

Search the scriptures; for in them ye think ye have eternal life: and they are they which testify of me.

John 5:39

Hardware vs. Software

Hardware does not determine behavior: *software does*. Software has no mass. The real *YOU* is software, not “hardware.” (Your hardware has mass; your software doesn’t) What has no mass, *has no time: it is eternal...*

* * *

Learn the Bible in 24 Hours Hour 2: The Creation & The Fall of Man Genesis 1 - 3

Our initial dozen sessions will, of course, deal with the Old Testament. (Many Christians have never explored the foundation of God’s program for mankind...)

There are only two world views: either everything is a result of a cosmic accident, or we are the result of a deliberate design by a Designer.

There are also four basic questions common to every individual: Who am I? Where did I come from? Why am I here? and, Where am I going when I die?

The Book of Genesis

It is the Book of Beginnings (Law of First Mention): Creation • Man • Woman • Sabbath • Marriage • Home • Childhood • Sin • Murder • Sacrifice • Grace • Trade • Agriculture • City life • Races • Languages • Chosen people • ...etc.

Genesis *anticipates* all false philosophies:

- Atheism (Genesis says the world was created by God)
- Pantheism (Genesis says God is transcendent and distinguishable)
- Polytheism (Genesis says there is One God)
- Materialism (Genesis says that matter had a beginning)
- Humanism (Genesis says that God, not man, is the ultimate reality)
- Evolutionism (Genesis says “God created”)
- Uniformism (Genesis says God intervenes in His creation)

All Major Doctrines Have their Roots in Genesis

Sovereign election • Salvation • Justification by faith • Believer’s Security • Separation • Disciplinary chastisement • Divine Incarnation • Rapture of the Church • Death and Resurrection • Priesthoods (Aaronic and Melchizedek) • The Antichrist • Palestinian Covenant

In the beginning God created the heaven and the earth.

Genesis 1:1

בְּרֵאשִׁית בָּרָא אֱלֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ

Beresheet Bara Elohim et ha-Shamayim et ha-Eretz: Beresheet = In beginning...Bara = Create out of nothing... Elohim = God; plural noun, used as a singular.

Some Fundamental Questions

- Is the Universe ~15 billion years old? (Hubble Telescope, et al.)
- Was it created in 6 days? 144 hours? Were aging factors built in? Was light created “in transit”?
- Or were the “days” of Genesis simply geological eras? Was “evolution” the mechanism God used?

Strange developments of the 20th century... The universe is finite and can be measured. The universe appears to have been expanding, originating from a “singularity” [a four (?) dimensional space compressed to 0 size.]

The “Big Bang” Models

- Steady State Model (Einstein’s Biggest Mistake)
- Hesitation Model (Refuted in the 1960s)
- Oscillation Model (Refuted by entropy laws, lack of mass)
- Inflation Model (Requires antigravity forces never observed)

The Stretch Factor (re: Dr. Gerald Schroeder)

- The expansion factor: $\sim 10^{12}$
- 16 billion years $\times 365 = 6,000,000,000,000$ days
- 6×10^{12} days $\div 10^{12} = 6$ days!
- Background Radiation: Initial formation (hadron nucleosynthesis): $10.9 \times 10^{12} \text{K} / 2.73 \text{K (today)} = 4 \times 10^{12}$

Boundaries of Reality

There are two mathematical concepts that go beyond our physical reality: **Randomness** and **Infinity**: Our physical universe is a *subset* of an ultimate set of conditions and length, mass, and time = *quantized*.

- **Randomness (Proverbs 16:33)**
 - Stochastic vs. Deterministic Processes
 - Pseudo-Random Numbers
 - “Chaos Theory”

The lot is cast into the lap; but the whole disposing thereof is of the LORD.

Proverbs 16:33

God does not play dice.

Albert Einstein

(If He did, He'd win.)

