

**Pursuit of Truth**

**Sorting Claims of Exclusivism vs. Inclusivism vs. Pluralism**

**The Edge of Evolution**

**Overview of Intelligent Design**

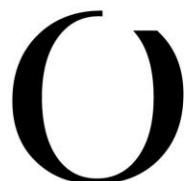
**Quantifying the limits of Darwinism**

**Not out of this world: the sewers of Paris**

R W Starr

[design@openspc.com](mailto:design@openspc.com)

The Metanarrative



*The circle cannot be drawn.*

# **WEEK 1 – OVERVIEW & FIRST QUESTIONS**

# The Metanarrative

- Pursuit of Truth – Key questions
- Sorting Claims of Exclusivism vs. Inclusivism vs. Pluralism
- Infinitely Large, Infinitely Small, Infinitely Complex
- The Edge of Evolution - Quantifying the limits of Darwinism
- Overview of Intelligent Design
- Not out of this world: the sewers of Paris
- Discovering order in chaos

*Is there a grand story able to command obedience?*

*The post-modern or post-post-modern world claims there is not.*

*How can Special & General revelation be more explicitly connected?*

*Who pegs the meter?*

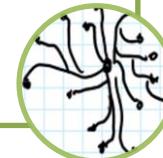
*What have you? What are you learning about Truth?*

*Definition and redefinition – ready?*

- 1<sup>st</sup> & 3<sup>rd</sup> Tuesdays
- 8-10:30 pm
- Location: Starr home
- East Liverpool OH

*Starting January 2023*

## Meeting



- Structured & guided discussion
- Reference charts will be used.
- Theology as Queen of the Sciences
- Technical background is not required
- Outside materials can be introduced
- Not a Bible study but scriptural insight is sought.
- Not for the uninitiated in the Faith once delivered.

## Format



- Your body, mind & spirit
- Local participants are strongly encouraged to be physically present.
- A live connection via Teams is being pursued but real-time discussions may prove difficult for those attending at a distance.

## Bring



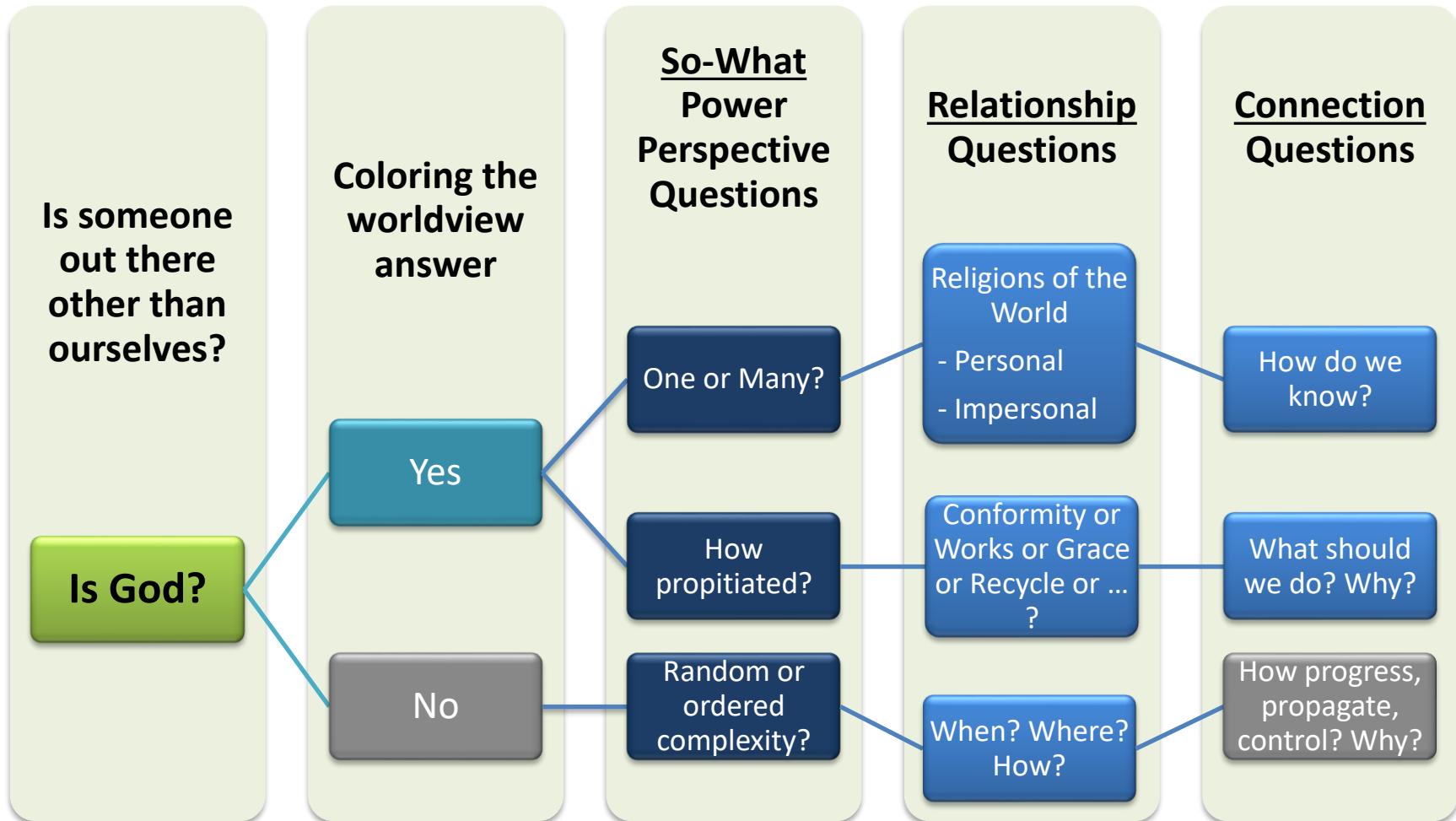
- Send email to [design@openspc.com](mailto:design@openspc.com)
- An invitation to MS Teams will be sent.
- Respond to become a member.
- Some slides and review topics will be made available.
- Live interaction will be attempted but may be at a different time.

## On-Line Connection



*The circle cannot be drawn.*

# What are the Key Truth Questions?



## God Is Revealed

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### Pegging the Meter

**Oh, thou Holy Ghost, parade round  
our minds taking captive our thoughts  
unto the Christ.**



**Thou shalt love the Lord thy God with  
all thy heart, with all thy soul, with all  
thy mind and with all thy strength.**

**... And thy neighbor as thyself.**

- Trinitarian
- No break in Godhead (especially Psalm 22)
- Creator of all, seen & unseen
- General & Special Revelation
- Personal & Impersonal

### Chalcedonian Christology

### Nicene – Apostles – Athanasian Creeds

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- Fully God & Fully Man
- Virgin birth
- Mary is Theotokos, the God bearer.
- Manhood of Christ is not dissolved into the sea of the Godhead.

### Resolvable Conflicts

### What is His purpose?

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- He said He would come for us, and He did.
- He said He would send the Comforter to lead us into truth, and He did.
- Maintain Unity
- Science has a voice
- Young Earth position not required
- The Fall of Man without complete depravity of reasoning
- Saul's armor does not fit David, i.e., differing multigenerational perspectives
- **Pray . . .**

Following, then, the holy Fathers, we all unanimously teach that our Lord Jesus Christ is to us One and the same Son, the Self-same Perfect in Godhead, the Self-same Perfect in Manhood; truly God and truly Man; the Self-same of a rational soul and body; co-essential with the Father according to the Godhead, the Self-same co-essential with us according to the Manhood; like us in all things, sin apart; before the ages begotten of the Father as to the Godhead, but in the last days, the Self-same, for us and for our salvation (born) of Mary the Virgin Theotokos as to the Manhood; One and the Same Christ, Son, Lord, Only-begotten; acknowledged in Two Natures unconfusedly, unchangeably, indivisibly, inseparably; the difference of the Natures being in no way removed because of the Union, but rather the properties of each Nature being preserved, and (both) concurring into One Person and One Hypostasis; not as though He were parted or divided into Two Persons, but One and the Self-same Son and Only-begotten God, Word, Lord, Jesus Christ; even as from the beginning the prophets have taught concerning Him, and as the Lord Jesus Christ Himself hath taught us, and as the Symbol of the Fathers hath handed down to us.

