensory effect
due to gravity



GENESIS 1-11

- does Gen 1-11 have an Ancient Phenomenological Perspective of the origin of the universe and life, including human life?

13A. THE EARTH & ANCIENT GEOGRAPHY

1. Earth is Immovable

this was the issue in the Galileo Affair

“The world is firmly established; **it cannot move**.” 1 Chr 16:30;
Ps 93:1, 96:10

2. Earth set on Foundations

stated 20 X

“God set the earth on its **foundations**; it can never be moved.”
like legs of a table Ps 104:5

☞ implies a flat earth

3. Earth Surrounded by Circumferential Sea

S4

LOGICAL notion → emerged because of two phenomena:

- visual impact of horizon
- travellers in Ancient Near East eventually came to a body of water

Geography of the Ancient Near East

S5

the “end” of the earth was at a shoreline:

- W: Mediterranean Sea
- N: Black & Caspian Seas
- E: Persian Gulf
- S: Arabian & Red Seas



Creation of Circumferential Sea

S6

Proverbs 8:22-31 Creation Account

“God inscribed a **circle** on the surface of the deep.” v. 27
outer boundary of the circumferential sea at the horizon

Job 26:7-14 Creation Account

“God inscribed a **circle** on the surface of the waters.” v. 10

Historical Criticism

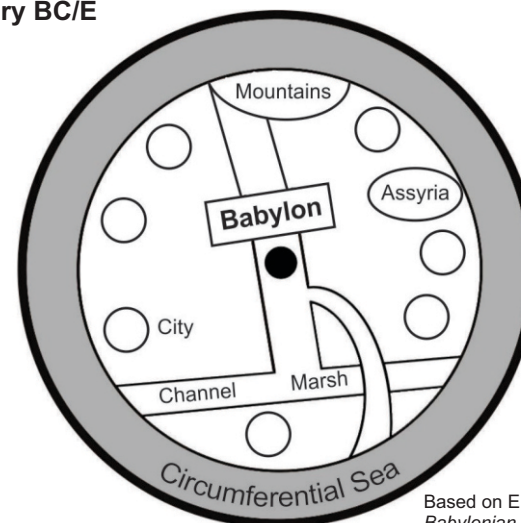
S7

DEF: the use of ANE literature to understand the Bible within its historical context

EG circumferential sea is the geography-of-the-day 2500 yrs ago

Babylonian World Map

6th Century BC/E

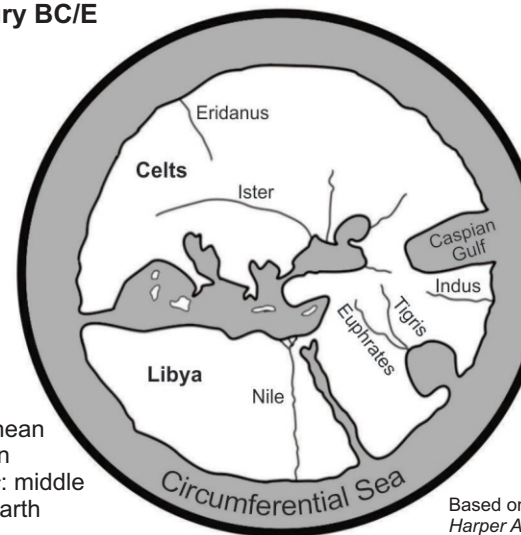


Based on E Sollberger, *The Babylonian Legend of the Flood* (London: Brit. Museum, 1961), 45

Greek World Map

6th Century BC/E

S8



Mediterranean
from Latin
medius: middle
terra: earth

Based on JB Pritchard, ed.
Harper Atlas of the Bible
(NY: Harper & Row, 1978), 93

4. Earth is Circular

S9

- **EXPLICIT** in Scripture:

“God sits enthroned above the **circle of the earth**.” Isa 40: 22

Classic Proof-Text

Christians often claim that this verse refers to the spherical outline of the earth from the perspective of outer space
it is used as proof that the Bible has modern science

- **BUT READ THE ENTIRE VERSE!!!**

S10 H6

“God sits enthroned above the circle of the earth, *and its people are like grasshoppers. He stretches out the heavens like a canopy, and spreads them out like a tent to live in.*” Isa 40:22
☛ a tent with a domed canopy & flat floor → 3-tier universe

- **IMPLICIT** in Scripture:

S11

King of Babylon: “There was a tree at the **centre of the earth**, and its height was great. The tree grew great and strong, its top reached to heaven & it was visible to the ends of the **whole earth**.” Dan 4:10-11

only makes sense in a 3-Tier Universe:

S12

- with a flat earth could one see the tree from “the ends of the whole earth”
ie, the shoreline of the circumferential sea
☛ this is impossible with a spherical earth

- Babylon was called the “centre” or “belly button of earth” obviously, the tree & Babylon are not at the centre of a spherical earth which is 10,000 F!!!