- **Infinity (James 1:17)**
 - Macrocosm: Finite Universe
 - Microcosm: Quantum Physics

Therefore, we live in a *Digital Simulation*! “Reality” is only “virtual.”

Physical Chronometers

- Radiometric Dating.
- Known clock rate.
- Clock set accurately at beginning.
- Clock must not be disturbed during measure.
- Uniformitarian Thesis vs Catastrophism.

Young Earth Indicators

Moon Dust: The lunar surface is exposed to direct sunlight, and strong ultraviolet light and x-rays can destroy the surface layers of exposed rock and reduce them to dust at a rate of a few ten-thousandths of an inch per year. But even this minute amount during the age of the moon could be sufficient to form a layer several miles deep.” (R. A. Lyttleton, astronomer and consultant to NASA, 1956.) Only a few thousand year’s worth found. Neil Armstrong, Apollo 12, was concerned as he stepped out...

Earth’s Magnetic Field: Earth’s magnetic field half-life is calculated to be 1,400 years. Based on measurements taken from 1835 to 1965 estimates an age of less than 10,000 years. If extrapolated back 20,000 years,

the joule heat generated would liquefy the earth. [Thomas G. Barnes, *Origin and Destiny of the Earth’s Magnetic Field*, Institute for Creation Research, 1983. After revisions for magnetic reversals, etc., Dr. Russell Humphreys confirmed these results. (John D. Morris, *The Young Earth*, 1994.)]

Mississippi River Delta: Approximately 300 million cubic yards of sediment are deposited into the Gulf of Mexico by the Mississippi River each year. Analysis of the volume and rate of accumulation and dividing the weight of the sediments deposited annually, the age of the delta appears to be about 4,000 years old. (Henry M. Morris, ICR.)

Salinity of the Oceans: The uranium, sodium, nickel, magnesium, silicon, potassium, copper, gold, molybdenum, and bicarbonate concentrations in the oceans are much less than would be expected if these elements and compounds were being added to the oceans at the present rate for thousands of millions of years. Nitrates and uranium do not break down or recycle like salt. Implies oceans are a few thousand years old. (Henry Morris, SA Austin, Dr. Humphreys, et al.)

Poynting-Robertson Effect (“Solar Janitor”): Photons slow down the forward movement of objects in space. The solar drag force exerted upon micrometeoroids causes the particles to spiral into the sun. The sun is sweeping space at the rate of about 100,000 tons/day. There is no known source of replenishment. Their current abundance speaks for a young universe. (Stanley P. Wyatt, Jr. and Fred L. Whipple, “The Poynting-Robertson Effect on Meteors,” *Astrophysical Journal*, Vol 3, Jan 1950, p.134-141; David A Weintraub, “Comets in Collision,” *Nature*, Vol 351, 6 June 1991, p.440-441.)

Radiohalos: Primordial Polonium 218 has been found in mica and fluorite. Polonium 218 has a half-life of only 3 minutes. This is evidence of an instantaneous crystallization of the host granite concurrent with the formation of the polonium. This speaks of an instantaneous creation.

Velocity of c Decreasing: Four of five related atomic properties dependent upon c have demonstrated decrease. Slowing of atomic clocks relative to orbital clocks; if atomic clocks are correct, orbital speeds of Mercury, Venus and Mars are increasing. [William Tiff, University of Arizona: red shift quantized; not “Doppler effect”; could be explained by changes in atomic behavior due to a decrease in c. T. C. Van Flandern, U.S. Naval Observatory: atomic clocks are slowing several parts per billion/year. D. Russell Humphreys: “White Hole” (Black hole in reverse).]

Quantization of Red Shift: Distortion of gravity during an early expansion phase. Time stands still at event horizon.

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.

Genesis 1:2

“was”: היה *haya* = “became”

וְבֹהוּ *tohu v'bohu* = “without form, and void”

A Missing Interval?

