



Formation of Mankind

Humans did not come into the cosmos, but were formed out of it.
Formed from star dust

Formation of Mankind

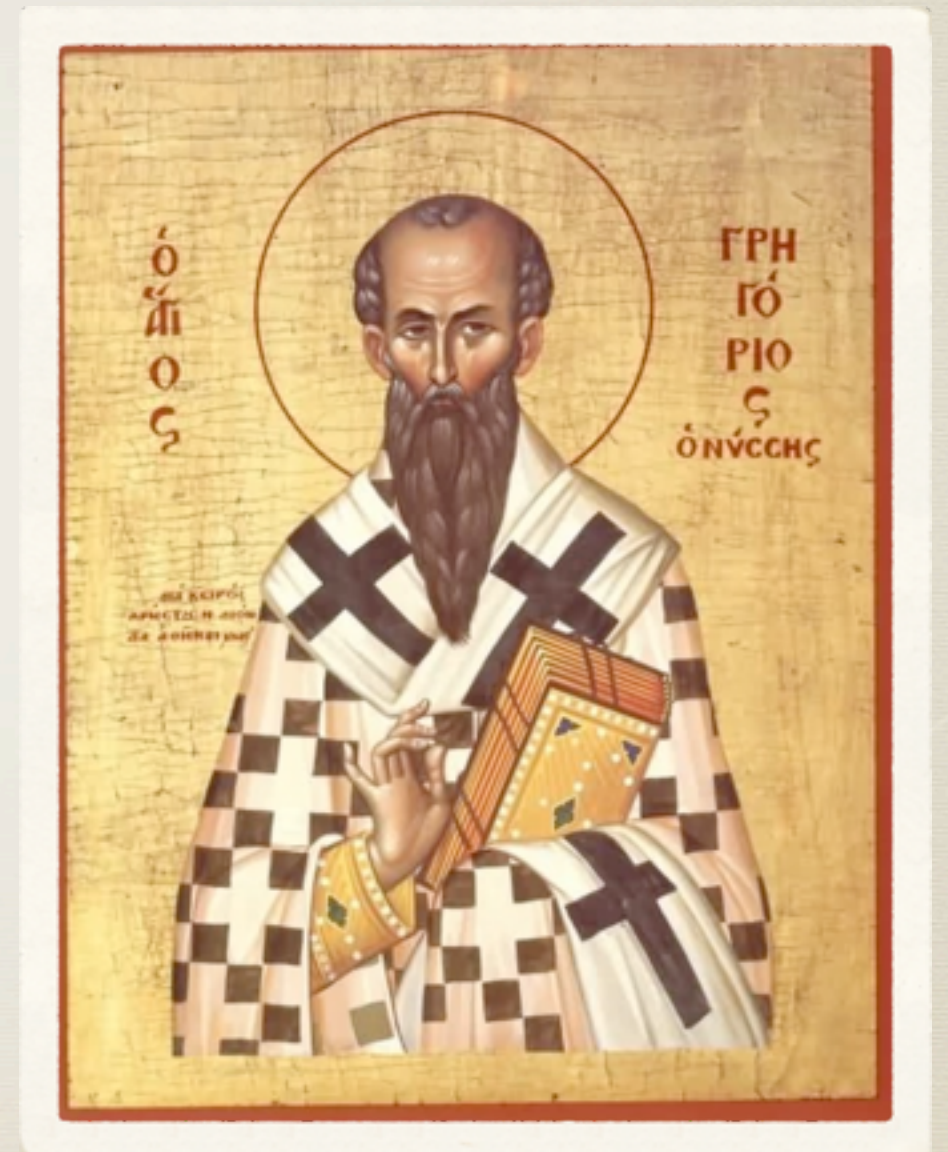
- * How did God prepare for Man?
- * Who is Man?
- * How was Man created?

Genesis

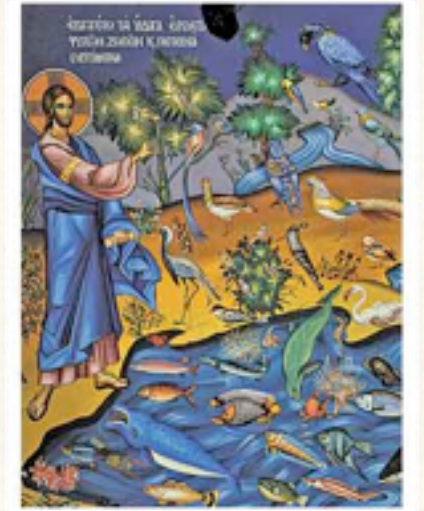
A mystical story of Creation -
Shows how Mankind was formed into
something different than other living
organisms

Formation of Man

- * First 3 chapters of Book of Genesis described by St. Gregory of Nyssa:
“not so much history as ‘doctrines in the guise of narrative.’”



Formation of Man



- * Sixth Day:
- * 1:24 *Then God said, “Let the earth bring forth the living creatures according to its kind: cattle and creeping things and beasts of the earth, each according to its kind”*
- * Before man: matter, minerals, life, plants and animals established.
- * 1:26 *Then God said, “**Let Us make man in Our image, according to Our likeness;***
- * Central message:
God (Trinity) made Man in His **image** and **likeness**.
- * *Let them have **dominion over** the fish of the sea, over the birds of the air, and over the cattle, over **all the earth** and over every creeping thing that creeps on the earth.”*

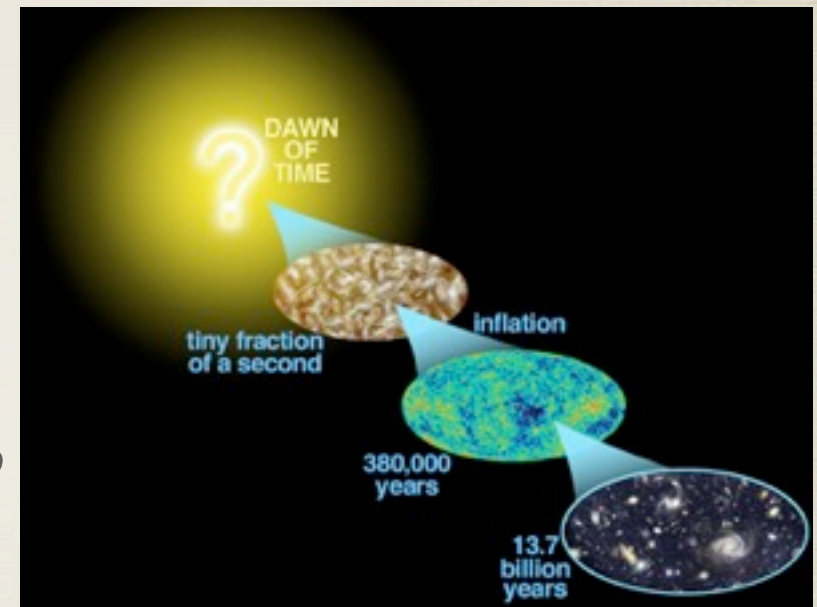
Formation of Man

- * 2:7 *And the Lord God **formed man** of the dust of the ground, and **breathed** into his nostrils the **breath of life**; and man became a living soul.*
- * Made of elements already created (star dust) and received God's breath (soul).
- * Formed by God, not simply created by word.
- * Does it say how?
- * 2:15 *Then the Lord God took the man and put him in the garden of Eden **to tend and keep it**.*
- * Made Man **steward** of Creation.



Formation of Man

- * Main Message?
 - * God Created matter **out of nothing**, then **Crafted** universe with minerals, life, plants and animals for formation of man and his perfection through Christ.
 - * **Formed** mankind in His **image** and **likeness**
 - * Gave him **dominion** over creation to tend and keep it.



Formation of Man

- * We are all **God's creatures**.
He is our maker.
Are **intimately related** and in contact with sustaining
Life Force of a loving God.
- * Must cultivate **humility** and not think we know best how
things are supposed to be.
- * Must ever **grateful** and give thanks always.
- * Learn to **trust** this incredible **Creator** who has created this
universe of ours, placing us at its pinnacle
- * With Christ-Event what did we gain?
 - * He gave us means for our perfection if we choose.

What is Theory of Evolution?

What do you know about it
and what is its main insight?