# Council of Chalcedon

Recognized as last generally accepted church council as fully gathered.  
(Roman Catholic, Anglican, Protestant, & probably Orthodox)



# Sorting Truth Claims

## Exclusivism

- Central Truth claims of Christianity are true.
- Where Truth claims conflict, other religions are false.
- Jesus Christ is the unique incarnation of God. Salvation is available only via person & work of Jesus Christ.
- God has revealed Himself definitively through the Bible.
- Universe was created revealing His handiwork to all. Evolution may reflect some truths, i.e., recognizes both general & special revelation.

## Inclusivism

- Central Truth claims of Christianity are true and ...
- Links to skepticism, higher-critical analysis of history & scripture and recognizes Darwinian conclusions challenging Truth claims.
- Jesus is superior savior, but non-Christian religions may provide other saving ways.
- Uses interreligious dialog as means of reaching mutual truths.
- Expect anonymous Christian – implicit salvation w/o preaching. (*Karl Rahner*)

## Pluralism

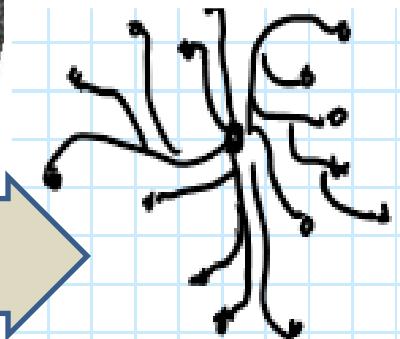
- Rival Truth claims are parts of kaleidoscope of preferences & values.
- Exclusivism is a vestige of intolerant religious imperialism.
- Rejects Christianity as superior, unique or normative. If a God, then expect soteriological universalism solution.
- Salvation / Enlightenment / Liberation is reality of all major religions. Evaluate pragmatically.
- Religion is private, i.e., not in public fact domain.

# Are you the man from Krumme?



And  
where on  
the map  
would  
you place  
Krumme?

i.e, the hinterland, of the hinterland, of the hinterland,  
of the hinterland . . .



. . . And that qualifies you to make your own creeds  
and truth claims ???

# Infinitely Large Infinitely Small Infinitely Complex

Scaling down to nanoMfg:

100nm > nanoMfg > 1nm

Meter

Millimeter  $10^{-3}$  meter

Micrometer  $10^{-6}$  meter

Nanometer  $10^{-9}$  meter

Picometer  $10^{-12}$  meter

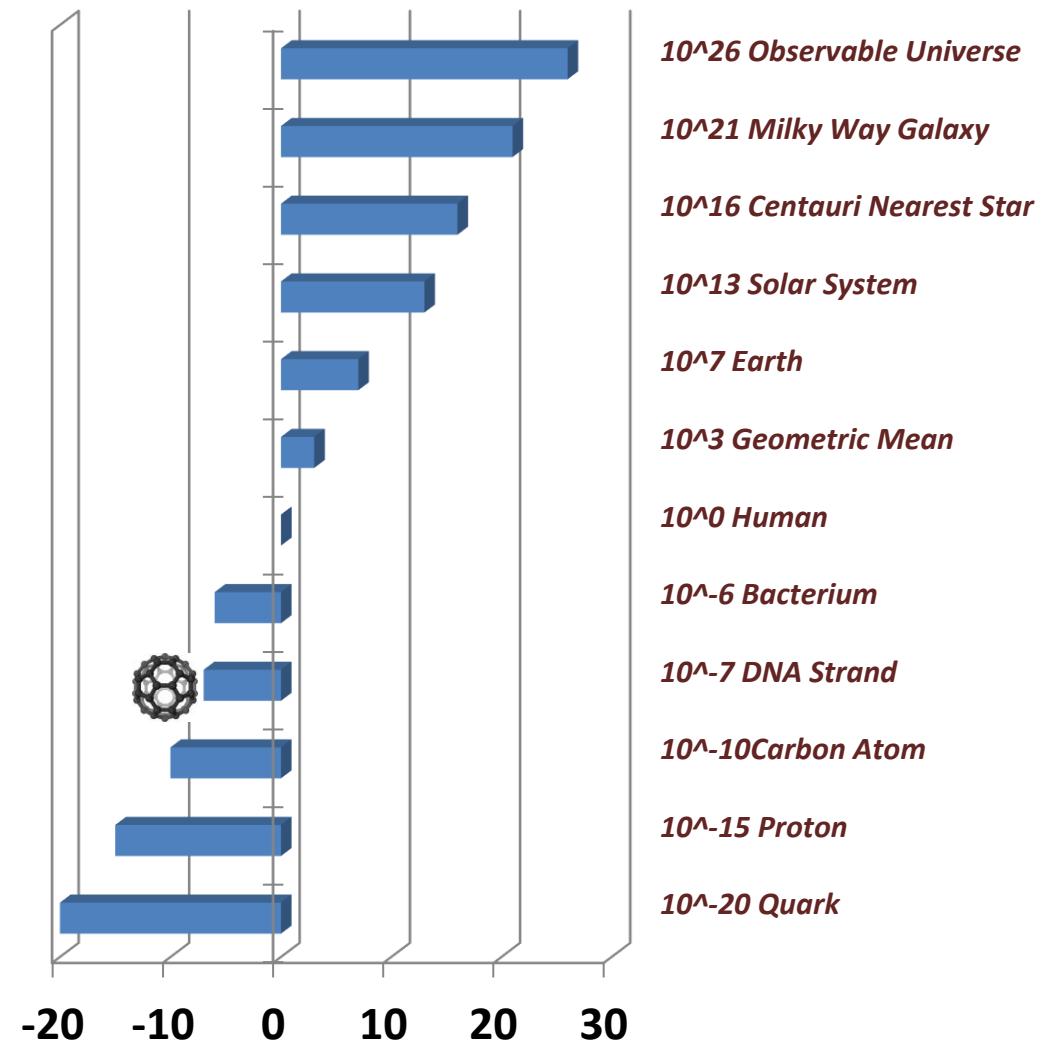
Femtometer  $10^{-15}$  meter

Below the nano scale are  
Ångströms and quantum physics.

An Ångström is  $1/10^{\text{th}}$  of a nanometer and often used to measure light waves.