*In the beginning God created the heaven and the earth. **But** the earth **became** without form, and void; and darkness was upon the face of the deep. And the Spirit of God hovered over the face of the waters.*

Genesis 1:1-2

(Adversative, “*But*”: LXX & Vulgate)

When were the angels created? When did Satan Fall? Is there a “gap” between v.1 and v.2?

The “Gap” Theory

Originally suggested by Thomas Chalmers in 1814, it is supported by G. H. Pember, D. G. Barnhouse, G. Campbell Morgan, A. Custance, et al. It is highly speculative and controversial, yet seems to link with other passages. Although it is provocative, it is often misapplied...

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

Genesis 1:3

First quote of God.

Velocity of Light?

By the 17th century, Johannes Kepler, Rene Descartes, et al., believed light was instantaneous (“c” was infinite). In 1677, Olaf Roemer measured the elapsed time between eclipses of Jupiter with its moons, yielding a *finite* speed of light. In 1729, James Bradley confirmed Roemer’s work. Over the next 300 years, the velocity of light was measured 164 times by 16 different methods.

Setterfield-Norman Analysis

- 1677, Roemer, Io eclipse:
– 307,600 +/- 5400 km/sec

- 1875, Harvard, (same method):
– 299,921 +/- 13 km/sec
- 1983, National Bureau of Standards, laser:
– 299,792.4586 +/- 0.00003 km/sec

Regression Curve

Was light 10-30% faster in the time of Christ? 2 times faster in the days of Solomon? 4 times faster in the days of Abraham? 10 million times as fast prior to 3,000 B.C. (Alan Montgomery’s Cosecant² Regression: Alan Montgomery, Canadian mathematician, analyzed the data statistically and concluded that the decay of the *c* follows a cosecant-squared curve with better than a 99% correlation coefficient. Confirmatory trends appear in 475 measurements of 11 other atomic quantities by 25 methods in dynamical time.

Other Confirmations

- M.E.J. Gheury de Bray, French astronomical journal, 1927, based on measurements over 75 years;
- T.C. Van Flandern, U.S. Naval Observatory, 1981: *atomic clocks slowing relative to orbital clocks*;
- V.S. Troitskii, Radio-physical Research Institute in Gorky, 1987 (independent of Setterfield);
- J. Magueijo and A. Albrecht, *Physical Review*, 1999.

Atomic vs. Orbital Time

Until 1967 (Orbital time): 1 sec = 1/31,556,925.9747 of one earth orbit around the sun. After 1967 (Atomic time): 1 sec = 9,192,631,770 oscillations of the cesium-133 atom.

If atomic clocks are “correct,” the orbital speeds of Mercury, Venus, and Mars are *increasing*. If the gravitational constant is truly constant, then atomic vibrations and the speed of light are *decreasing*.

If a planet’s orbital speed increased it would violate the law of conservation of energy. If atomic clocks are correct, the gravitational constant should change. No such variations have been detected.

If atomic frequencies are decreasing, then five properties of the atom, such as Planck’s constant, should also be changing. Statistical studies support both the magnitude and direction of this change. (Alan Montgomery and Lambert Dolphin, “Is the Velocity of Light Constant in Time?” *Galilean Electrodynamics*, Vol 4, No. 5, 1993.)

The Red Shift of Spectra

The Basis of “Hubble’s Law,” but what do you do with the occurrences of aberrant red shifts (Halton Arp; William Tifft). Is there *quantization* of red shift data? This may be evidence of a change in the property of space: an atomic effect rather than a recessional velocity effect.

And God said, Let there be light: and there was light. And God saw the light, that it was good: and God divided the light from the darkness. And God called the light Day, and the darkness he called Night. And the evening and the morning were the Day One.