Evolution

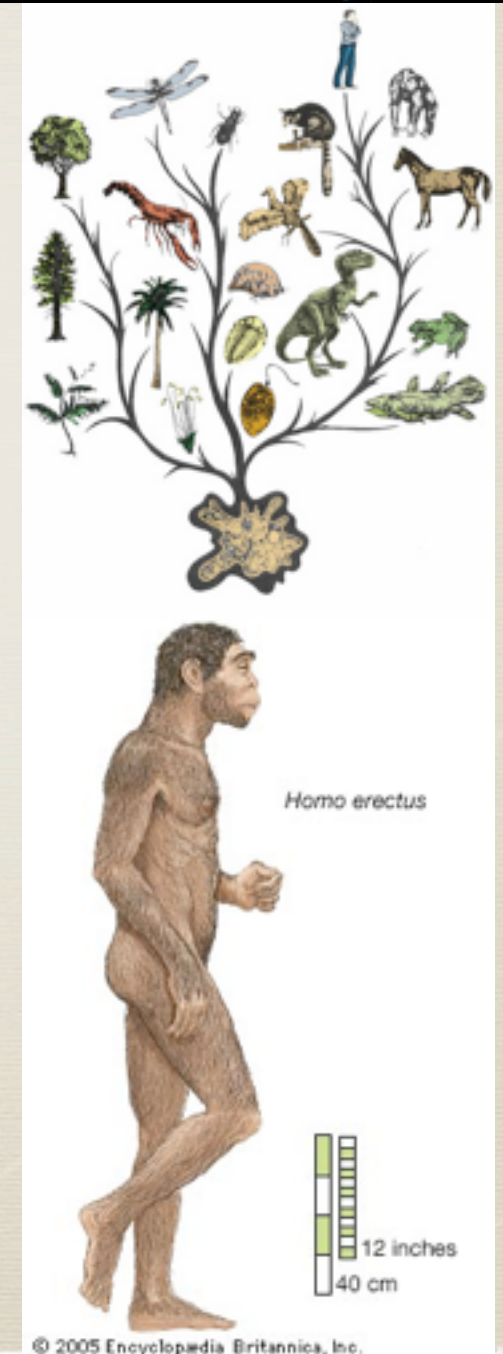
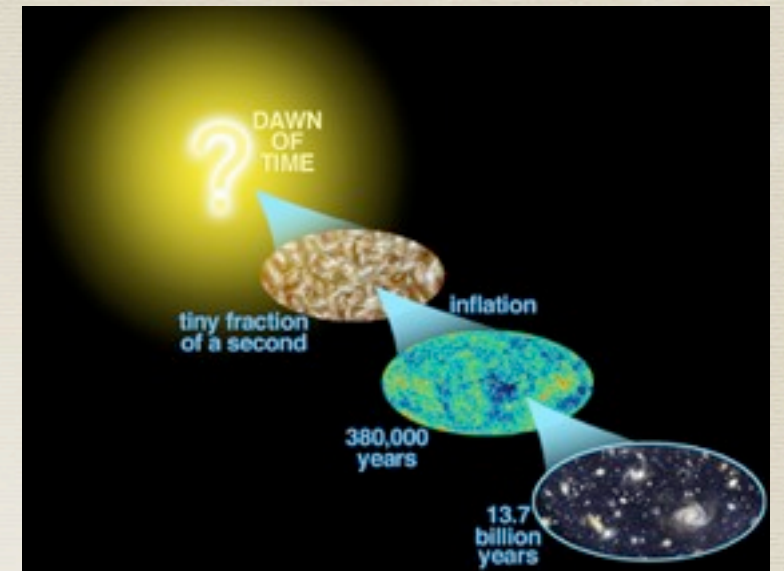
- * Science of **Evolution** is about **physical** development of life over time.
Gives us **insights** about how God may have prepared for the Human-Event. Clearly shows a **gradual** unfolding through process of descendance.
- * Coupled with Big Bang, gives us what is to date most reliable **empirical account** of where we came from.

Evolution

- * Cannot easily harmonize Evolution with **Patristic interpretations** of Scripture.
- * Theory of Evolution of life brought a major **shift in perspective** that we have already implied in discussion of the Creation of matter out of nothing.
- * What was another major shift in thinking due to science?
 - * Earth not flat or center of universe.

Evolution

- * Through discoveries of science we see how **God** is creatively **involved** in Creation over very long period of time.
- * What is time to God?
- * Evident that development of **physical** characteristics of man came from lower animals, did **not** take place in an **instant**.
- * But **when** did hominids **become man** with soul, with image of God?



Evolution



Fathers do recognize change.

Gregory of Nyssa: *“The created nature cannot exist without **change**, because transition from nonexistence to existence is a **kind of motion** and change of nonbeing altered into being by the **divine will**.”*



* Can think of human being as **becoming**, reaching for perfection in the image of Christ.

* In joining with Christ we have a rebirth, transformation:

“being transformed into the same image from glory to glory, just as by the Spirit of the Lord” (2 Cor 3:18) *We become “partakers of the divine nature”* (2 Peter 1:4)

Evolution

- * Idea of God making a garden and one day taking dirt and making man in less than a day is **not realistic** view of creation today.
- * Key is **God creates**, He formed Man out of “dust”, from energies, atoms, living cells & organisms that had been created before.
- * Man was created when God gave him a **soul**, His living Spirit, and through this made Man **in His image**.
- * He later sends **Christ** for our perfection: The Christ-Event.



Evolution

- * Evolution science gives us **new insights** about our Creator and how He creates. We do not have to shy away from these findings but contemplate them.
- * What are some of these insights?
 - * **Diversity** desired by God.
 - * *How **many** are your works, O God.
You have made them all in **wisdom**.
The Earth is full of your creatures.
There is the sea, vast and wide.
There the creeping things beyond count,
Living things great and small.* (Psalm 104:24-5)

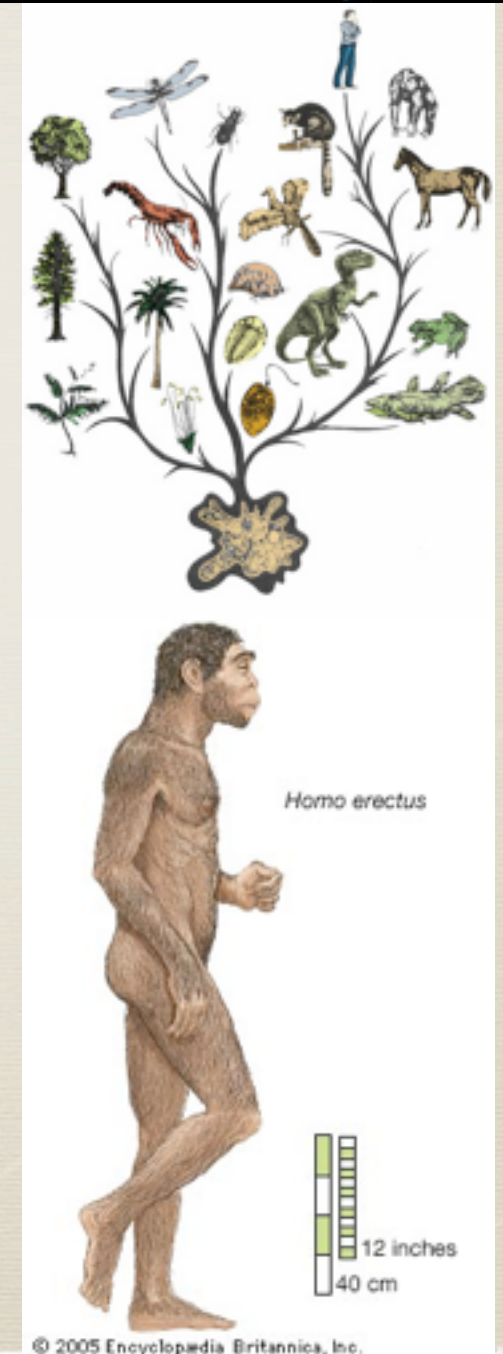
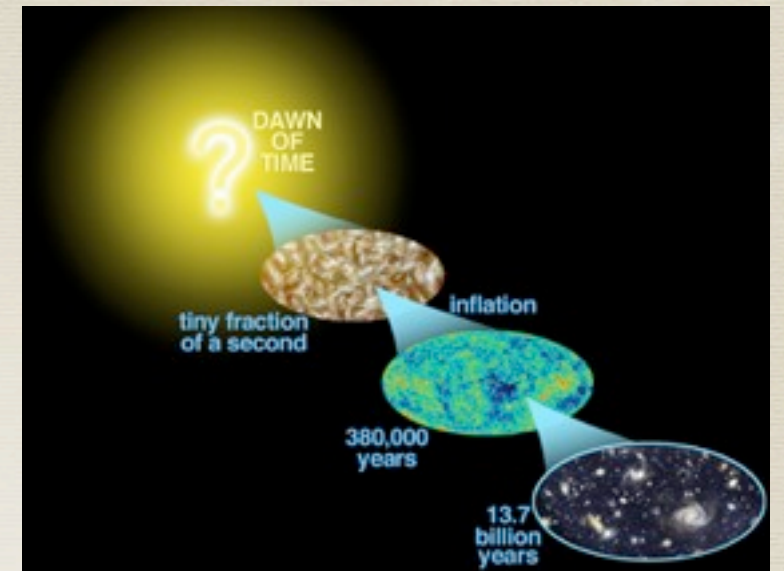
* Creation is **creative**.

Not a static universe, not like a watch, but one with a mechanism by which **life reproduces itself** in way that allows for **variety** and **new** biological possibilities.

* **Life** derives from a **single source** and is **interconnected**.