S13

5. Earth has Ends

S14

stated 50 X in Scripture → the expression “the ends of the earth”

God: “But you, **Israel** ... descendant of **Abraham** my friend, you whom I have taken from the **ends of the earth**, and called from its **remotest parts [Ur]**.” Is 41:8-9

Abraham came from Ur (S. Mesopotamia) Gen 11:31
Ur is the “remotest parts” from Israel for ANE people

S15

JESUS: “The **Queen of the South [Sheba]** will rise at the judgment with this generation and condemn it; for she came from the **ends of the earth** to listen to Solomon’s wisdom.” Matt 12:42

S16

Sheba is in the SW corner of the Arabian Peninsula

S17

6. Earth has an Underworld

S18

OLD TESTAMENT: called *she’ōl* 65 X

translated the “grave” and “place of the dead”

God: “Though they **dig down** to the depths of **she’ōl**, from there my hand will take them. Though they climb up to the heavens, from there I will bring them down.” Amos 9:2

NEW TESTAMENT: called *hadēs* 20 X

S19

JESUS: “And you Capernaum, will you be lifted up to heaven? No, you will go **down** to **hadēs**.” Lk 10:15

- also called *katachthonios*

S20

“At the name of Jesus every knee should bow, [1] in heaven and [2] on earth and [3] in the **katachthonios**.” Phil 2:10

καταχθονιος = underworld, subterranean world

κατα = down χθονιος = chthonic realm

εν τω ονοματι Ιησου παν γονυ καμψη

S21

in the name of Jesus all knee should bend

επουρανιων και επιγειων και καταχθονιων

beings of heaven and beings of earth and beings of underworld

- also referred to as “under the earth”

S22

“No one [1] in heaven, or [2] on the earth, or [3] *hupokatō gē* was found worthy to open the book or to look into it.” Rev 5:3

ὑποκατω *hupo* = under *katō* = down

γη *gē* = earth

7. Earth is Flat

S23

- **NO** passage in Scripture directly states: “The earth is flat.”

notion of flat earth → **Implicit Scientific Concept** of ancient people

- Flat earth clearly **IMPLIED** in Scripture:

S24

“The devil took Jesus to a **very high mountain** and showed him **ALL the kingdoms of the world**.” Matt 4:8

could one see the Chinese or Aztecs from a mountain in the Middle East? NO

☛ only makes sense if the world is flat

Earth Dearth Argument

S25-26

IF Scientific Concordism were true,
 IF God intended to reveal scientific facts ahead of time,
 THEN it is reasonable to expect God to reveal the shape of the earth
 EG, comparing the earth to an orange, ball, etc.

BUT

Greek

S27 H66

γη

gē earth, land
 250 X in New Testament

NEVER referred to as a sphere or ball

Hebrew

S28 H66

אֶרֶץ

'eres earth, land
 2500 X in Old Testament

NEVER referred to as a sphere or ball

13B. THE HEAVENS & ANCIENT ASTRONOMY (PART I)

S1

1. Sun Moves across the Sky Daily

S2

this was the issue in the Galileo Affair

"The sun **rises** & the sun sets, and **hurries** back to where it **rises**."

Eccl 1:5

"The sun **rises** at one end of the heavens and makes its **circuit** to the other."

Ps 19:6

"The sun **stopped** in the middle of the sky & delayed **going down** about a full day."

Jos 10:13

NOTE: poetic language argument & phenomenological perspective argument were not used until after the 1600s

2. The Firmament

S5

DEF: solid dome/sphere of heaven above the earth

S6

accepted in astronomy in the 1600s → Galileo believed it!

2nd Day of Creation

S7

"God said, "Let there be a **firmament** between the waters to separate the water from the water." So God made a **firmament** and separated the water under the **firmament** from the water above the **firmament**. And it was so. God called the **firmament** 'heavens.' And there was evening, and there was morning—The Second Day."

Gen 1:6-8

☞ word "firmament" appears 5X

Psalms 19

S8

"The heavens declare the glory of God and the **firmament** proclaims the work of his hands."

Ps 19:1

Many Evangelical Translations of the Bible

S9

use word '**expanse**' or '**skies**' instead of '**firmament**'

WHY?

most evangelicals are **Scientific Concordists**

Ancient Languages

ancient science is deeply embedded in some ancient words

Greek

S10

στερεωμα

stereōma

firmament, solid dome/sphere of heaven

στερεος

stereos

hard, firm

Hebrew

S11

רָקִיעַ

rāqīa'

firmament, solid dome/sphere of heaven

רָקַע

rāqa'

to flatten, hammer, stamp down

• context of pounding metals:

S12

"They hammered out [*rāqa*] thin sheets of gold." Ex 39:3

• context of creating the heavens:

"Can you join God in spreading out [*rāqa*] the skies, **hard** as a mirror of **cast bronze**?"