Genesis 1:3-5

עֶרֶב *Erev*

- Obscuration, mixture; (increasing entropy); When encroaching darkness began to deny the ability to discern forms, shapes, and identities; hence:
- Twilight; the time of approaching darkness (Prov 7:9; Jer 6:4)
- Sunset; marking the duration of impurity: when a ceremonially unclean person became clean again (Lev 15)
- The beginning of the Hebrew day

בֹּקֶר *Boker*

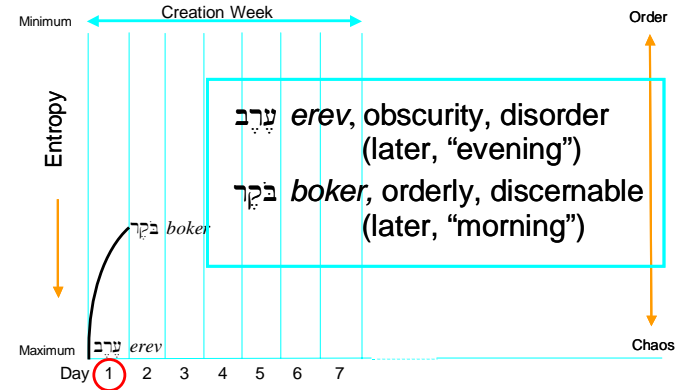
- Becoming discernable, distinguishable, visible; perception of order; relief of obscurity; (decreasing entropy); attendant ability to begin to discern forms, shapes, and distinct identities; breaking forth of light; revealing; hence:
- Dawn; morning (Gen 19:27; 2 Kgs 10:9)

Information Measures

Entropy ← Information



Entropy Profile of the Universe



The Firmament = ?

And God made the firmament, and divided the waters which were under the firmament from the waters which were above the firmament: and it was so. And God called the firmament Heaven. And the evening and the morning were the second day.

Genesis 1:7, 8

רָקִיעַ *raqia*

- Hebrew רָקִיעַ *raqia*: extended surface (solid), expanse.
- Greek στερεώματος, *stereoma*: firmness.
- Latin, *firmamentum*: 3-dimensional solidity, firmness.

More than a Metaphor?

Who alone stretches out the heavens (Job 9:8); Stretching out heaven like a tent curtain (Ps 104:2); Who stretches out the heavens like a curtain, and spreads them out like a tent to dwell in (Isa 40:22); He has stretched out the heavens (Jer 10:12); The Lord who stretches out the heavens (Zech 12:1).

“Stretching the Heavens”: 2 Sam 22:10; Job 9:8, 26:7, 37:18; Psalm 18:9, 104:2, 144:5, 40:22, Isaiah 42:5, 44:24, 45:12, 48:13, 51:13; Jeremiah 10:12, 51:15; Ezekiel 1:22; Zechariah 12:1.

Space is *not* an empty vacuum: It can be “torn” (Isaiah 64:1); “worn out” like a garment (Psalm 102:25); “shaken” (Hebrews 12:26, Haggai 2:6,

Isaiah 13:13); “burnt up” (2 Peter 3:12); “split apart” like a scroll (Revelation 6:14); “rolled up” like a mantle (Hebrews 1:12) or a scroll (Isaiah 34:4).

“Rolled Up?”

There is some dimension in which space must be “thin”—space can be “bent”—then there is a direction it can be bent *toward*. Thus, there are *additional spatial* dimensions

Dimensions of “Reality”

Nachmonides (13th Century): 10 dimensions, only four are “knowable” (*Commentary on Genesis*, 1263). Particle Physicists (20th Century): 10 dimensions, 4 are directly measurable: (3 spatial + time) and the other 6 are “curled” into less than 10^{-33} cm, and thus inferable only by indirect means. (We have spent billions of dollars building elaborate particle accelerators to learn what Nachmonides discovered by doing his homework on Genesis One!)

Model of the Atom

The nucleus of an atom is 100,000 times smaller than atom: equivalent to a pinhead vs. 100 meters—an atom is mostly empty space.