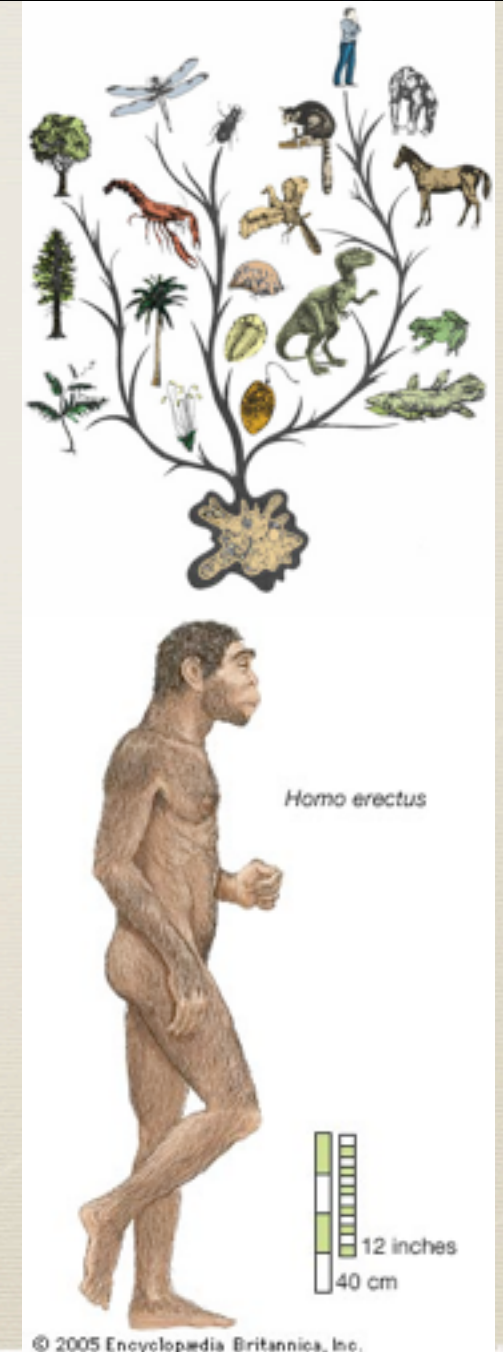
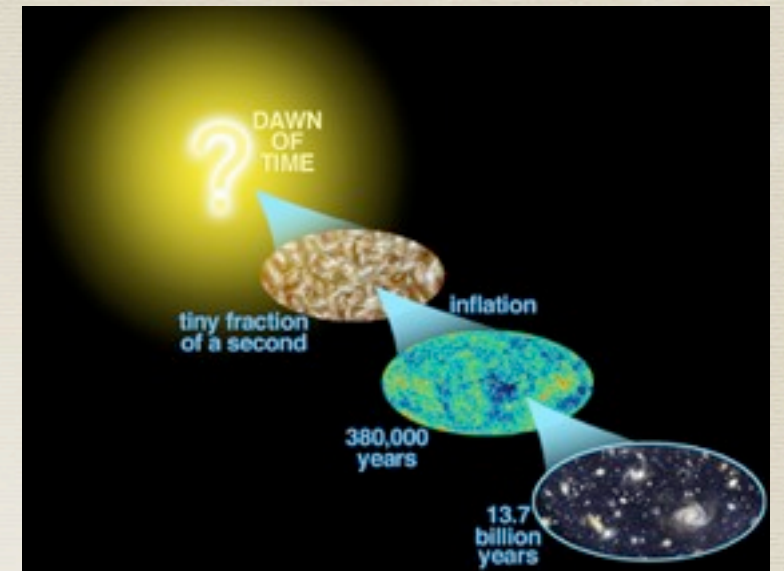
Evolution

- * Couple Evolution with **Big Bang** and we have an interesting **modern day** story about God's **process** of physical Creation.
- * Ever expanding **knowledge** of process of physical aspect of Creation can only **increase** our appreciation, wonder & **awe** of God.



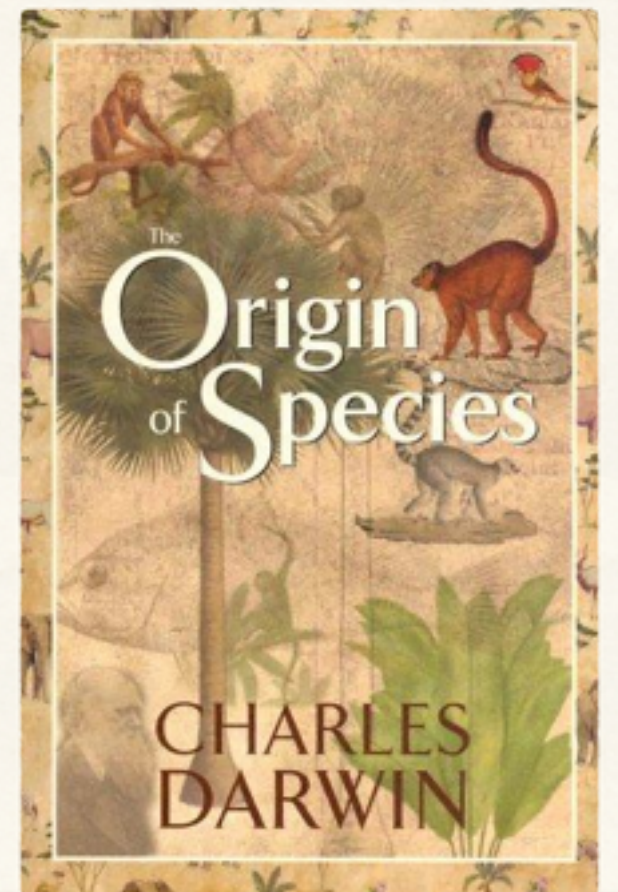
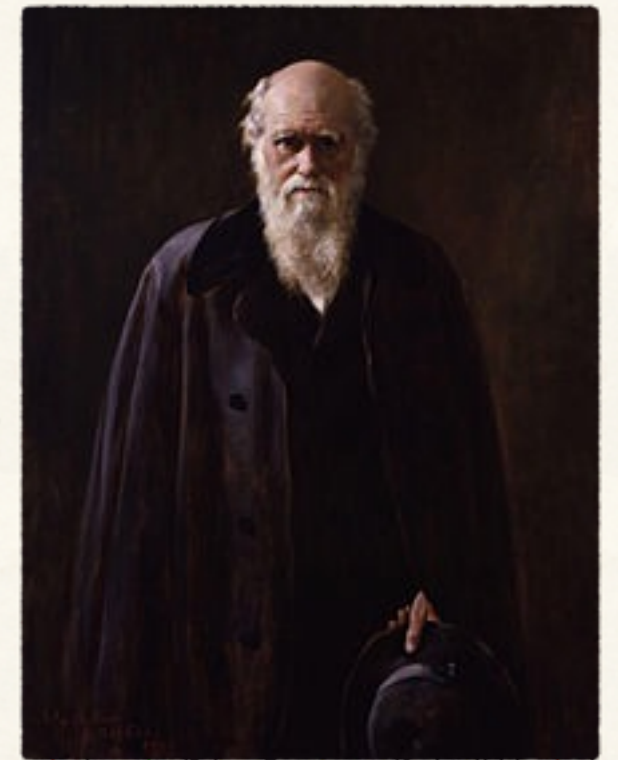
Evolution

- * Fathers repeatedly tell we can learn about God through the **contemplation** of His creation.
- * We have come a long way from the days of Moses & Patristic Fathers, where the **Earth** was seen as a **flat** fixed object as the **center** of the universe and was thought God created everything **instantly**.
- * Are some stuck with **flat earth** like **assumptions**?



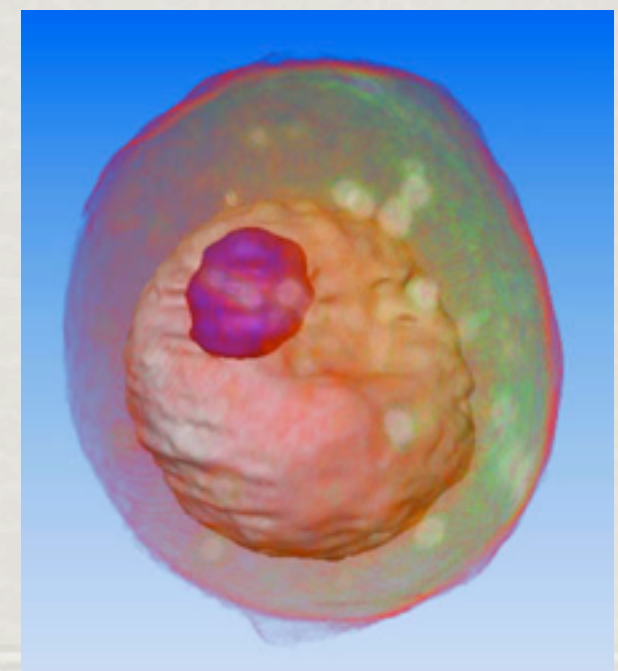
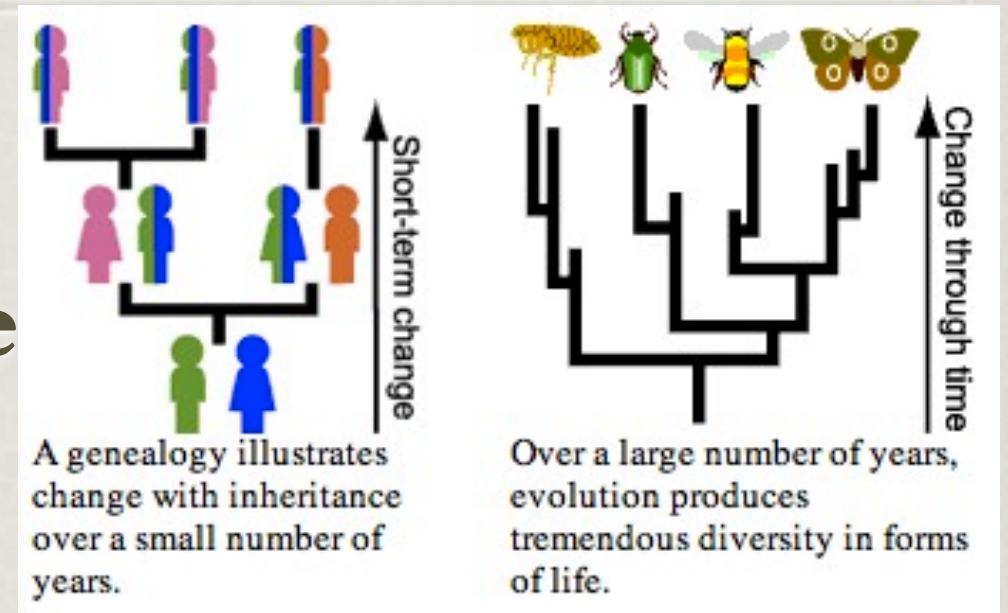
Evolution

- * **Charles Darwin** established (1859) all species of life have descended over long periods of time **from common ancestors**.
- * Dramatic finding causing major shift in human consciousness.
- * Changed the view that things were created in an instant, but instead, gradually over long periods of time. Major shift in world view.
- * He proposed a theory of development of life resulted from a process that he called **natural selection**.