Job 37:18

רִיקְוָא

riqqua'

broad metal plate

S13

"Hammer [*rāqa*] the censers into sheets [*riqqua*] to overlay the altar."

Num 16:38

Latin

S14

Vulgate Bible (5th century) → the church's Bible for 1000 yrs

firmamentum

firmament, solid sphere of heaven

firmus

hard, firm

English

King James Bible (17th century) → Protestant Bible for 400 yrs

firmament

solid sphere of heaven

Historical Criticism

the firmament was the astronomy-of-the-day 3000 yrs ago

S15

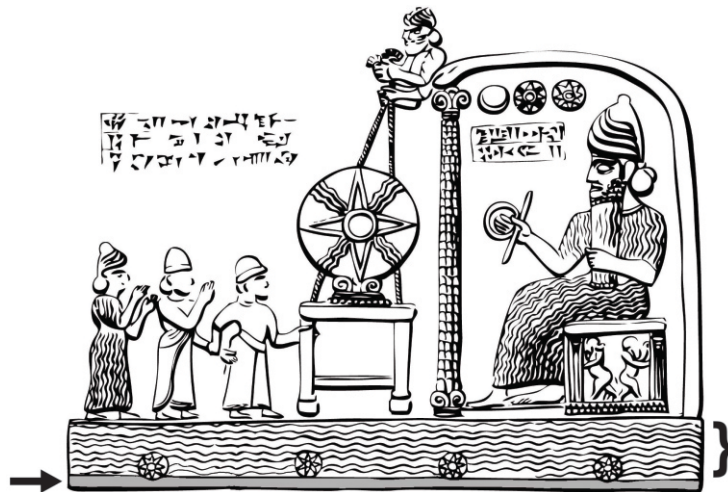
Egyptian Universe 1570-1085 BC/E



The firmament (shaded) and stars are the sky goddess Nut. The sun god Re (falcon head) travels in a boat across the heavenly sea and is received by the afterlife god Osiris at the entrance of the underworld (lower right corner). The sun passes through the underworld to rise again in the east. Earth god Geb is reclined; air god Shu is above Geb.

Mesopotamian Heavens 885-850 BC/E

S16



The firmament (shaded; arrow) supports the heavenly sea (bracket) and stars. The sun god Shamash is seated.

Reproduced from O. Keel, *The Symbolism of the Biblical World*, T.J. Hallett, trans. (Winona Lake, IN: Eisenbrauns, 1997) 36, 174. Copied with permission.

CONCLUSION: The Firmament

S17

ancient words → a solid structure

traditional translations → a solid structure

☛ **NOT** outer space

Greek & Hebrew S18-21

13C. THE HEAVENS & ANCIENT ASTRONOMY (PART II) S1

3. The Heavenly Sea: The “Waters Above” S2

a logical notion since the sky is blue & rain falls from above

2nd Day of Creation S3

“God said, “Let there be a firmament between the waters to separate the water from the water.” So God made a firmament and separated the **water under** the firmament from the **water above** it. And it was so ... The Second Day. Gen 1:6-8

leads to the expressions “waters above” & “waters below”
word “water/s” appears 5X

“Praise him [God], sun & moon, praise him, all you shining stars. Praise him, you highest heavens and you **waters above the skies**.” Ps 148:3-4 S4

“God stretches out the heavens like a tent and lays the beams of his upper chambers **on their waters**.” Ps 104:2-3 S5-6 & H6

Greek S7

ὕδωρ *hudor*
water

Hebrew S8

אֵי *–ayim*
dual ending
used for things in nature occurring in **PAIRS**

מַיִם *mayim*
waters
600X in Old Testament & only in **DUAL**
never in singular or plural

THEREFORE two bodies of water in the natural world: S9 H6

- (1) “**waters above**” in heaven
- (2) “**waters below**” on earth

Historical Criticism

S10-11

the heavenly sea was the astronomy-of-the-day 3000 yrs ago
EG Egyptian Universe & Mesopotamian Heavens

Gk & Heb
S12-13

Excursus I: Water Canopy Theory Young Earth Creation S1

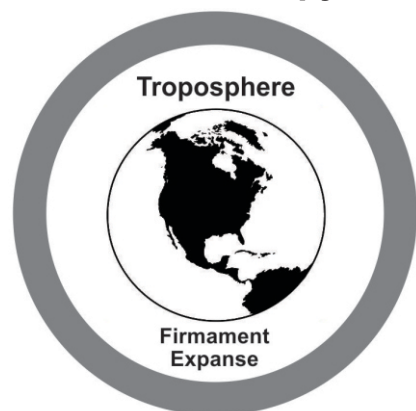
- YEC claims that the “waters above” is actually a water canopy that once enveloped the earth & then collapsed during Noah’s Flood S2