Properties of Space

- Zero-point energy: 10^{95} ergs/cm³
- Permittivity (absolute dielectric constant)
- Permeability (absolute magnetic constant)
- Intrinsic impedance
- Velocity of light – At Creation: 2.54×10^{10} times present velocity
– Currently: Speed of Gravity

“Zero-Point” Energy

If the temperature of an empty container is lowered to absolute zero, there still remains a residual amount of thermal energy that cannot by any means be removed: the “zero-point energy.” A “vacuum” is now known to be a vast reservoir of seething energy out of which particles are being formed and annihilated constantly. Why doesn’t the electron in an atom simply radiate its energy away and spiral into the nucleus? It picks up energy from the background zero-point energy and therefore is sustained by it (estimated at 1.071×10^{117} kilowatts per square meter).

Creation Week

- Day One: “Let light be”
- 2nd Day: Stretching of space. . .
- 3rd Day: Land and vegetation
- 4th Day: Sun, Moon, Stars.

The Trees in Genesis 2

And God said, Behold, I have given you every herb bearing seed, which is upon the face of all the earth, and every tree, in the which is the fruit of a tree yielding seed; to you it shall be for meat...

Genesis 1:29

...and ending with

And out of the ground made the LORD God to grow every tree that is pleasant to the sight, and good for food; the tree of life also in the midst of the garden, and the tree of knowledge of good and evil.

Genesis 2:9

Trees in Genesis 2

אשל	Tamarisk (2)	רמון	Pomegranate (8)
אלה	Terebinth, (-2)	גפר	Gopherwood or fir (8)
עבת	Thicket (or Dense forest) (-3)	סנה	Thornbush [<i>Crataegus</i>] (9)
הדר	Citron (-3)	זית	Olive (-9)
ששה	Acacia (-3)	בטן	Pistachio Nut (13)
שקד	Almond (5)	לון	Hazel (-13)
חטה	Wheat (5)	חאנה	Fig (14)
חמר	Date Palm(5)	ערבה	Willow (-15)
ארז	Cedar (-5)	אלון	Oak (17)
אהלים	Aloe (6)	נפן	Vine (-18)
ענב	Grape (-6)	שערה	Barley (-28)
אשור	Boxthorn or Bramble (7)	ערמו	Chestnut (44)
קדה	Cassia (7)	לבנה	Poplar (-85)

Set *in* Interstellar Space

And God said, Let there be lights **in** the firmament of the heavens ... And let them be for lights **in** the firmament of the heavens ... And God made two great lights ... He made the stars also. *And God set them in the firmament of the heavens to give light upon the earth.*

Genesis 1:14-17

Spiral Galaxies

- The furthest galaxies had to release their light long before the closer galaxies.
- The further galaxies did not have as much time to rotate and twist their arms.
- Thus, the closer galaxies should have the most twist.
- If the speed of light was a million times faster in the past, that would account for them being so similar...

And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years:

Genesis 1:14

“...seasons”: המועדים “the appointed times.”

The Heptadic Calendar

The Week of Days	<i>Shabbat</i>
The Week of Weeks	<i>Shavout</i>
The Week of Months	The Religious Year
The Week of Years	The Sabbatical Year
Seven Weeks + 1	The Jubilee Year

- 52 sabbaths
- + 7 days of Passover (including its related feast days)
- + 1 *Shavout*, Feast of Weeks (Pentecost)
- + 1 *Yom Teruah*, Feast of Trumpets
- + 1 *Yom Kippur*, Day of Atonement
- + 7 days of *Sukkot*, Feast of Tabernacles
- + 1 *Shimini Atzeret*, 8th Day of Assembly
- 70

המועדים The Appointed Times

- Statistical expectation: 5 times in the 78,064 letters of Genesis;
- As an *equidistant letter sequence*, it appears **only once** in Genesis;
- At an interval of 70;
- It is centered on Genesis 1:14.
- Odds against this by unaided chance have been estimated at greater than 70,000,000 to one!