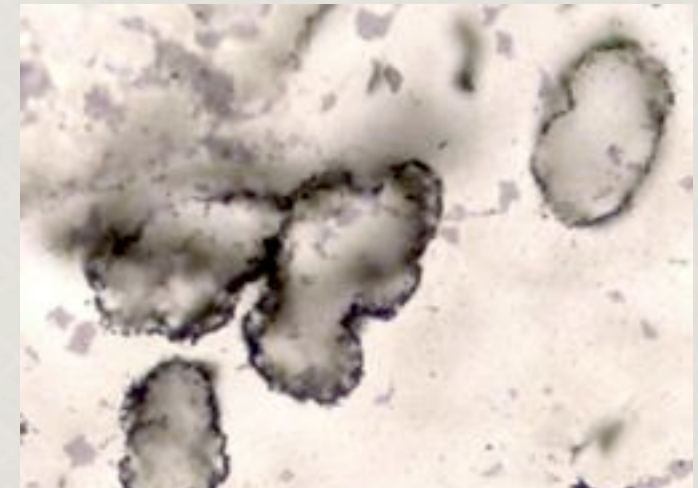
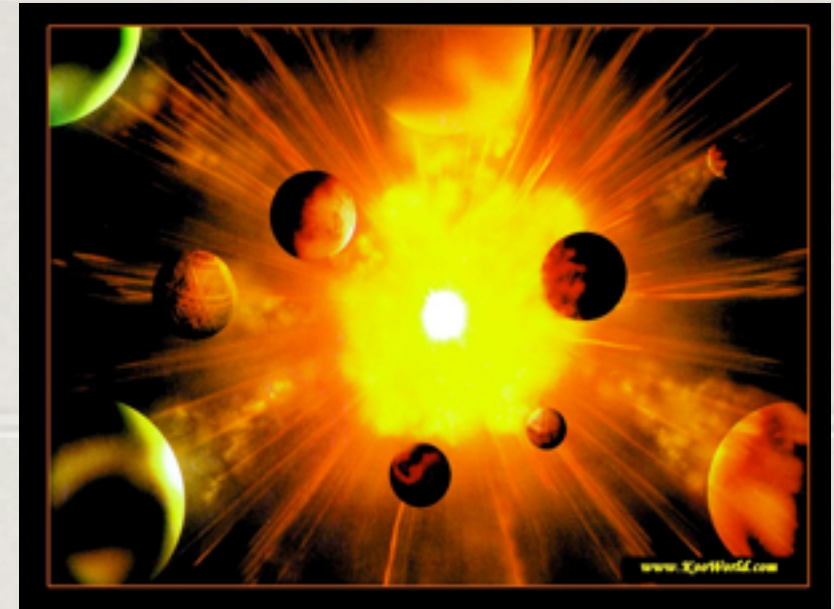
Modern Theory of Evolution

- ✿ **Central idea** – all life shares **common ancestor**
- ✿ Through process of **descendence** with **modification**, **common ancestor** of life on Earth gave rise to fantastic **diversity**.
- ✿ Documented in the **fossil** record.
- ✿ It began with a **single cell** of life long before Adam.



Fossil Record

- ✿ Earth > 4 billion years
- ✿ Life is > 2.5 billion years
- ✿ Vertebrates < 600 million years
- ✿ Mammals < 200 million years
- ✿ Everything comes from what proceeded it - often with new creations



Natural Selection

✿ Darwin had a **partial** view.

1. **There is variation in traits.**

For example, some beetles are green and some are brown.



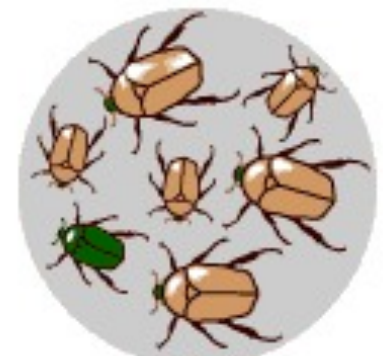
2. **There is differential reproduction.**

Since the environment can't support unlimited population growth, not all individuals get to reproduce to their full potential. In this example, green beetles tend to get eaten by birds and survive to reproduce less often than brown beetles do.



3. **There is heredity.**

The surviving brown beetles have brown baby beetles because this trait has a genetic basis.



4. **End result:**

The more advantageous trait, brown coloration, which allows the beetle to have more offspring, becomes more common in the population. If this process continues, eventually, all individuals in the population will be brown.



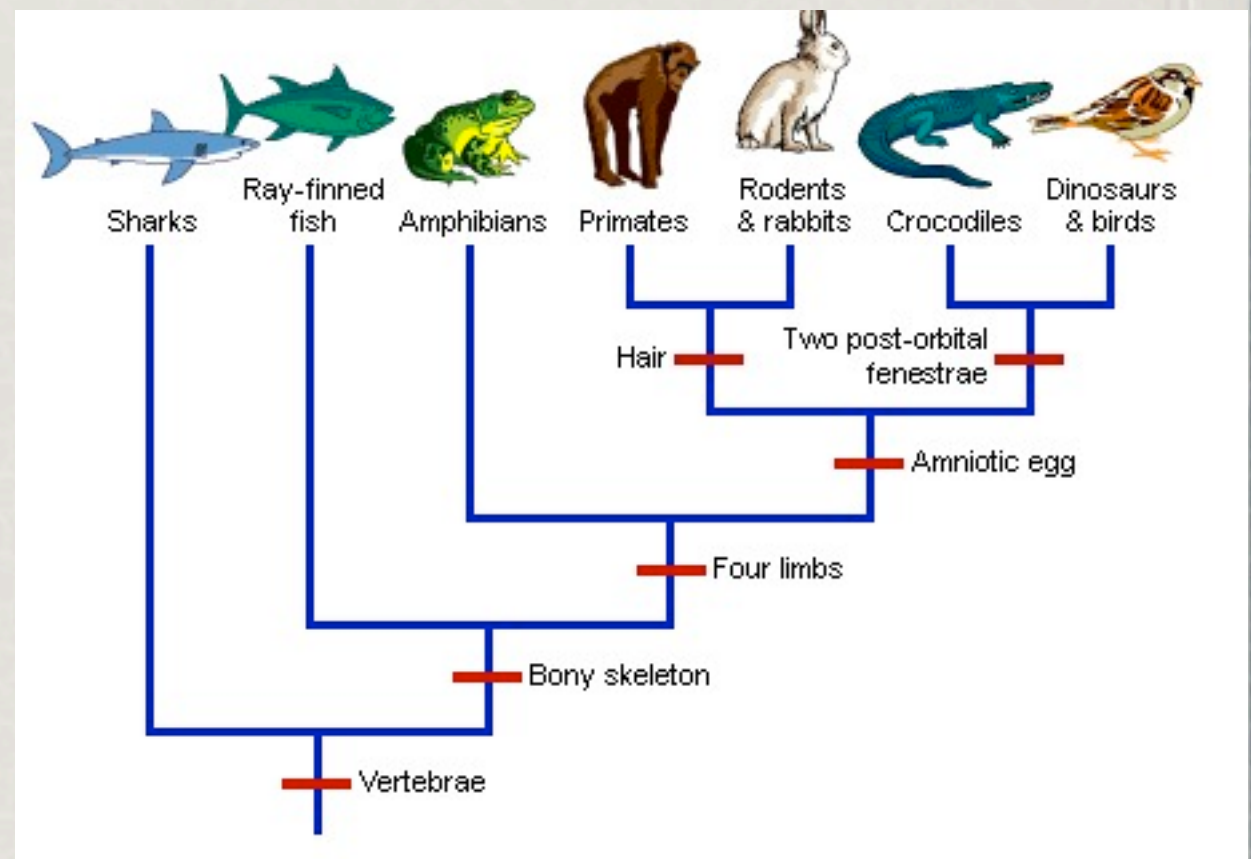
✿ Does not explain the **emergence** of new species.

Mechanisms of Evolution

- ✿ **More than** “survival of fittest” today.
- ✿ **1. Mutation,**
Changes in DNA allowing for emergence of **new species**.
A single mutation can have a large effect, but often due to accumulation of many mutations.
Big Question: What causes such mutations?
- ✿ **2. Migration** (gene flow),
Movement of genes from one population to another. How?
- ✿ **3. Genetic drift**
In each generation, some individuals may, by chance, leave behind a few more descendants than other individuals. The genes of the next generation will be the genes of the “lucky” individuals, not necessarily the healthier or “better” individuals.