- YEC claims that the water canopy provided a unique environment on the earth before the Flood
 - ☛ explains the reason people lived +900 yrs (Gen 5)

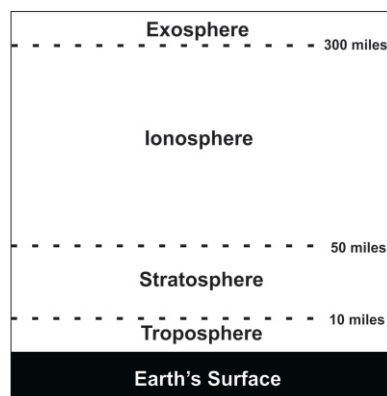
“On the **SECOND DAY of creation**, the waters covering the earth’s surface were divided into two great reservoirs—one below the firmament and one above; the **firmament** being the ‘**expanse**’ above the earth now corresponding to the **troposphere** ... With the Biblical testimony concerning a pre-flood canopy of waters, we have an adequate source for the waters of a **universal flood**.” S3

Henry Morris & John Whitcomb, *The Genesis Flood: The Biblical Record & Its Scientific Implications* (Presbyterian & Reformed, 1961), 229, 77 S5

Water Canopy



The Atmosphere S2&4



COMMENTS S6

- eisegetical spherical earth
- mistaken definition of the firmament: NOT an expanse NOT the troposphere
- problem with Ps 104 & 148 → written in 10th century BC/E AFTER flood the heavenly waters still in heaven & have not collapsed → “blue” of sky S7
- problem with 4th Day of Creation
 - God places sun, moon & stars IN the firmament
 - Morris & Whitcomb state the firmament is the troposphere
 - BUT** sun, moon & stars are not IN the troposphere!!!

CONCLUSION S8

YEC Water Canopy Theory is **Un-Biblical!**
☛ **Scientific Concordism FAILS**

Excursus II: Water Vapor Theory Progressive Creation S1

- PC claims that the “waters above” is water vapour S2

“God’s ‘separation’ of the water on **DAY TWO [of creation]** accurately describes the formation of the **troposphere**, the atmospheric layer just above the ocean where clouds form and humidity resides, as distinct from the stratosphere, mesosphere, and ionosphere lying above.” S3

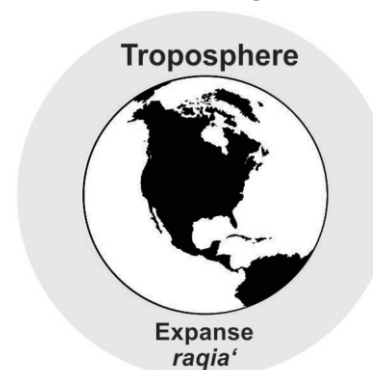
DEF of Hebrew *rāqîa’* in the glossary: S5

“the expanse”

“the atmosphere immediately above the surface of the earth”

Hugh Ross, *The Genesis Question: Scientific Advances & the Accuracy of Genesis* (NavPress, 1998), 34, 201

Water Vapor S2



COMMENTS S6

- eisegetical spherical earth
- mistaken definition of the firmament: NOT an expanse NOT the troposphere
- IF the biblical author meant vapour, mist, humidity, or clouds THEN he should have used the common Hebrew words: *’ed* (Gen 2:6) *nasi’* (Jer 10:13) *’ānān* (Gen 9:13) BUT he used *mayim* (waters) 5X in 2nd Day of Creation S7
- problem with position of “waters above” → they are ABOVE *raqia’* not IN it
- problem with 4th Day of Creation
 - “God made two great lights—the greater light to govern the day and the lesser light to govern the night. He also made the stars. God set them IN the firmament (*raqia’*). Gen 1:16-17
 - BUT** sun, moon & stars are not IN the troposphere!!!

CONCLUSION S9

PC Water Vapor Theory is **Un-Biblical!**
☛ **Scientific Concordism FAILS**

13D. THE HEAVENS & ANCIENT ASTRONOMY (Part III) S1

4. Ends & Foundations of the Heavens S2

- “ends of the heavens” logical since the end of the firmament is at the horizon
JESUS: “God will gather his elect from the four winds, from the ends of the earth to the **ends of the heavens**.” Mk 13:27
“The sun rises at one **end of the heavens** and makes its circuit to the other.” Ps 19:6 S3-4
- “foundations of the heavens” a logical notion since something supported the firmament
“The **foundations of the heavens** shook & trembled, God was angry.” 2 Sam 22:8 S5
- “The **pillars of the heavens** quake, aghast at God’s rebuke.” Job 26:11 S6-7