The Jew's catechism is his calend — Samson Raphael Hirsch

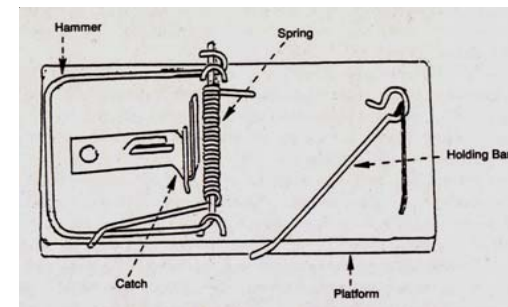
Creation Week (continued)

- 5th Day: Sea animals, Birds
- 6th Day: Land animals, and Man

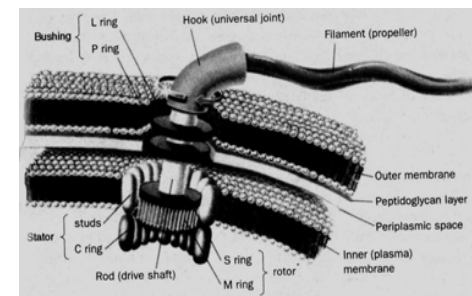
Death of Darwinism

Advances in microbiology, DNA, et al., have dealt the death blow to Darwinism. DNA is a *digital* code. Darwinism cannot explain the origin of life because it cannot explain the origin of *information*. Irreducible complexity refutes chance as a designer.

Irreducible Complexity



Bacterial Flagellum (Model)



“Monkey Men” Frauds

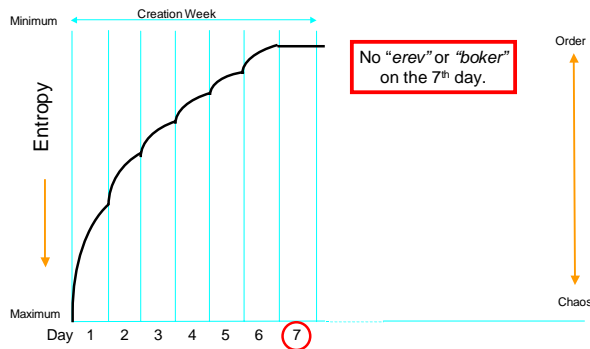
- Heidelberg Man (built from a jawbone);
- Nebraska Man, 1922 (Henry Osborn: from just one tooth; later discovered to be an extinct pig);
- Piltdown Man, 1912 (Charles Dawson: from jawbone of modern ape; deliberate fraud; filed, treated with iron salts);

- Peking Man, 1921 (evidence disappeared; outright fraud);
- Neanderthal Man (found in a cave in the Neander Valley near Duüsseldorf; Int'l Congress of Zoology, 1958: that of an old man suffering from arthritis);
- Java Man, 1922 (1891 skull cap; 50 ft. femur (thigh) bone; concealed evidence; teeth were of an orangutan);

In 120 years of searching—no intermediate stages found!

The 7th Day: Sabbath Rest

Entropy Profile of the Universe



The Scriptural View

For in six days the LORD made the heavens and the earth, the sea, and all that in them is, and rested the seventh day; therefore the LORD blessed the sabbath day, and hallowed it.

Exodus 20:11

The Laws of Thermodynamics

Over the past 125 years, the Laws of Thermodynamics have been fully described. The **First Law of Thermodynamics** asserts that matter or its energy equivalent can neither be created nor destroyed (under *natural* circumstances). Nowhere in the universe is matter being observed being created or annihilated. All observed processes conserve matter or its equivalent energy. Corollary: **natural processes cannot create energy.** All is a result of the *past*.

The **Second Law of Thermodynamics**, also called the “Arrow of Time,” asserts that as time advances, the universe progresses from a state of

order to a state of greater disorder (entropy). This also declares that the energy available to do work continually decreases. The universe appears to run “downhill” to an eventual heat death when no temperature differences exist (no energy is available), resulting in uniform randomness. [Looking back, total is limited: the universe had a *beginning*.]