Theory of Evolution

- ✦ Earlier, based on work of Carolus Linnaeus (1735), Scientists began categorizing the forms of life using “*family trees*.”
- ✦ Today, estimate there are 8.7 million species, 1.3 have been cataloged. Each year identify 15,000 new species.



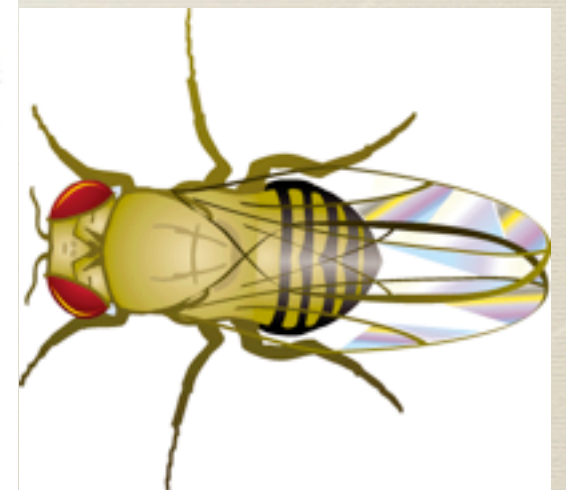
Genetics

- ✿ Discoveries gone beyond fossils with science of genetics
- ✿ 1953 James Watson and Francis Crick Discovered the Double Helix which accounts how a genetic code is passed on as cells divide.
- ✿ 1970 they began to study the individual genes.
- ✿ 1991 the Human Genome Project was launched by the US government.
- ✿ Now know DNA's genetic code is virtually identical for all living organisms.



Genetics

- ✧ Know there is a genetic **identity** of man with **chimpanzees** and **gorillas** 98% - 99%
- ✧ Not much difference between **mice** and men. Each have about 30,000 genes, yet only **300** are **unique** to either organism.
- ✧ **Fruit flies** share nearly **60%** of human genes.
- ✧ Clearly, there is an underlying **oneness of life**.
- ✧ Does this surprise you?



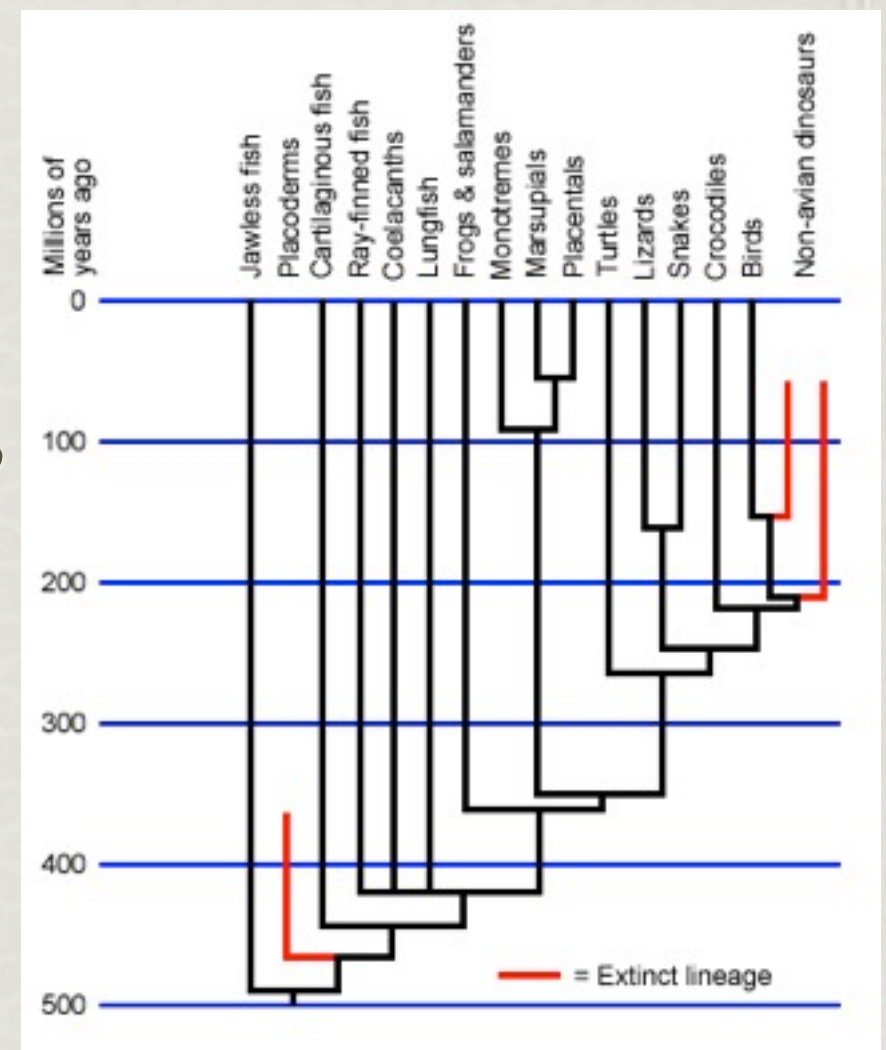
Oneness of Life

- ✦ A Pastor's words:
Some fundamentalists-minded person says something like, 'Don't tell me I'm related to monkeys.'
- ✦ *The fact of the matter is that now we have discovered DNA and its code, we know that we are not only related to monkeys, we are related to **zucchini**.*
- ✦ *So **let's get over it.***
Marlin Lavanhar



Timeline of Evolution

- ✦ Think in God's time: If you squeezed the 3.5 billion years of life on Earth into 1 minute,
- ✦ **50 seconds** for multicellular life to evolve,
- ✦ **4 seconds** for vertebrates to invade land,
- ✦ **4 seconds** for flowers to evolve—
- ✦ **Last 0.002 seconds** would “modern” humans arise.
- ✦ Man arises from **what was made before** - made from “earth” (star dust). But is **unique**.
Crown of Creation.



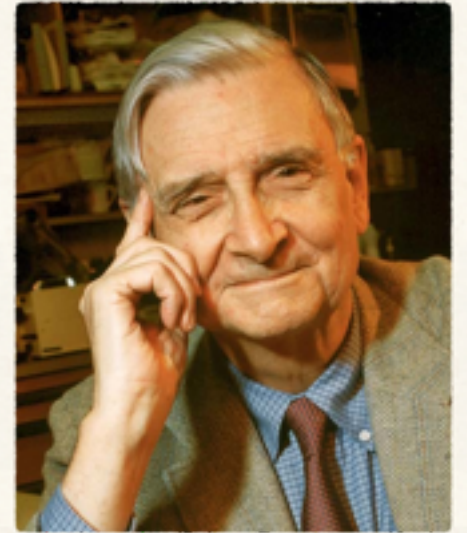
Evolution

- * Mystically, from stardust there emerged a **living cell**.
- * From a single cell, **all forms of life** emerged over many years of creative actions, yet, how, we do not know.
- * More than survival of fittest and beyond probability theories.
- * Finally God formed **Mankind** in His image.
- * But **When** and **How**?

Emergence of Species Humans



Humans



* Edward O. Wilson - *The Social Conquest of Earth*

* “*LIKE ALL GREAT PROBLEMS in science, the evolutionary **origin** of humanity first presented itself as a tangle of **partly seen** and partly **imagined** entities and processes. Some of these elements occurred well back in geological time, and **may never be understood** with certainty.*”

* “*NO INDIVIDUAL PATH of evolution of any kind can be predicted, either at the beginning or even toward the end of its trajectory.*”



Humans

- * Science shows by **fossil records** there is an emergence of a human species different from other animals.
- * View different from that of early Church Fathers.
- * Must distinguish between the **human as an object** in science and the notion of **being Human** in our Orthodox **Faith**.