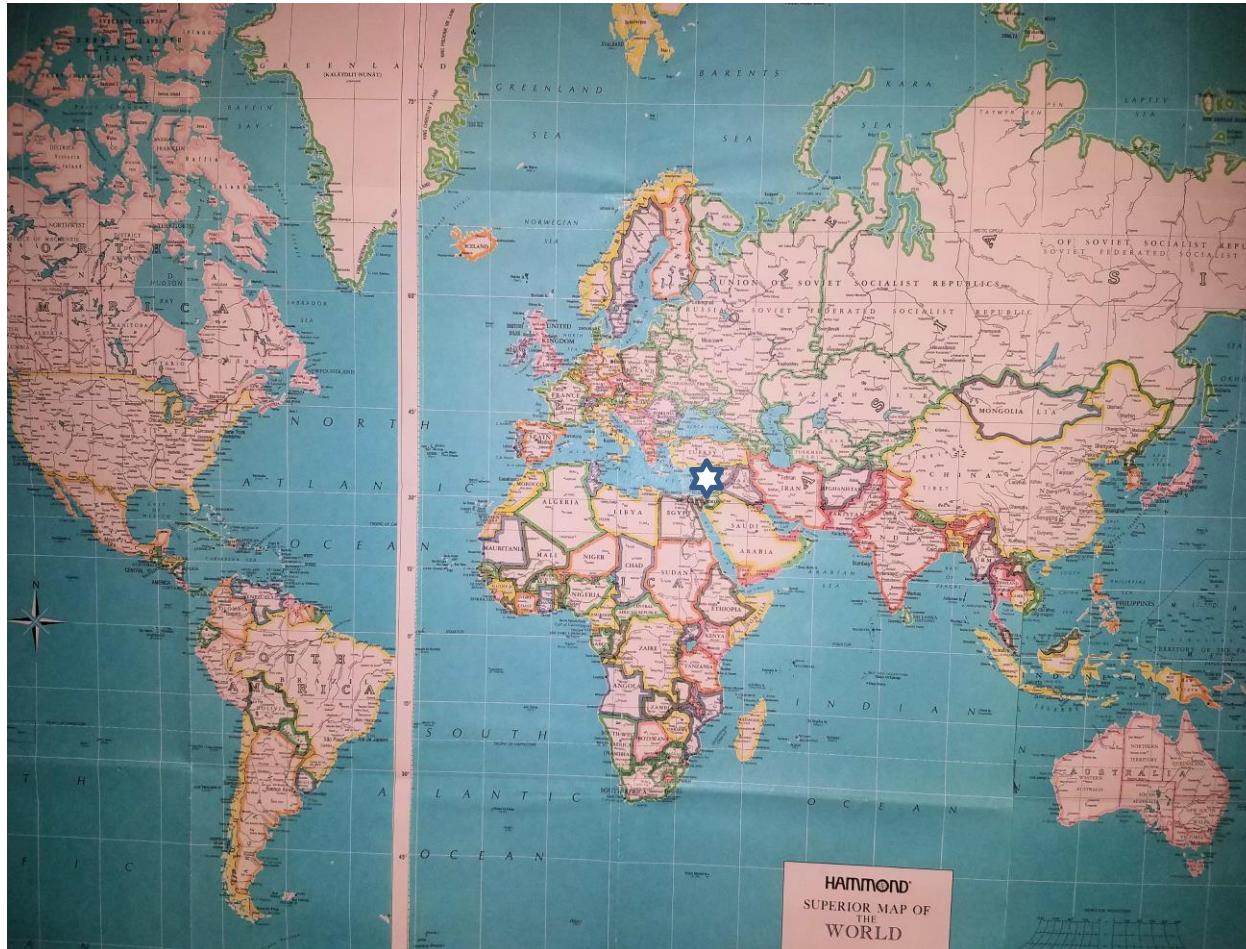
Visible light spectrum includes wavelengths from 380 to 780nm

## Comparative Log Scale in Meters



Source: Comparative Log Scale: [The Privileged Planet](#), Gonzalez, Guillermo and Richards, Jay, 2004, Regnery Publishing

# Where is World Central? Universe Central? City of the Great King



Rabbis present the Wave Offering as an ingathering to the Lord from the four corners of earth.

## Psalm 107

Oh, give thanks to the Lord, for He is good;  
For His Mercy endures forever.

Let the redeemed of the Lord say so,  
Whom He has redeemed from the hand of the adversary,  
And gathered from the lands,  
From the east and from the west;  
From the north and from the south.

# Defining Evangelism, Dialogue & Tolerance

Exclusivism	Inclusivism	Pluralism
<ul style="list-style-type: none"><li>• Truth is <u>rational &amp; propositional</u></li><li>• <u>Traditions</u> defended as truth claims w/o sufficient rehearsal of <u>links to truth</u>.</li><li>• <u>Difficulty maintaining unity</u>, i.e., much in-house fighting.</li><li>• <u>Group discriminations</u>.</li><li>• Lack of connections between Special &amp; General revelation.</li><li>• <u>Stress on evangelism &amp; conversion</u>.</li><li>• Belly-button focus</li></ul>	<ul style="list-style-type: none"><li>• Truth <u>becoming experiential</u> &amp; defined by group.</li><li>• <u>Traditions</u> losing power to hold or persuade.</li><li>• <u>Difficulty teaching precepts</u>.</li><li>• <u>Broadening base of acceptability</u> of varying practice &amp; values.</li><li>• Growing awareness of <u>world religions</u> &amp; holiness pursuits.</li><li>• Dialogue is <u>not</u> to be about <u>conversion</u>.</li><li>• <u>Reason loses validity</u>.</li></ul>	<ul style="list-style-type: none"><li>• Truth is <u>relative</u> to context.</li><li>• There is <u>no metanarrative</u> that can command obedience.</li><li>• <u>No tolerance</u> for public religious discourse or display.</li><li>• <u>Narrowing inner circle</u> of acceptability, i.e., groups become smaller.</li><li>• <u>Power dictates social behavior &amp; tolerance</u>.</li><li>• <u>All religions are true</u>.</li><li>• Power struggles dominate.</li></ul>

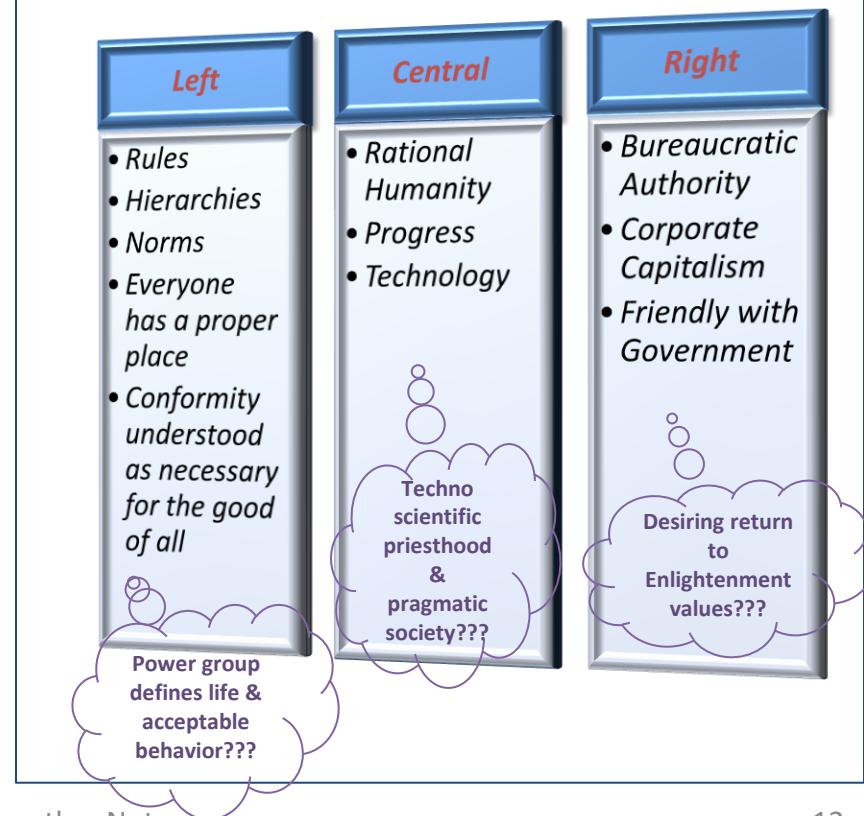
If there is a God, God reveals self, not truths about self, i.e., not propositional.  
~ Karl Barth, Emil Brunner, Rudolf Bultmann, . . .