The Third Law: every substance has a finite positive entropy which may become zero at a temperature of absolute zero.

Conservation of Matter/Energy in Scripture

*And on the seventh day God **ended** His work...*

Genesis 2:2-3

*The works were **finished** from the foundation of the world...*

Hebrews 4:3-4

*All the things that are therein...you **preserve** them all.*

Nehemiah 9:6

Entropy in Scripture

They shall perish... grow old as a garment...

Psalms 102:25-26

The earth will grow old like a garment...

Isaiah 51:6

Heaven and earth will pass away...

Matthew 24:35

Entropy to be Repealed?

*...Because the creation itself **will be set free from its bondage to decay** and obtain the glorious liberty of the children of God.*

Romans 8:21

Thermal Decay

- Heat always flows from hot bodies to cold bodies.
- If the universe was infinitely old, the temperature throughout the universe would be uniform. It isn't; therefore, it isn't infinitely old.
- The universe had a beginning...and it is destined for an ending.

The details of these early chapters of Genesis—the Creation and the Flood—pervade the entire Bible, and are clearly confirmed in the New Testament, and by Jesus Christ personally. God does not deceive or lie: we must not bury these issues in a closet; they are fundamental to the entire Biblical plan of redemption.

Genesis 3: The Seed Plot of the Entire Bible

- *Nachash*, the “Shining One”
- The Forbidden Fruit
- Methodology of the Deception
 - Doubt: “*Yea, Hath God Said...?*”
 - then Denial: “*Ye shall not surely die*”
- God’s Declaration of War
 - Seed of the Woman
 - Seed of the Serpent

*And the LORD God said unto the serpent, Because thou hast done this, thou art cursed above all cattle, and above every beast of the field; upon thy belly shalt thou go, and dust shalt thou eat all the days of thy life: And I will put enmity between thee and the woman, and between **thy seed and her seed**; it shall bruise thy head, and thou shalt bruise his heel. Unto the woman he said, I will greatly multiply thy sorrow and thy conception; in sorrow thou shalt bring forth children; and thy desire shall be to thy husband, and he shall rule over thee...*

Genesis 3:14-16

Effects of the Fall?

- Entropy (the “Bondage of Decay”) introduced?
- Universe “fractured?”
 - Separation of the 4 & 6 dimensions?
 - Separation of the “spiritual” and “physical”?
- Redemption involves more than Man alone: “...a New Heavens and a New Earth”

Everything that we know about the Creation is from **post-curse** observations...

The First Act of “Religion”

And the eyes of them both were opened, and they knew that they were naked; and they sewed fig leaves together, and made themselves aprons [covering, armor].

Genesis 3:7

God’s Plan of Redemption:

Unto Adam also and to his wife did the LORD God make coats of skins, and clothed them.

Genesis 3:21

Teaching them that only by the shedding of innocent blood they would be covered (on another tree in another garden).

The Central Theme

- The OT is an account of a Nation.
- The NT is the account of a Man.
- The Creator became a Man. His appearance is the Central Event of all history.
- He died to purchase us and is alive now.
- The most exalted privilege is to know Him. That’s what the Bible is all about.

The Scarlet Thread Begins

- From the Seed of the Woman Genesis 3
- The Call of Abraham Genesis 12
- The Tribe of Judah Genesis 49
- The Dynasty of David 2 Samuel 7
- The Virgin Birth in Bethlehem Isaiah 7
- To another tree...in another garden

Next Time:

Genesis 4	Cain & Abel
Genesis 5	Genealogy of Noah
Genesis 6-9	Flood of Noah
Genesis 10-11	Tower of Babel

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Learn the Bible in 24 Hours Hour Three: The Pre-Historical Period Genesis 4 - 11

Genesis 4	Cain & Abel
Genesis 5	Genealogy of Noah
Genesis 6-9	Flood of Noah
Genesis 10-11	Tower of Babel