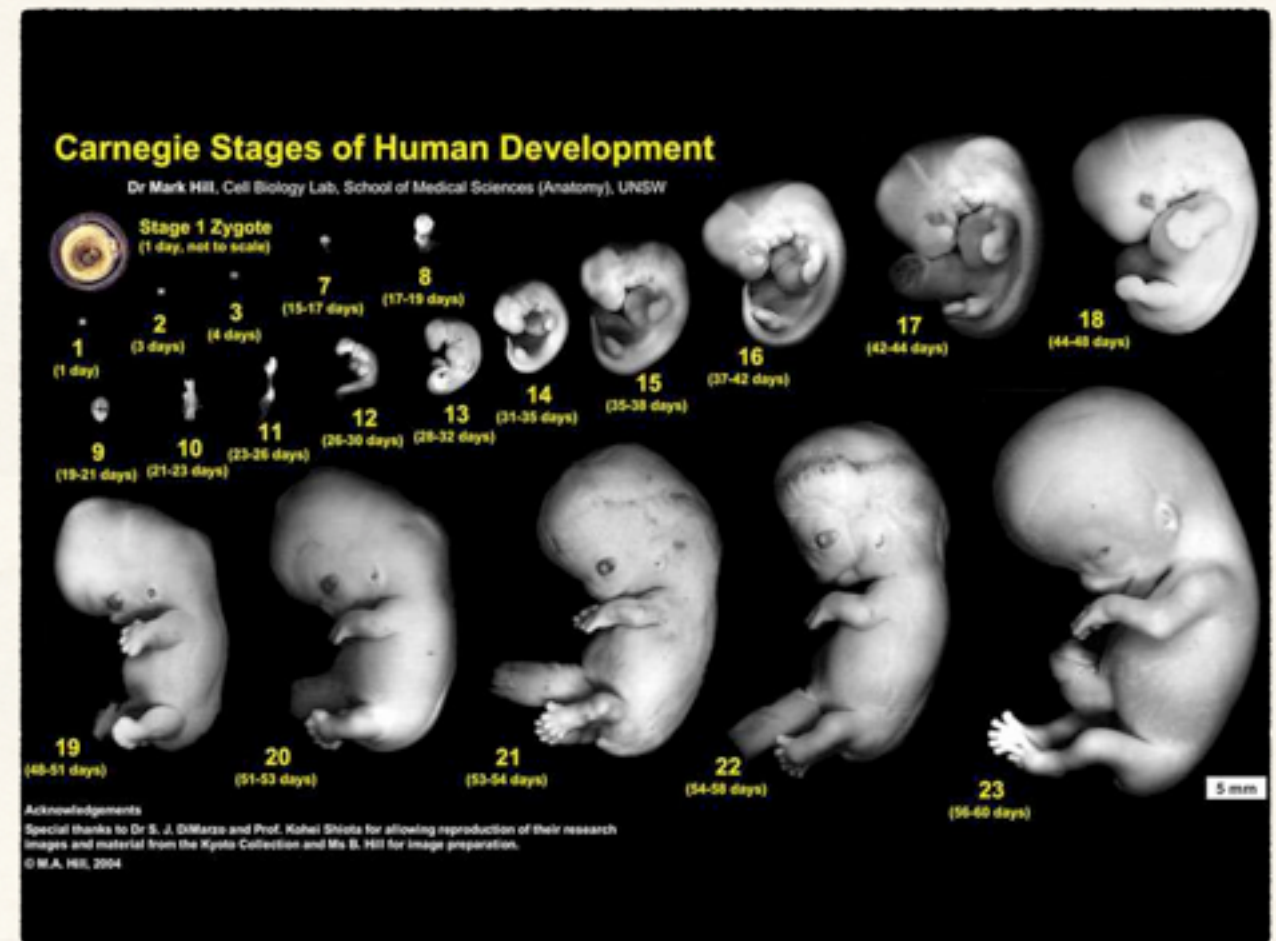


Humans

- * Begin by accepting idea that **fullness** of nature of a human can **never** be **fully known** in science.
- * Can we say love exists for purpose of genetic continuity?
- * In medical science we **do not expect** a medical doctor to **know everything** about human life.
- * Likewise an evolutionary scientist does not know everything about humankind.
- * Because we have cells, hearts, lungs, & brains... does it mean we are those things?
- * Standing upright or using tools does not make us human.

Life From a Cell

- * Think of how the initial life of a human being unfolds.
- * It did not occur 'ex nihilo' but comes from already existing life.
- * A child does not appear all at one moment. It is a process.
- * Fossil record suggest the similar process for physical nature of mankind (Homo Sapiens)



Humans

- * Could say human development began 6 million years ago with emergence of new species that was a split from the anthropoid ape lineage.
- * They were called hominids- upright posture & bipedal locomotion
- * Yet totally different species from humans
- * Is a child in earliest stages of development recognizable as human being?



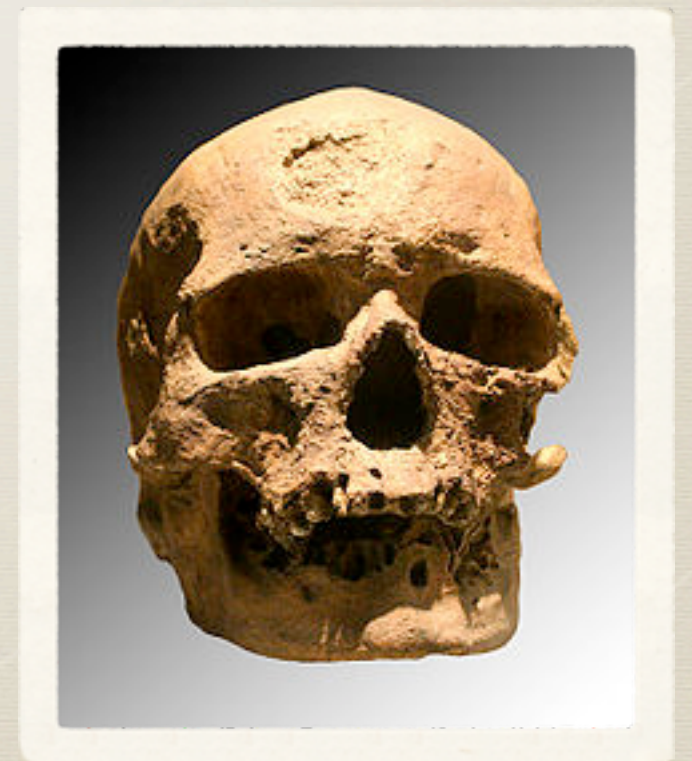
Humans

- * From 6 million to 2.5 million years ago the changes have to do with dentition and facial features and refinement in bipedal locomotion.
- * 2.5 million years - advent of first tools and anatomical changes in face.
Something new is happening.
- * 1.8 million years homo-erectus emerges - hand ax
 - * brain 800-1000 cc - lower range of human brain.
 - * Head still different but rest almost the same.



Humans

- * Begin to see use of fire and stone tools, walking upright with competency.
- * There were other hominoids at this time with even larger brains.
- * 30-40,000 years ago (Upper Paleolithic) we find hominids we could recognize. Neanderthal man disappears and is replaced by a variety of Homo sapiens such as Cro-Magnon man and Grimaldi man
- * We see the growth of man like creatures after a slow period of gestation.

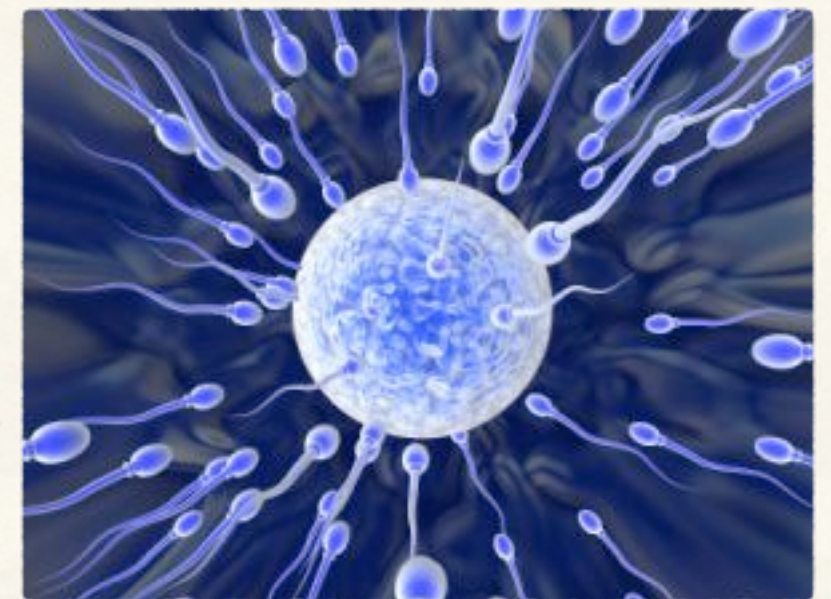
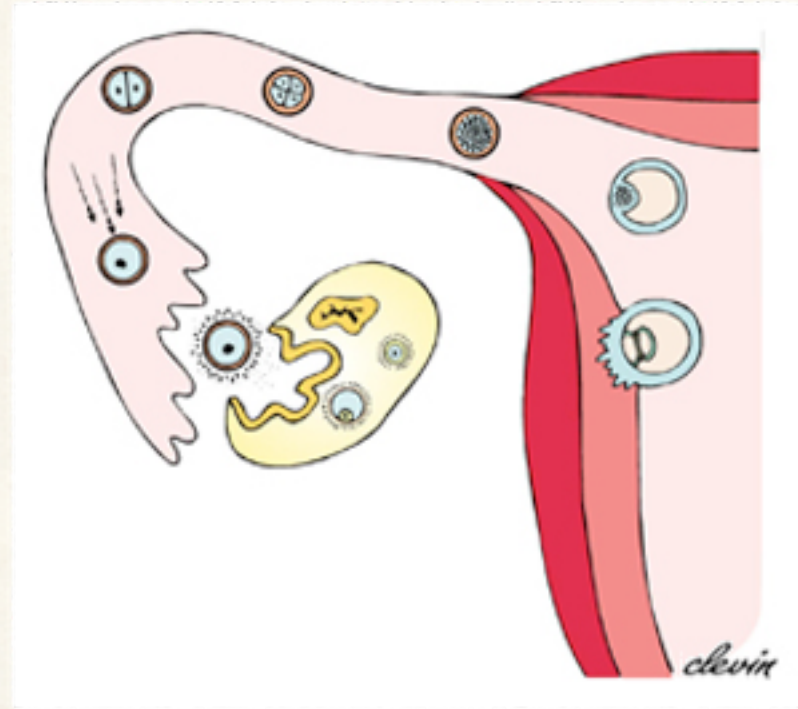


Living Soul

- * Somewhere in this process God “*breathed into his face the breath of life, and man became a **living soul**.*”
- * What is a **living soul**?
 - * St. John Chrysostom: *An active soul, which has the members of the body as the implements of tis activities, submissive to its will.*
- * Essential link between the Divine and Creation.
Through Man, Matter becomes God’s servant. Divine Consciousness is now manifested in His creation.