# Why bye, bye Miss American Pie?

... and a lost connection to a rational humanity

- Assumed we were Godly people passing good moral values to our children
  - *What have been our traditions without Truth connections?*
  - *Why did we learn to read?*
  - *What is accepted as a source of power?*
- Assumed we were a Godly nation passing on good moral values to the world
  - *... but the Africans are saying they will bring Christ back to us.*
  - *Challenging the claims of Darwinism in the USA is as intolerable as challenging the Party in China.*
- Chose conformity rather than unity & built out onto sand
  - *Expecting to smooth over the details.*
  - *Long accepted social intolerances have seeded destruction.*
- Used Special Revelation to refute General Revelation,
  - *i.e., misapplication of the Word of Truth*
  - *Allowing that the hinterland can make its own rules.*
- Promoted a picture of God that is other than what He has shown of Himself,
  - *i.e., incorrectly dividing the Word of Truth*
  - *It was never the Devil in the details.*

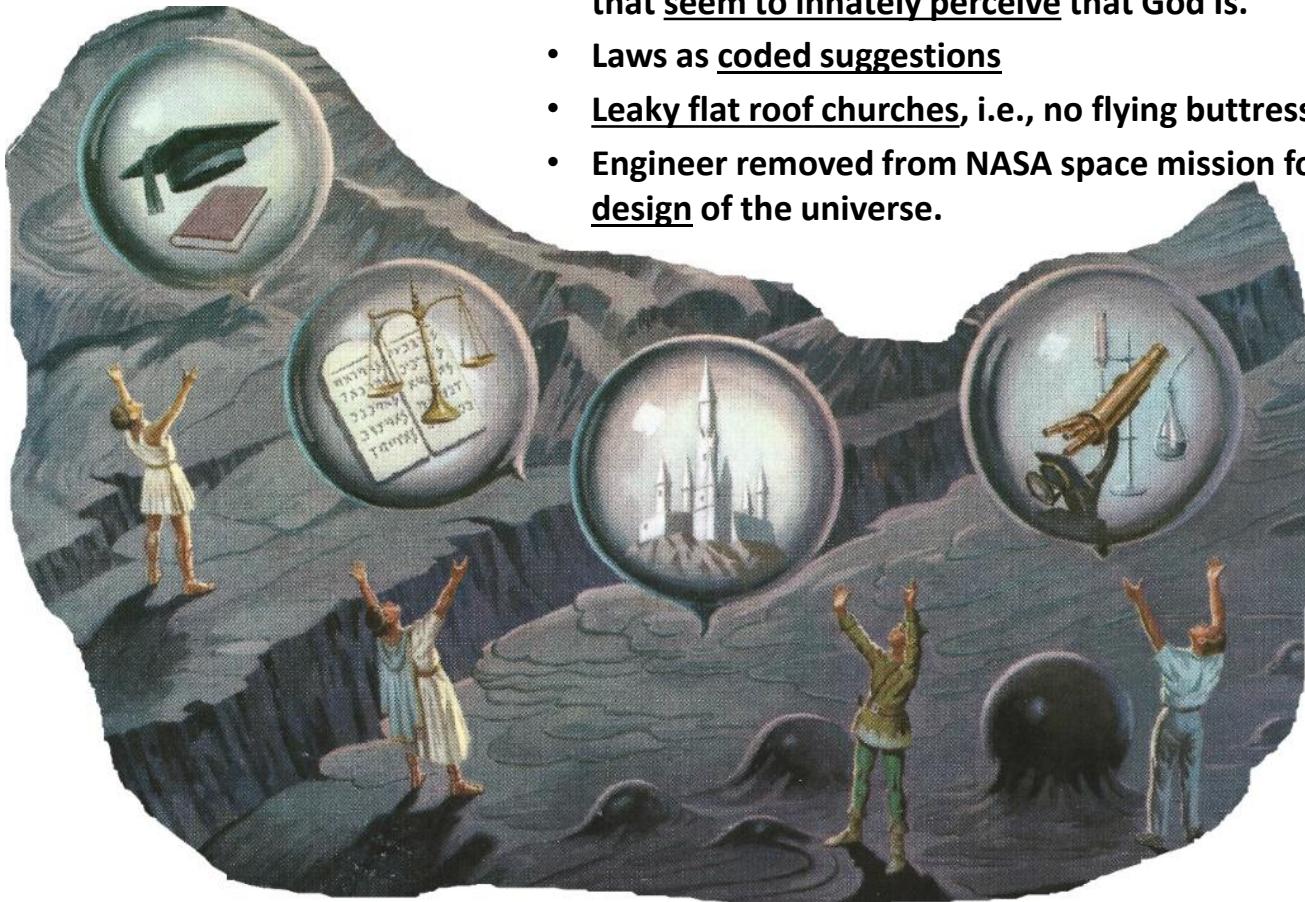
## The Establishment Tryptic Society, Culture, Traditions, Power

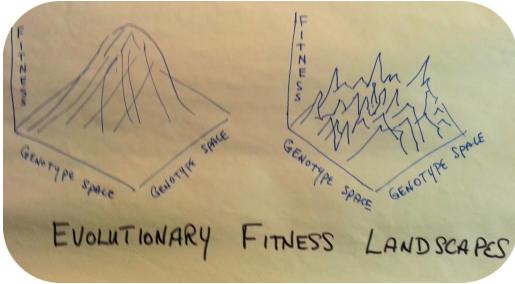


# Implications

And what  
passes as  
acceptable?

- Worshipping the works of our hands and ourselves as creators not discoverers
- Presuming our gifts bubbled up from the slime
- Using institutions to sow confusion, i.e., scrubbing the brains of children that seem to innately perceive that God Is.
- Laws as coded suggestions
- Leaky flat roof churches, i.e., no flying buttresses or vaulted ceilings
- Engineer removed from NASA space mission for daring to consider design of the universe.





# Mushing the Details

--- **Theodosius Dobzhansky**

*"Seen in retrospect, evolution as a whole, doubtless, had a general direction, from simple to complex, from dependence to relative independence of the environment, to greater and greater autonomy of individuals,*

*greater and greater development of sense organs and nervous systems conveying and processing information about the state of the organism's surroundings, and finally greater and greater consciousness.*

*You can call this direction progress or by some other name."*

--- **G.K. Chesterton**

*The Everlasting Man*

*I do believe that the things on which I have insisted are more essential to an outline of history than the things which I have subordinated or dismissed.*

*I do not believe that the past is most truly pictured as a thing in which humanity merely fades away into nature, or civilization merely fades away into barbarism, or religion fades away into mythology, or our own religion fades away into the religions of the world.*

*In short, I do not believe that the best way to produce an outline of history is to rub out the lines.*

Does life increase in complexity over time?

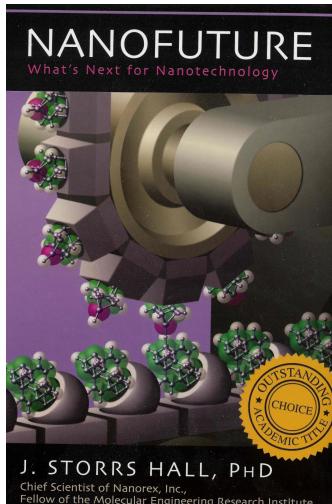
If so, . . .  
Where? When? Why?

What quality of information is needed

. . . for complexity to increase?

. . . for verifying purpose?