5. Sun, Moon & Stars Placed in the Firmament S8

4th Day of Creation

“God said, ‘Let there be lights **in the firmament** of the heaven to separate the day from the night, and **LET THEM SERVE** as signs to mark the seasons and days and years, let them be lights **in the firmament** of the heaven to give light on the earth.’ And it was so. God made two great lights—the greater light to govern the day and the lesser light to govern the night. He also made the stars. God set them **in the firmament** of the heaven to give light on the earth, to govern the day & the night, and to separate light from darkness. And God saw it was good. And there was evening, and there was morning—The Fourth Day.” Gen 1:14-19 S9

עַל תְּוֹסְפָאָה

in the firmament S11

בְּרָקִיעַ

firmament in S12

COMMENTS S13-14

- worship of heavenly bodies common in ANE
Gen 1 is very polemical (in-your-face) & has a radical Message of Faith:
DON’T YOU SERVE THE HEAVENS, THEY WILL SERVE YOU!
“Let them **serve** ...” you to be markers of times & seasons
- subtle criticism: terms “sun” & “moon” not used
creation of stars seems like an after thought S15
- God of the Hebrews created astronomical bodies → they are not gods
de-deification of nature
☛ Gen 1 is **BLASPHEMY** to a worshipper of heavenly bodies

6. Falling Stars & Rolling Up of the Heavens S16

- stars are believed to be small and can fall to the earth
LOGICAL notion due to the phenomenon of meteors
same size & luminosity as stars & look like they fall from firmament
- Jesus: “The **stars** will **fall** from heaven, and the heavenly bodies will be **shaken**.” Matt 24:29 S17
- “The sky will be **rolled up** like a scroll; all the **starry host** will **fall** like withered leaves from the vine, like shrivelled figs from the fig tree.” Isaiah 34:4 S18
- QUESTIONS: S19
How can stars “fall” to the earth when only ONE star would blow us away completely?
Answer: they are tiny specks
How can heavenly bodies be “shaken”?
Answer: they are attached to the firmament
How can heaven be “rolled up”?
Answer: it is like a tent canopy

7. Upper Heavens & Lower Heavens S20

CAUTION!

complex term → context dictates the meaning

Greek S21

οὐρανός *ouranos*
heaven

Hebrew S22

אֵימָּה *–ayim*
dual ending
used for things in nature occurring in **PAIRS**

שָׁמַיִם *shāmayim*
heavens
400X in Old Testament & only in **DUAL**
never in singular or plural

THEREFORE two heavens exist in the natural world: S23

- (1) **Upper Heavens**
- (2) **Lower Heavens**

BOTH ARE REAL PHYSICAL PLACES

(1) Upper Heavens

GOD'S DWELLING PLACE

a real **PHYSICAL** location just overhead.

☛ NOT in another dimension as believed today by Christians!

To God: "**Look down** from heaven, **your holy dwelling place**,
and bless your people Israel."

Deut 26:15

"God stretches out the heavens like a tent and lays the beams
of his **upper chambers** on their waters."

Ps 104:2-3

שָׁמַיִם שָׁמַיִם

shāmayim shāmayim

term occurs occasionally to indicate specifically the upper heavens
where God dwells

"God made [1] the **heavens** [*shāmayim*; lower heavens], even
[2] the **heavens of heavens** [*shāmayim shāmayim*; upper heavens]
(or **highest heavens**) with all their [starry] host, the earth and all
that is on it, the seas & all that is in them."

Neh 9:6

☛ two types of heavens → upper heavens & lower heavens

S24

S25

S26-27

S28

S29

S30

(2) Lower Heavens

THE FIRMAMENT

2nd Day of Creation: "God called the firmament '**heavens**.'" Gen 1:7

THE AIR SPACE

"God formed ... all the **birds of the heavens**." Gen 2:19

S31-32

"The Son of Man coming in the **clouds of the heavens**." Dan 7:13

Gk & Heb S33-34 H66

Tent Metaphor of the Structure of the Heavens

ancient Hebrews used a tent used to describe physical reality
domed canopy of heaven & flat floor of earth

"God stretches out the heavens like a **tent** and lays the beams of
his upper chambers on their waters."

Ps 104:2-3

"In the heavens he [God] has pitched a **tent** for the sun, which is
like a bridegroom coming forth from his pavilion like a champion
rejoicing to run his course."

Ps 19:4-5

"God sits enthroned above the circle of the earth, and its people
are like grasshoppers. He stretches out the heavens like a
canopy, and spreads them out like a **tent** to live in."