Humans

- * To get to this point, many other life forms had to exist, species were made and then died out.
- * Think of human conception process. In women, each time one egg is ovulated, as many as 2,000 are lost. In males between 200 and 600 million sperm cells are released in each ejaculation yet only one sperm cell is required for conception.
- * There were many hominids before humans, but out of this process humans were formed.



Humans

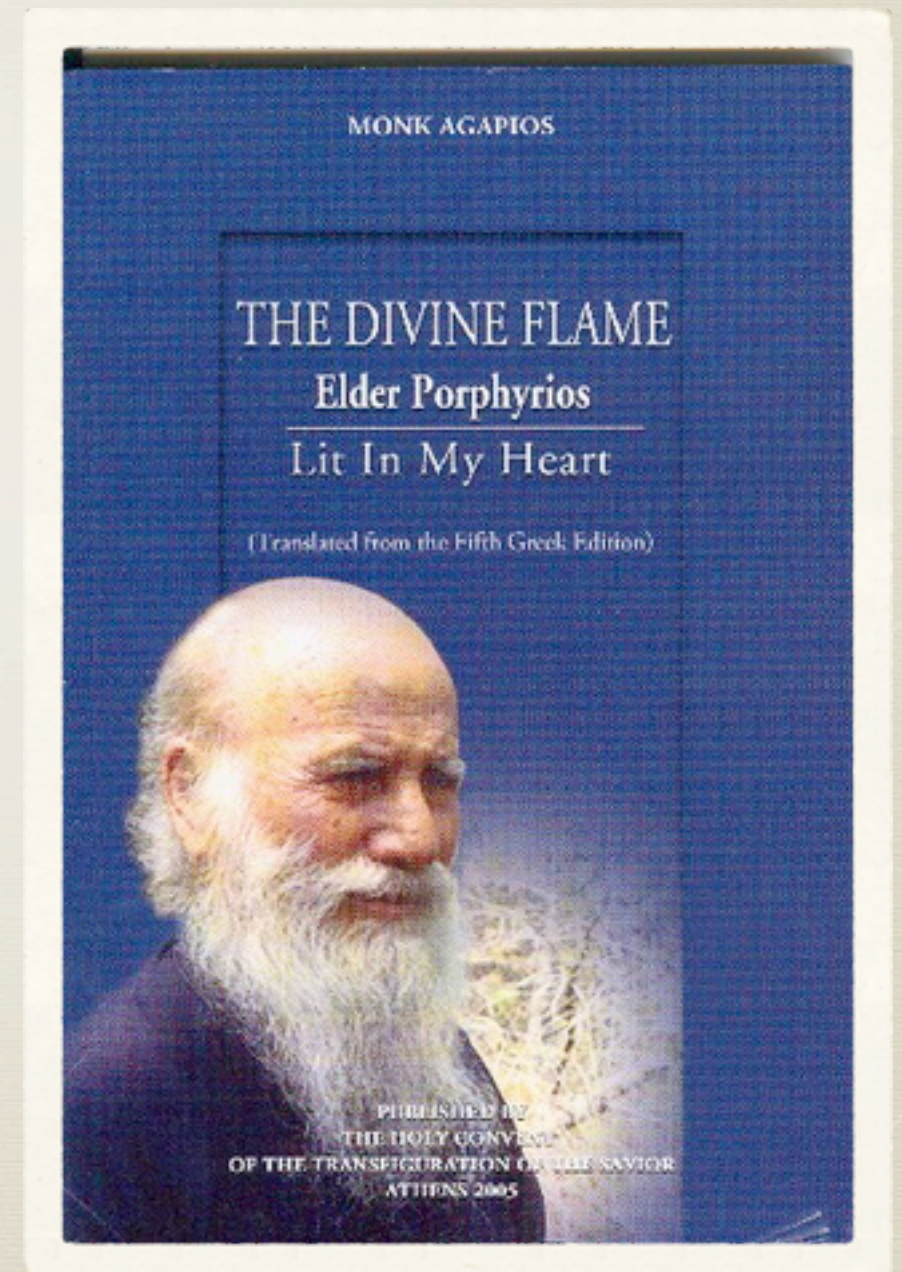
- * When did we actually become human?
 - * Similar to question of when did we become a child, an adolescent or an adult. Can't say exactly.
 - * We can never know for sure.
Impossible to say when we became fully human like ourselves.
- * Was it a **gradual** process or was there a **specific** creative event?
 - * Genesis says it occurred with “**breath**” of **God**. This is interpreted to mean we **received a soul**, from the Spirit of God. At some point were made in **image of God** with a soul. Much happened previously to prepare for this act.

Humans



- * What is our final frontier?
 - * What **Christ** brought to us in the Christ-Event.
Shown how to perfect our humanness thru Christ.
 - * The final science is the science of the soul.
- * Can we gain this through natural science?
 - * No. Spiritual knowledge cannot be attained via natural science, philosophy or the arts.
- * Where do we get it?
 - * This is the work of **grace** in the **Church** and the purpose of the Orthodox way of life: purification, illumination and glorification - theosis.

- * Elder Porphyrios (1906 - 1991)
- * *“All around us are **droplets of the love of God** - both **things animate and inanimate**, the plants and animals, the birds, and the mountain, the sea and the sunset and the starry sky.*
- * *They are **little loves** through which we attain the great love that is Christ.”*
- * *But when one does not possess **inner grace**, nature is of no benefit.*
- * ***Nature awakens us**, but cannot bring us into Paradise.”*



Many Unanswered Questions

- ✿ All evidence supports central conclusions of Theory of Evolution.
 - ✿ 1. Physically, life on Earth has evolved
 - ✿ 2. Species appear to share common ancestors.
- ✿ Mysteries still abound for scientists.
How does evolution happen?
How does evolution produce **new and complex features** such as **human eye**?



How?



- ✿ At issue is **HOW** Humans came to be in time:
 - ✿ Most evolutionists claim it was by means of the transformation of one kind of creature into another, "*complex forms being derived from simpler forms*" in a process taking millions of years, yet they do not know how.
 - ✿ **Atheists** will say - natural process guided by **necessity or probability**.
 - ✿ **Believers** will say - with intimate participation and **guiding hand of God**.
 - ✿ Evolutionary perspective shows the **Creator** involved **within Creation** for all time. **Glory be to God!**

What is Nature of Mankind?

*God created man in his own image,
in the image of God he created him*
Gen 1:27

Nature of Mankind

- * **What makes us human?**

- * Can we be described by bones, organs, genes....?

- * Do we know and experience another person by their physical elements?

- * How do we explain Holy People such as Elder Porphyrios with their clairvoyance?

- * How do we explain the Christ-Event?

Nature of Mankind

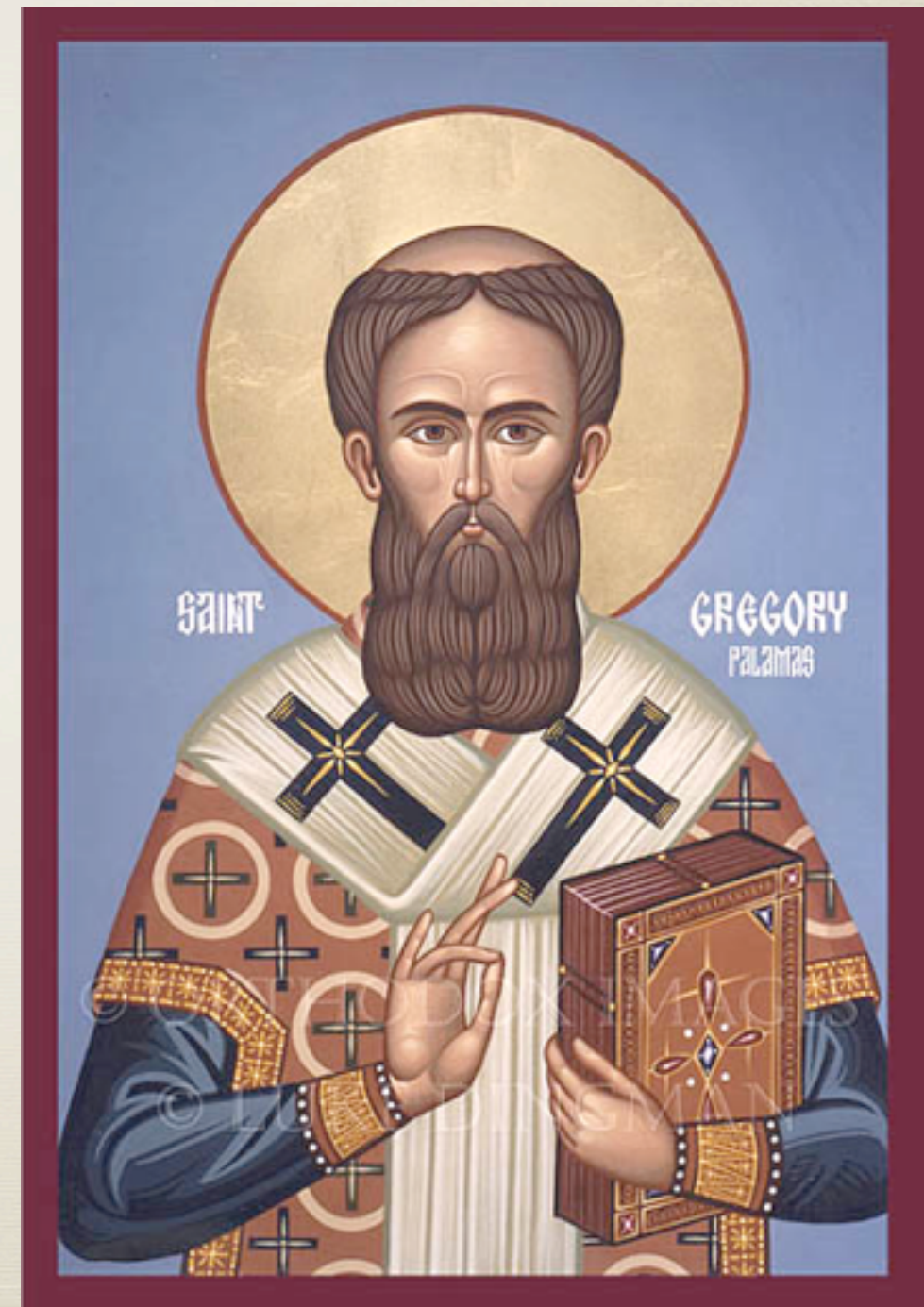
- * Lessons from Genesis Story
 - * Creation was **out of nothing** in beginning.
 - * God first prepared the “**Garden**” for man.
 - * God formed man giving him a **soul** from His “breath.”
 - * Made him **steward** over creation.
- * What else?