# Complexity



## Some quotes from Josh Hall, 2005 –

- *Research Fellow at Institute of Molecular Manufacturing*
- *President of Foresight Institute*

*'Current practice involves factories that make nanoscale products. Mature nanotechnology will involve nanoscale factories: working machines, atom-for-atom precise, that make things.'*

*'Each living cell is an amazing factory jammed with molecular machines. Most are made of proteins.'*

- *'Sticking together properly is the key to how everything in the cell works.'*
- *'Need an "AB" machine? Then make an "A"; make a "B" and let them float & stick together. Floating & sticking is called self-assembly.' ???*

Authored:  
Nanofuture: What's Next For Nanotechnology (2005) ISBN 1-59102-287-8

Beyond AI: Creating the Conscience of the Machine (2007) ISBN 1-59102-511-7

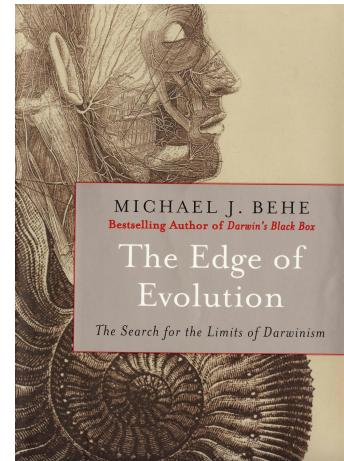
Where Is My Flying Car?: A Memoir of Future Past (2018)

## Per Michael Behe, 2007 –

- *Biochemical Professor at Lehigh University*
- *Senior Fellow at Discovery Institute*

**Goldilocks Problem:** Consider a well-stirred pool full of potential protein matches, i.e., lots of "A", lots of "B", lots of X,Y,Z.

- *Bump and stick: the octopus with multiple "A" and "B" connect points and the cell clogs.*
- *Bump but mismatch on several points and the protein machine fails to operate or stay together.*
- *Proteins are both shape and charge specific.*
- ***Floating & Sticking by Chance isn't just inefficient, it is likely inoperative.***



Authored:  
Darwin's Black Box: The Biochemical Challenge to Evolution. (1996) New York: Free Press. ISBN 978-0-684-82754-4.

The Edge of Evolution: The Search for the Limits of Darwinism. (2007) New York: Free Press. ISBN 978-0-7432-9620-5

Darwin Devolves: The New Science About DNA That Challenges Evolution. (2019) San Francisco: HarperOne. ISBN 978-0062842619

# Protein Machinery

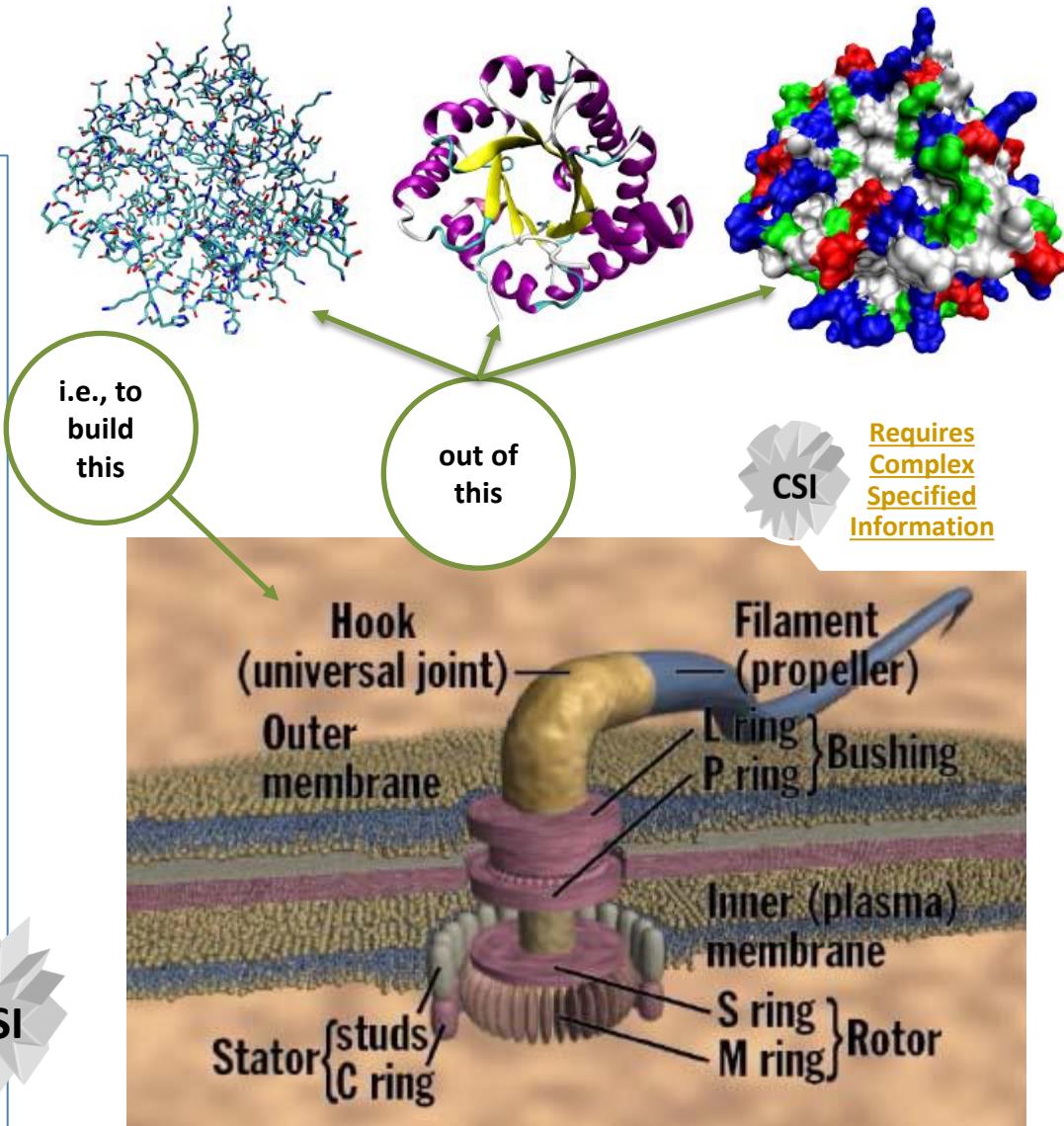
## Nano Factory

- Protein Structures & Systems
- Shape determines function
- Precision folding

## Cellular Lean Manufacturing

- Marshalling the right stuff at the right time in the right place in precise quantities
- Using catalysts to conserve energy
- Minimizing inventory
- Controlling access to parts
- Initiating process control sequences
- Using multilayer feedback loops
- Dismantling, reallocating, reusing
- And doing it quickly

*Knee-high by the 4<sup>th</sup> of July*



# Continuum of Thought

# Fencepost Positions in the Philosophies of Science



B. B. Warfield

*(Princeton Theologian early 1900s; encouraged creation/evolution discussions.)*

- “Evolution must be ranked as a more or less probable or more or less improbable working hypothesis.”
  - Delineates 2 types of creation:
    - from nothing (*ex nihilo*) and
    - *mediate*, i.e. injecting more than what is available.
  - Evolution is modification of what exists and is ultimately purpose-driven, i.e. *teleos*.