Is 40: 22

S35

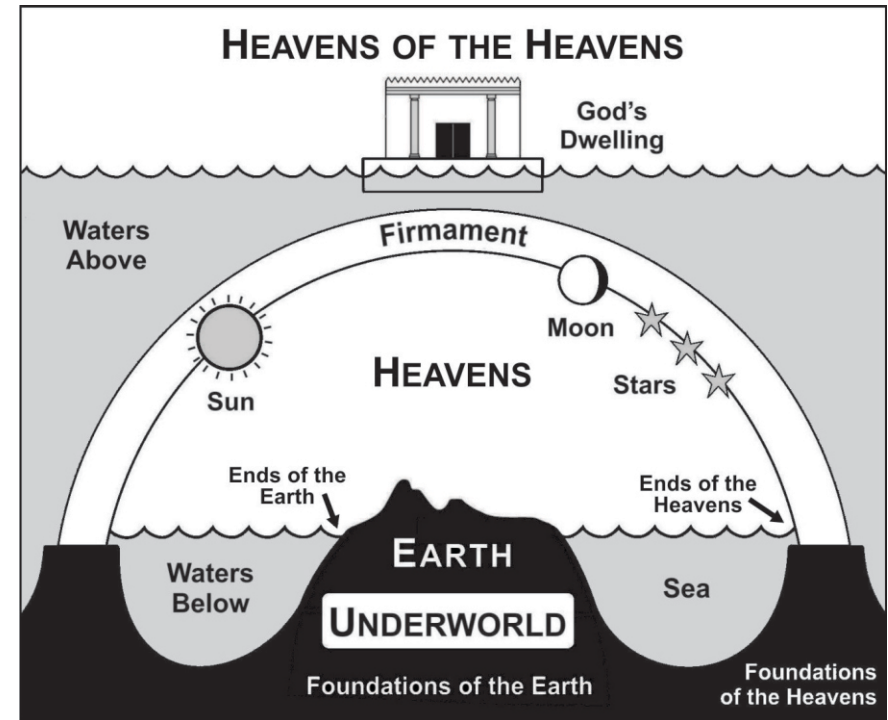
S36

S37

S38

The 3-Tier Universe

S39



Relationship between Sea Floor & Foundations of the Earth

S40-41

"The valleys of the sea were exposed and the foundations of the earth laid
bare at your rebuke, O Lord, at the blast of breath from your nostrils."

Ps 18:16, 2 Sam 22:16

CONCLUSION

S42

Hermeneutical Principle 13

Ancient Phenomenological Perspective of Nature: The 3-Tier Universe

S43

- The Bible features a 3-Tier Universe → BEST science-of-the-day in ANE
- The Bible has an ancient phenomenological perspective of the structure and operation of the universe
- God accommodated in the biblical revelatory process and allowed the ancient Hebrews to use **ancient astronomy** and **ancient geography**

QUESTION

S44

Does the Bible also feature an **ancient biology**?

14. ATTRIBUTION OF DIVINE ACTION IN ORIGINS

QUESTION 1:

Does the Bible reveal the ACTUAL structure of the universe?

ANSWER 1: **NO**

The Bible features a 3-tier universe

QUESTION 2:

Does Gen 1 reveal how God ACTUALLY created the universe?

ANSWER 2: **NO**

2nd Day of Creation:

God creates the firmament & waters above **DE NOVO**

4th Day of Creation:

God sets the sun, moon & stars in the firmament **DE NOVO**

QUESTION 3:

Did God LIE in the Bible?

ANSWER 3: **NO!!!**

God ACCOMMODATED

God allowed the use of ancient astronomy & ancient geography as a vessel to deliver inerrant Spiritual Truths

Attribution of Divine Action in Origins

DEF: God's creative action is filtered/accommodated through an ANE understanding of origins:

DE NOVO CREATION → Quick & Complete

GENESIS 1-11

IF the Bible has an ancient astronomy & an ancient geography,
THEN it is reasonable it also has an **ancient biology**

IF we don't go to Gen 1 to find out how the heavens & the earth were created,

THEN we shouldn't go to Gen 1 to find out how life was created

☛ **AND in particular the creation of humans**

THEREFORE:

**Open the Book of God's Works &
Do the Science!**

15. ANCIENT PHENOMENOLOGICAL PERSPECTIVE OF NATURE: THE LIVING ORGANISMS

DEF: living organisms as they **appear** to the naked eye & natural senses
φαινόμενον (*phainōmenon*): appearance

Review from 1st Half of Course:

Ancient Botany

mustard seed is the smallest of all seeds (Mk 4:30)

seeds die before germinating (John 12:23-24)

Ancient Human Reproductive Biology

only men have seed (Heb 11:11) & women are like fields (Lk 1:42)

only women cause reproductive problems (Gen 11:30, Heb 11:11)

Ancient Taxonomy

bats are birds

"These are the **birds** you are not to eat ... the eagle, the vulture,
[17 other birds listed] ... and the **bat**." Lev 11:13-19

bats are not birds → they are mammals

BUT they fly, so it's reasonable to think they were birds

Immutability of Living Organisms

plants & animals reproduce: "according to their kinds"
stated 10X in Gen 1

EG goat births → goat births → goat births ...