Made in His Image

- * God formed Man in His **image and likeness** - not simply material being.
- * **Integral Beings** with **soul & body** as one.
- * **Consciousness**, Awareness of ourselves as well as other beings, and rational thinking.
- * **Free will**: We can choose our actions.
- * **Creativity** and procreative abilities
- * Can **imagine a future** and understand that death is a limitation placed upon us.
- * Capable of **personal relationship with God** and can aspire to things of God and of eternity
- * **Incarnate spirit** - Breath/spirit of God enlivening us

Made in His Image

- * Gregory Palamas
- * *"What did he breath into him?"*
- * *The breath of life... 'The first man... became **a living spirit.**'*
- * *But what does 'living spirit' mean?*
- * *Eternally living, immortal, which is the same as saying rational... it is also **endowed with divine grace.***
- * *For such is the truly living soul.*
- * *And this is identical with '**in the image**' and, if you like, '**in the likeness**' too."*

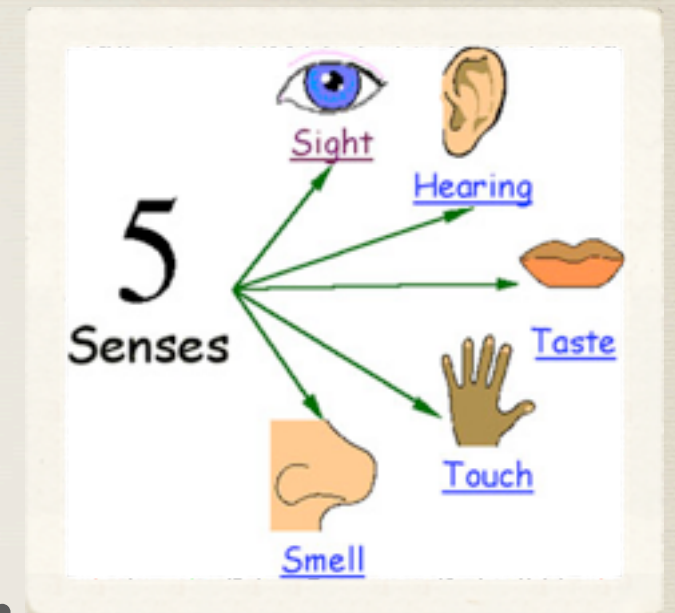


Made in His Image

- * This **inbreathing from God** is what is most significant.
- * Creation of man more than our physical makeup (star dust).
- * Creation of Man is about **free and intellectual soul** and our communion with God and His grace.
- * What was nature of relationship with God and man initially in Genesis?
 - * God began to **speak with man** and give him the **consciousness of God** and show he is **expected** to respond out of love.
- * God takes a biological organism and forms a partner for Himself.

Nature of Mankind

- * What **freedoms** do we have as a result of this inbreathing?
- * **Feeling** and **knowing** through our **senses**.
- * Not a slave to these, but, with **self-consciousness** and **freedom**, have power of own motion to **participate** in Sprit's acts.
- * What does this make the body?
 - * **instrument of Spirit** with an infinitely complex sensibility.
- * Leads to doctrine of **Synergia**



God, Man & Creation

- * How is God connected with Creation?

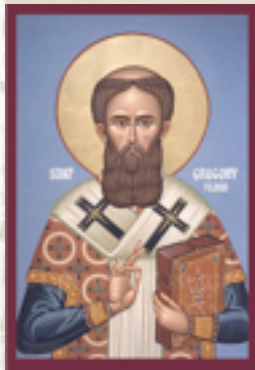
- * Gregory Palamas says:

*Man made in the "image" develops into "likeness," particularity **by means of the virtues** which are the work of the will helped by grace.*

imposing himself** to break the connection between process of nature establishing **spiritual connections** with moral character ordering the world **binding spirit and nature together.

- * *Mankind **raises the world** to a higher sphere, **spiritualizing matter.***

- * We are to act in **cooperation** with God for salvation of all creation.



God, Man & Creation

- * Only through mankind Creation attains a state of **complex organization** involving Man's Body and Soul **connecting all to Divine Spirit**.
- * Think about this. How does this differ from materialist's view?
 - * Through work of mankind entire world is **spiritualized**.
- * How does this happen?
 - * Soul



Direct Knowledge



- * Fathers call higher and intellective part of soul, **nous**. Often translated as mind.
- * When **nous** is **freed** from all representations and images of things of world, **knows God in a direct way**.
- * Is in "**heart**" where Mind (nous) must gather itself to experience the grace of God.
- * "Heart" is **inner most** organ of body and center of encounter between body and soul.
- * **Not** pure intelligence, **intellectual reasoning**, that governs man's encounters with God, **but entire being** in whom understanding and feeling make us the unity, whole.

Direct Knowledge



- * Direct knowledge does not come from a scholastic method with deductive knowledge. But begins with a purified mind so mystical reality of God can radiate a **spiritual "light"** in it - Energies of God.
- * We can know God through His energies by contemplation of the **uncreated light** that is sent forth from Him like the rays are sent from the Sun. We join with His energies and understand the nature of His creation directly.
- * Only comes through what the Fathers call **purification of the Heart.**

Purification



St. Gregory Palamas sought to purify the body in a way that put it at the service of God and love.

"Detachment does not consist in mortifying the passionate part of the soul, but in removing it from evil to do good, and directing its energies toward divine things..."

- * *the impassible man...is marked by the virtues, as men of passion are marked by the evil pleasures;*
- * *has tamed his irascible and lustful appetites (which constitute the passionate part of the soul), to the faculties of knowledge, judgment, and reason in the soul."*
- * Someone translate?
 - * Through detachment we gain purified mind that can concentrate on God. - nature of Church Fathers

Direct Knowledge

- * Not Theory!
- * We know this clearly through writings & experience of
Maximus the Confessor (580 – 662)
Saint Symeon the New Theologian (949–1022)
Saint Gregory Palamas.(1296-1359)
Numerous others
- * Gregory Palamas especially instructive - engaged in a debate between a western philosopher named Barlaam in 14th century.
- * Teachings of Saint Gregory became doctrine in Church.

Personal God

- * Because of being honored with being in the image of God, our God becomes a **personal God**.
- * Our heart and reason calls out for **communion** with the **personal God** fully capable of an **infinite relationship** so we can understand fully the meaning of existence.
- * This what Creation of mankind is all about, seeking union with God.
Given different capability and calling than other animals.
- * This is work of the Orthodox Scientist.

Summary

- * We have shown:
 - * Man is **more** than a physical **biological** being.
 - * Created in **image of God** with the power of soul integral to his physical being
 - * Capable of **Union with God**
 - * Called to Be **God's helper** in spiritualization of all creation.
- * When the time was right, God formed Man in His image and likeness distinct from all other beings, out of stardust and life, giving consciousness to the Cosmos.

St. John of Damascus



- * *What is it that has ordered things of Heaven and those of earth, the things which move through the air and those which move in the water...? What is it that combined and arranged them? What is it that set them in motion and put them on their unceasing and unhindered courses?*

St. John of Damascus



- * *Or is it that they had no architect...? But who is the architect of these things? Did not he who made them also bring them into being?*
- * *We shall certainly not attribute such power to spontaneity. Even grant that they came into being spontaneously; then, what maintains and keeps the principles by which they subsisted in the first place?*
- * *It is most certainly some other thing than mere chance. What else is this, if not God?*

Questions

- * How can Evolution raise doubts regarding the Truth of our Orthodox Christian faith?
- * Seek God in all ways.
Remember, Scripture tells us that he who purifies his heart will see God.

THE FALL & SALVATION

Next Week