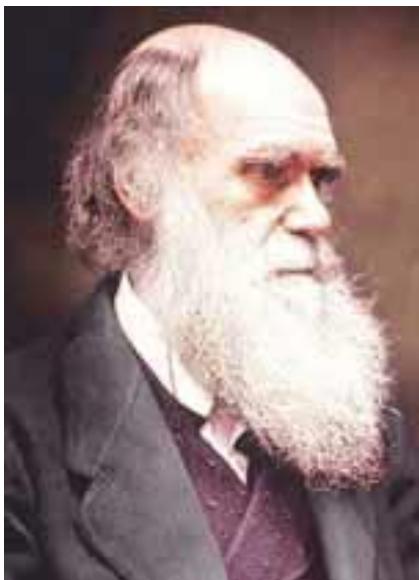
# Theodosius Dobzhansky

*(Columbia Biologist, mid 1970s;  
considered “father of modern genetics.”)*

- Quotes from Teilard de Chardin:  
“... evolution is a general postulate to which *all* theories, *all* hypotheses, *all* systems must bow and satisfy in order to be thinkable and true.”
  - Evolution explains the problem of evil; i.e. theodicy.
  - Evolution is random and unguided.



# Slime to Bugs ○ Bugs to Frogs ○ Frogs to Dogs and a Dog-eat-Dog World



## Neo-Darwinian Synthetic Theory of Evolution

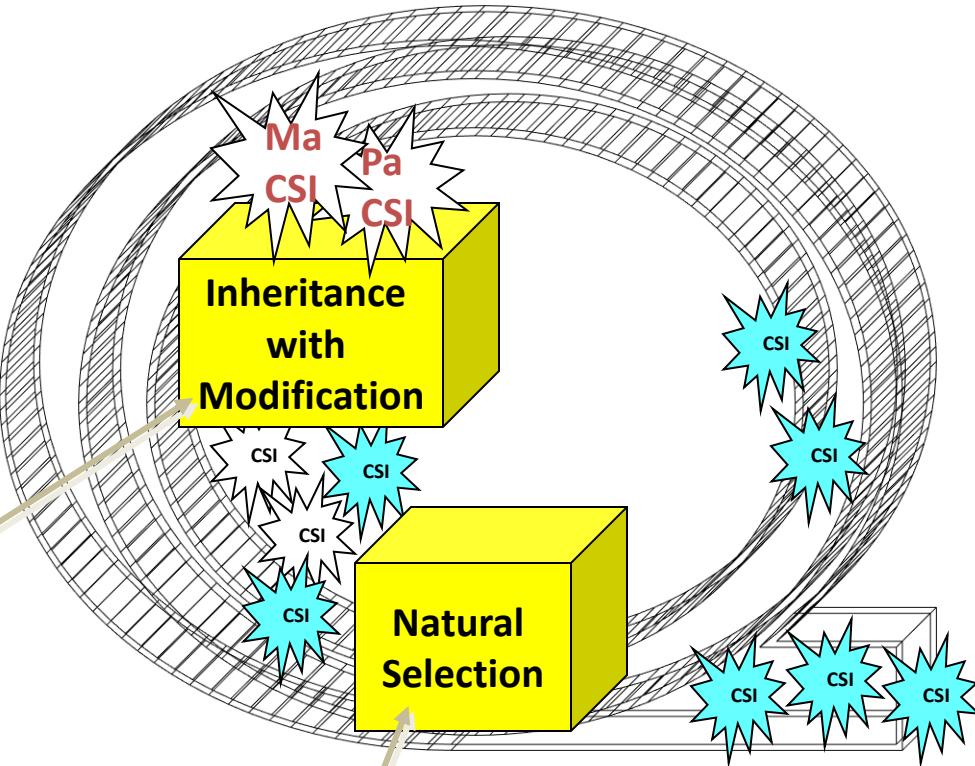
- **Natural Selection**
  - Darwin
- **Inherited Characteristics**
  - Mendel's Peas
- **Population Equilibrium Equations**
  - Hardy & Weinberg

## Cultural Icons with questionable validity

- **Common Descent**
  - Tree of Life
  - Embryonic Similarities
  - The Fossil Record
- **Ascent of Man**
- **Life rising as a necessity**
  - Miller-Urey Experiment

*"If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous successive, slight modifications, my theory [of natural selection] would absolutely break down."* – Charles Darwin

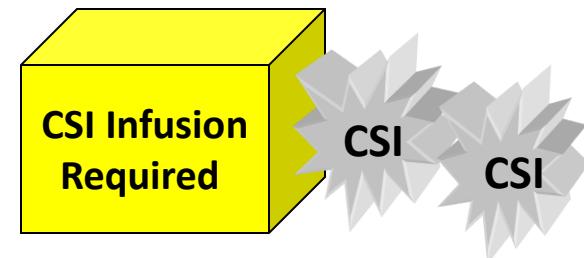
# Trial & Error Time Machine



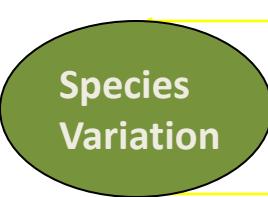
Includes  
Natural Laws  
operating as  
functions with  
DNA changes from  
random mutation.

Not purpose driven;  
selects only for  
advantage in current  
generation.

- Darwinian mechanisms do not allow large steps in complexity.
- If not purpose driven . . .
  - Collecting drive shafts & propellers does not add advantage until work is performed.
- No Darwinian mechanisms account for Irreducible Complexity.
- Darwinian evolution cannot look ahead to function.



# Viewpoint Distinctions



## Intelligent Design

Adaptation to environment is true, i.e. *microevolution*.

Time + Chance + Natural Selection + Mutation are NOT sufficient.

Introduced from outside the system; i.e. *open system*.

Mark of intelligence is *identifiable* through scientific inquiry.

## Theistic Evolution

Evolution is or may be a method of creation.

Time + Chance + Natural Selection + Mutation *might be* sufficient.

Available from the beginning; i.e. *front-end loaded*.

Knowledge about designer is *NOT accessible* through scientific inquiry.

## Naturalistic Evolution

All life evolved from simpler forms; i.e. *macroevolution* is true.

Time + Chance + Natural Selection + Mutation are *sufficient*.

There is nothing outside the system; i.e. *closed system*.

Limits scientific inquiry to natural causes and denies intelligence; i.e. *Methodological Naturalism*.

# Viewpoint Distinctions

	<u>Intelligent Design</u>	<u>Theistic Evolution</u>	<u>Naturalistic Evolution</u>
Species Variation	Adaptation to environment is true, i.e. <i>microevolution</i> .	Evolution is a method of creation.	All life evolved from simpler forms; i.e. <i>macroevolution</i> is true.
Complexity of Life	Time + Chance + Natural Selection + Mutation are <u>NOT</u> sufficient.	Time + Chance + Natural Selection + Mutation <i>might be</i> sufficient.	Time + Chance + Natural Selection + Mutation are <i>sufficient</i> .
	Introduced from outside the system; i.e. <i>open system</i> .	Available from the beginning; i.e. <i>front-end loaded</i> .	There is nothing outside the system; i.e. <i>closed system</i> .
	Mark of intelligence is <i>identifiable</i> through scientific inquiry.	Knowledge about designer is <i>NOT accessible</i> through scientific inquiry.	Limits scientific inquiry to natural causes and denies intelligence; i.e. <i>Methodological Naturalism</i> .