Therefore:

reasonable to think living organisms are IMMUTABLE (unchanging)

De Novo Creation of Living Organisms

plants & animals were originally created: Quick & Complete

☛ retrojection of the 'goat births goat' data set back in time:

De Novo Creation of 1st goat/s ← births goat ← births goat

GENESIS 1-11

• attribution of divine action in the origin of living organisms in Gen 1 & 2
is filtered/accommodated through an ANE understanding of origins

• *De Novo* creation of life in Gen 1 & 2 → **ANCIENT SCIENCE**

• anti-evolutionism of Young Earth Creation & Progressive Creation is
based on → **ANCIENT BIOLOGY**

• Gen 1 & 2 do NOT reveal how God ACTUALLY created living organisms

THEREFORE:

**Open the Book of God's Works &
Do the Science!**

Excursus: Historical Criticism & Human Origins

Two creative mechanisms in the Ancient Near East (ANE):

(1) Plant-Like Mechanism → Remember 1-Seed Theory (Preformatism)

Assur Bilingual Creation Account (KAR 4)

the gods plant the seeds of humans in the earth and people later
“sprout from the ground like barley”

Hymn to E'engura

“humans broke through the earth's surface like plants”

Hymn to the Pickax

a god strikes the ground with a hoe-like axe “so that the seed
from which people grew could sprout from the field”

(2) Craftsman-Like Mechanism

Epic of Atrahasis

a goddess mixes clay & blood of dead god to fashion 7 males & 7 females

Enki and Ninmah Account

an intoxicated god uses earth to make imperfect humans

Egyptian Pyramid Texts & Coffin Texts

god Khnum fashions humans on a potter's wheel & goddess Isis gives life



COMMENTS

• Plant-Like Mechanism seems to be the creative method in **Gen 1:24**

“God said, ‘Let the earth produce [yāšā] living creatures according to their kinds:
livestock, creatures that move along the ground, and wild animals.’”

Hebrew verb yāšā’ (to produce) is the same verb found in Gen 1:12
“the earth produced vegetation”

☛ implies animals created from seeds that sprouted from the earth

• Craftsman-Like Mechanism is the creative method in **Gen 2:7**

“The Lord God formed [yāšar] the man from the dust of the ground & breathed
into his nostrils the breath of life, and the man [Adam] became a living being.”

Hebrew verb “yāšar” (to form) is the root of the term “potter”

“We [humans] are the clay, you [God] are the Potter,
we are all the work of your hand.” Is 64:8

☛ **De Novo Creation of Adam → ANE creative mechanism**

16. SCIENCE IN THE BIBLE: “CONSERVATIVE” & “LIBERAL” INTERPRETATIONS

QUESTIONS: what defines Conservative or Liberal Christianity?
will it be our views of the science in the Bible?

CONSIDER ASTRONOMY:

St. Augustine (415)

“Bear in mind that the term ‘**firmament**’ does not compel us to imagine
a stationary heaven: we may understand this name as given to indicate
not that it is motionless but that it is **solid** and that it constitutes an
impassable boundary between the **waters above** & the **waters below**.”

“Motion of Heaven & Meaning of Firmament”
Literal Meaning of Genesis, II:10

Martin Luther (1536)

“Scripture ... simply says that the moon, the sun, and the stars were
placed in the **firmament** of the heaven (**below** and **above** which are
the **waters**) ... The bodies of the stars, like that of the sun, are round,
and they are **fastened** to the **firmament** like globes of fire.”

Lectures on Genesis, J. Pelikan, ed
(Concordia, 1958) 42-3

John Calvin (1554)

“We indeed are not ignorant, that the circuit of the heavens is finite, and
that the earth, like a little globe, is placed **in the center** ... The **primum**
mobile [the **firmament**] rolls all the **celestial spheres** along with it.”

Commentary on Genesis (Ethereal
Library, 2007) I: 24-5, 114

COMMENTS

• “Conservative” view of astronomy for 16 centuries accepted:

- (1) firmament
- (2) geocentricity

THEREFORE

☛ **are all 21st century Christians liberals?**

GENESIS 1-11

• “Conservative” view of biological origins for 20 centuries accepted:

- (1) *De Novo* creation of plants & animals
- (2) *De Novo* creation of Adam & Eve

QUESTIONS:

Does rejecting the *De Novo* creation of:

- plants & animals make you a **LIBERAL**?
- Adam & Eve make you a **LIBERAL**?

☛ **are Adam & Eve like the firmament?**
an ancient biology of human origins?