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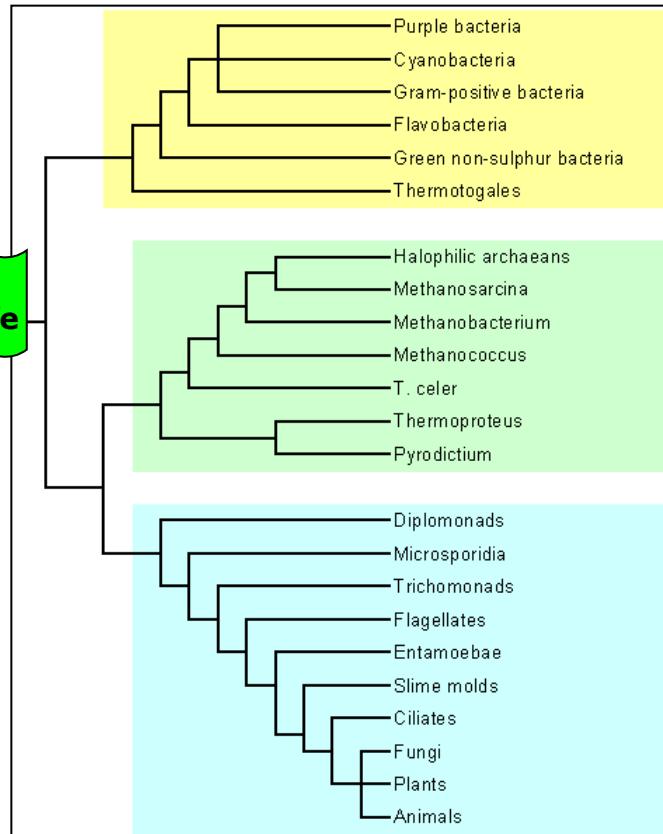
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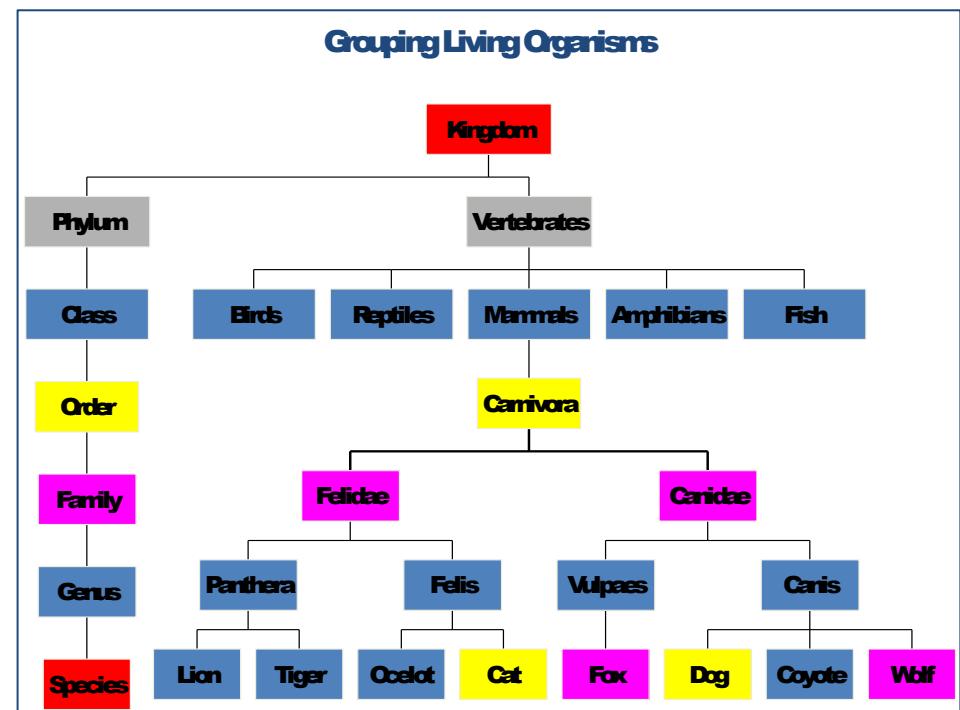
*The circle cannot be drawn.*

# Grouping by Trees & Hierarchies

Cladistics looking for common ancestor



Grouping by shared characteristics



# Objections to Design

Scientific explanations must be naturalistic by definition.

Uses “God in the Gaps” to explain the unknown

An argument from analogy, (things aren’t always what they seem)

Just scientific creationism re-packaged

Sub-optimal designs

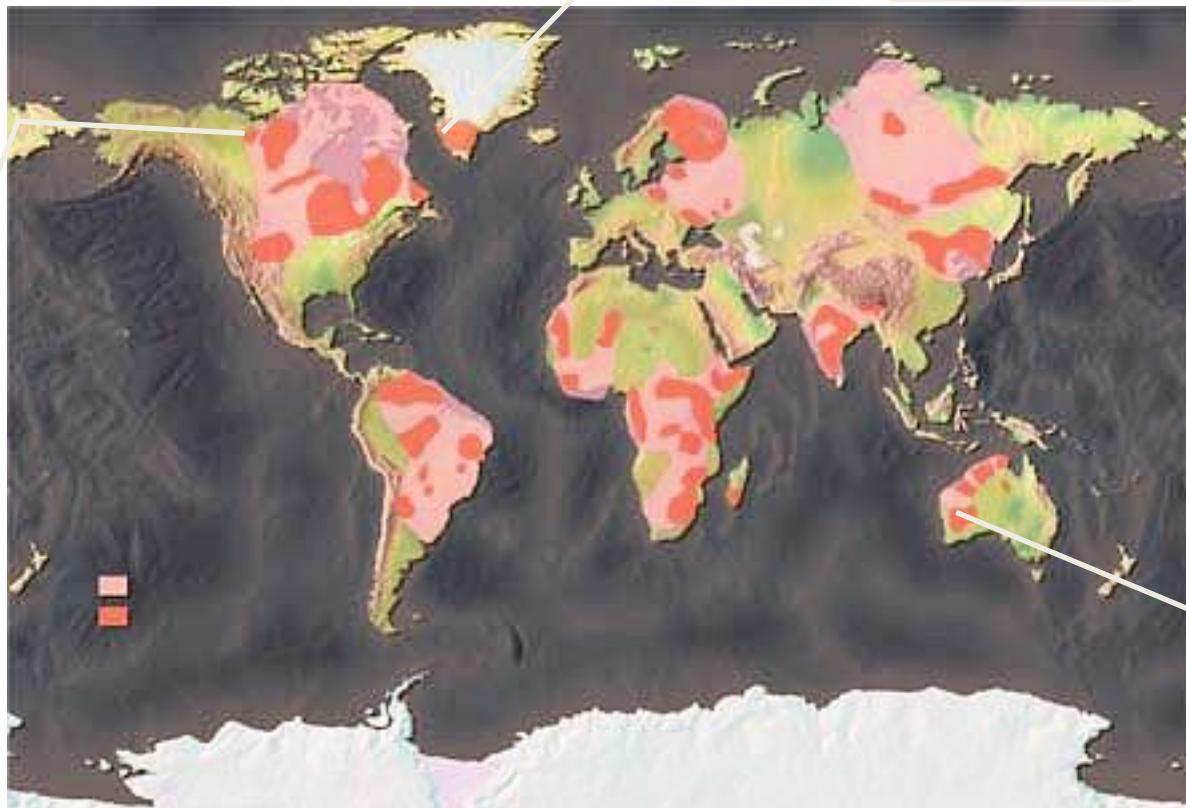


## Age of Earth rocks (Its not carbon dating)

Acasta  
Gneiss 4Ga  
Oldest  
intact rock,  
i.e. formed  
under  
ground

Isua  
sediments  
3.8Ga  
Oldest  
Life Form  
record

Jack Hills  
Zircon  
4.4 Ga  
Oldest  
Earth  
material



# Isotope Half Life

Direct Measurements began ~1905

Isotope Decay Constants are Known & Do Not Vary over Time

Table 1: Naturally-Occurring Radioactive Isotopes and Their Half-Lives		
Radioactive Isotope (Parent)	Product (Daughter)	Half-Life (Years)
Samarium-147	Neodymium-143	106 billion
Rubidium-87	Strontium-87	48.8 billion
Rhenium-187	Osmium-187	42 billion
Lutetium-176	Hafnium-176	38 billion
Thorium-232	Lead-208	14 billion
Uranium-238	Lead-206	4.5 billion
Potassium-40	Argon-40	1.26 billion
Uranium-235	Lead-207	0.7 billion
Beryllium-10	Boron-10	1.52 million
Chlorine-36	Argon-36	300,000
Carbon-14	Nitrogen-14	5715
Uranium-234	Thorium-230	248,000
Thorium-230	Radium-226	75,400

Most half-lives taken from Holden, N.E. (1990) *Pure Appl. Chem.* 62, 941-958.