17. Biblical Inerrancy: An Incarnational Approach

(Biblical Inerrancy: belief the Bible is absolutely true & without error)

DEF: re-defining inerrancy using parallels between:

- Jesus (The Word) & the Bible (The Word)
- Greatest Act of Revelation (God in human flesh) & Biblical Revelation (God's Words in human words)

The Incarnation Latin *in*: in *carnis*: flesh

DEF: belief that God became a human in the person of Jesus

"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

EARLY CHURCH HERESIES:

Docetism

Jesus a God who only appeared human

Arianism

Jesus a human with supernatural power

CONSERVATIVE CHRISTIAN POSITION:

Jesus fully God & fully man → Mystery of Incarnation

Ontology of Jesus

God → inerrant & perfect Spiritual Being

Man → incidental & imperfect physical body

Temporality of Jesus

God → eternal & transcends time

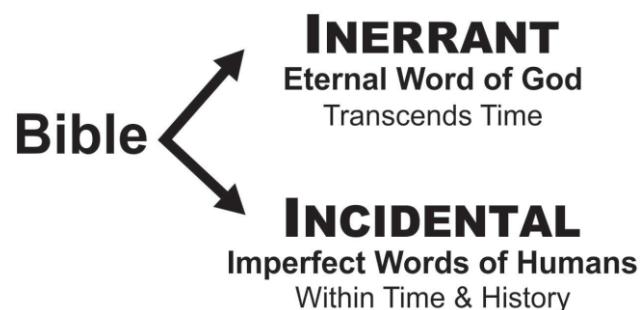
Man → bound within time & the history of the 1st century

Pedagogy of Jesus

God → taught the inerrant Word of God

Man → used incidental & imperfect human words

EG ancient science in Mustard Seed Parable



GENESIS 1-11

PARALLELS TO EARLY CHURCH HERESIES:

Biblical "Docetism"

Gen 1-11 is completely divine with NO human elements

☛ science in Gen 1-11 is inerrant

Biblical "Arianism"

Gen 1-11 is completely human with NO divine elements

☛ spiritual truths in Gen 1-11 are erroneous human superstitions

CONSERVATIVE CHRISTIAN POSITION:

Gen 1-11 is fully divine & fully human → just like Jesus

science in Gen 1-11 is the erroneous ancient science of humans

Spiritual Truths in Gen 1-11 are inerrant and divinely inspired

18. ST. AUGUSTINE'S PASTORAL WARNING TO CHRISTIANS REGARDING SCIENCE & RELIGION

"**Usually**, even a **non-Christian** knows something about the earth,

the heavens, and the other elements of this world, about the motion and orbit of the stars and even their size and relative positions, about the predictable eclipses of the sun and moon, the cycles of the years and seasons, about the kinds of animals, shrubs, stones, and so forth, and this knowledge he holds to as being certain from **reason** and **experience** [ie, science].

Now, it is a **disgraceful** and **dangerous** thing for a non-Christian to hear a Christian, presumably giving the meaning of Holy Scripture, talking **nonsense** on these topics; and we should take all means to prevent such an embarrassing situation ...

If non-Christians find a Christian mistaken in a field which they themselves know well and hear him maintaining his foolish opinions about our book, **how are they going to believe** those books in matters concerning the resurrection of the dead, the hope of eternal life, and the kingdom of heaven, when they think their pages are full of falsehoods on facts which they themselves have learnt from experience and the light of reason? [ie, science]

Reckless and incompetent expounders of Holy Scripture bring untold trouble and sorrow on their wiser brethren when they are caught in one of their mischievous false opinions and are taken to task by those who are not bound by the authority of our sacred books. S5

For then, to defend their utterly foolish and obviously untrue statements, they will try to call upon Holy Scripture for **proof** and even **recite from memory** many passages which they think support their position, although they understand neither what they say nor the things about which they make assertion.” S6

St. Augustine, *Literal Meaning of Genesis*, I:42-3

COMMENTS S7

- non-Christians can discover truth about the creation

Is there a similar situation TODAY?

To recast Augustine’s words:

“Usually, even a non-Christian knows something about the age of the earth, the fossil record, evolutionary genetics, and developmental biology ... and this knowledge she/he holds to as being certain through scientific method.”

- Augustine’s pastoral warning is directed at Christians who place stumbling blocks between non-Christians & God (see 2 Cor 6:3) S8

Is there a similar situation TODAY?

To recast a cliché:

If Christians cannot even get simple things correct like the **age of the rocks**, why should non-Christians bother listening to them about mysteries regarding the **Rock of Ages** [God]?

GENESIS 1-11 S9

FINAL QUESTION

Can St. Augustine’s pastoral warning be recast for the Modern Origins Debate:

Is it a disgraceful and dangerous thing for a non-Christian to hear a

Christian concordist

(eg, Young Earth Creationist or Progressive Creationist) presumably giving the meaning of Genesis 1-11?

What do you think?