Direct Measurement of Geologic Materials

$$t = \frac{1}{\lambda} \ln \left( 1 + \frac{D}{P} \right)$$

$t$  = age of rock

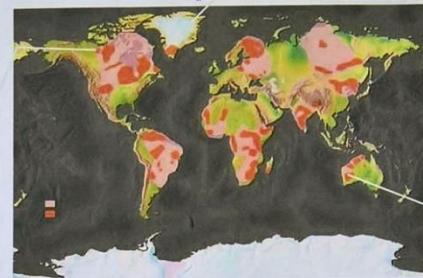
$\lambda$  = decay constant

$D$  = amount of daughter isotope in atoms

$P$  = amount of parent isotope in atoms

Archean Rock  
Zircon Crystals  
Bentonite Clays

Acasta Gneiss 4 Ga  
Oldest intact rock, i.e. formed under ground



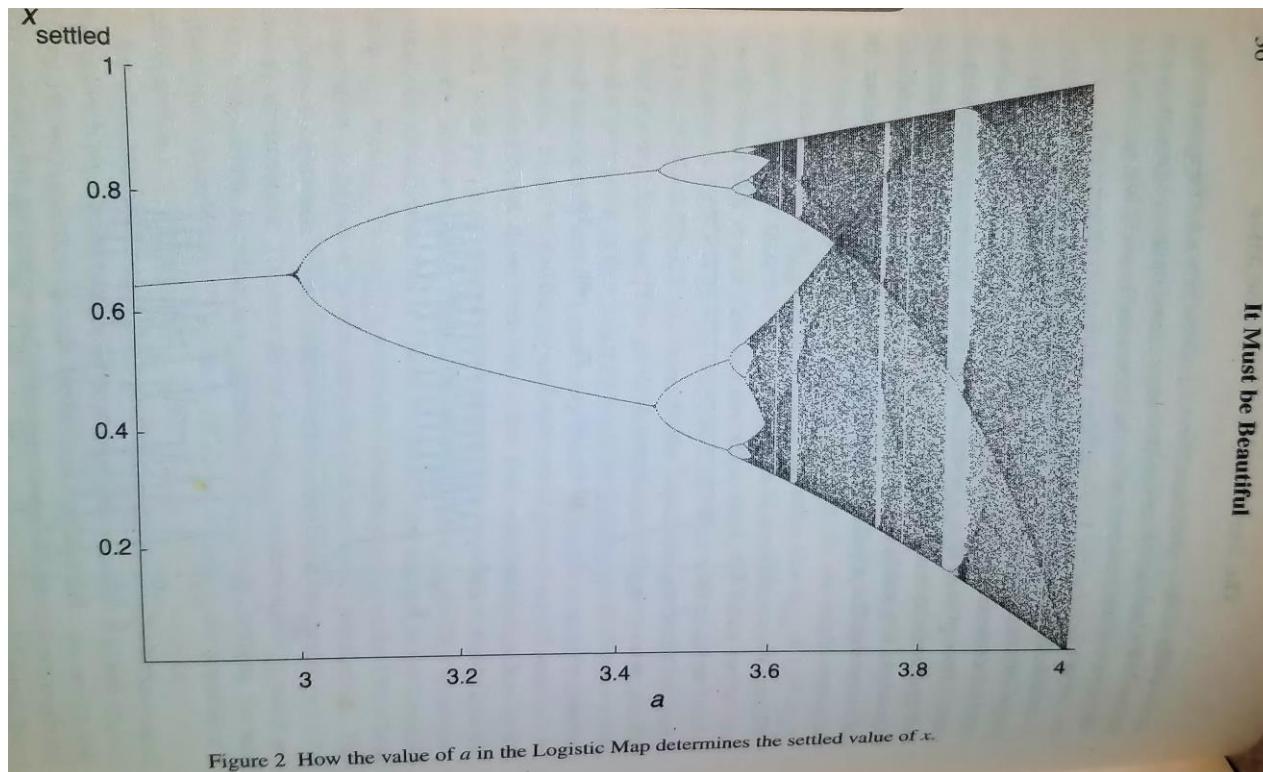
Isua sediments  
3.8 Ga  
Oldest  
Life Form ? record?

... but not fossils.  
Using  $^{13}\text{C}/^{12}\text{C}$  Ratio  
And Thermochem  
Decomp of Non-Bio  
Carbonate can produce  
 $^{13}\text{C}$  &  $^{12}\text{C}$

Jack Hills Zircon 4.4 Ga  
Oldest Earth material

Source: Scientific American 2005

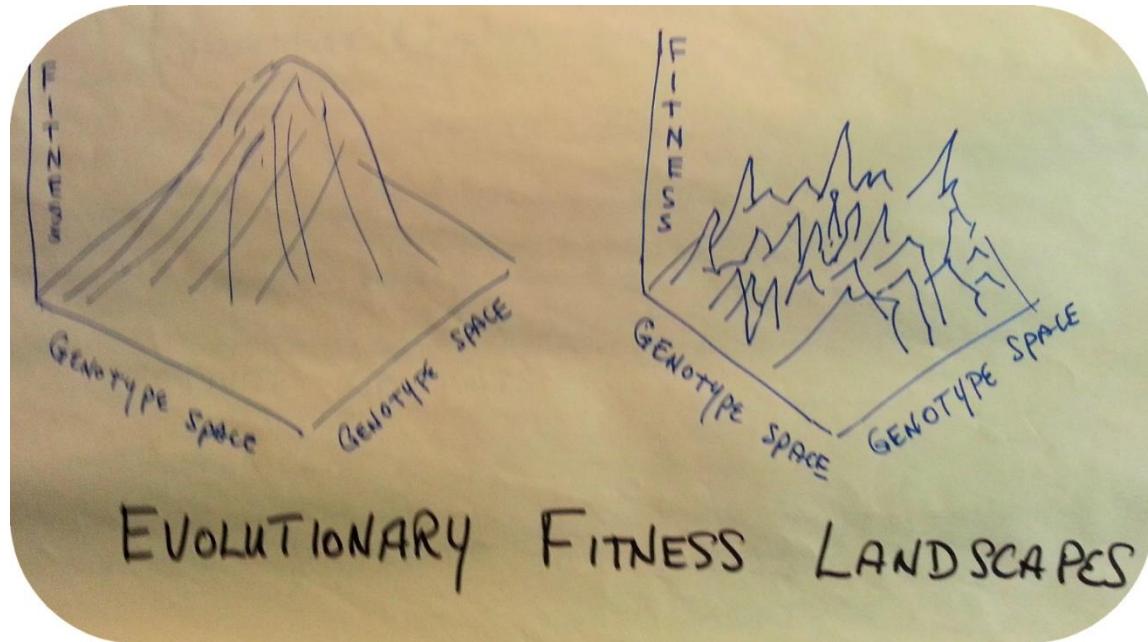
# Logistics Map



Calamity & Order out of  
Chaos

It Must be Beautiful

# Mushing the Details

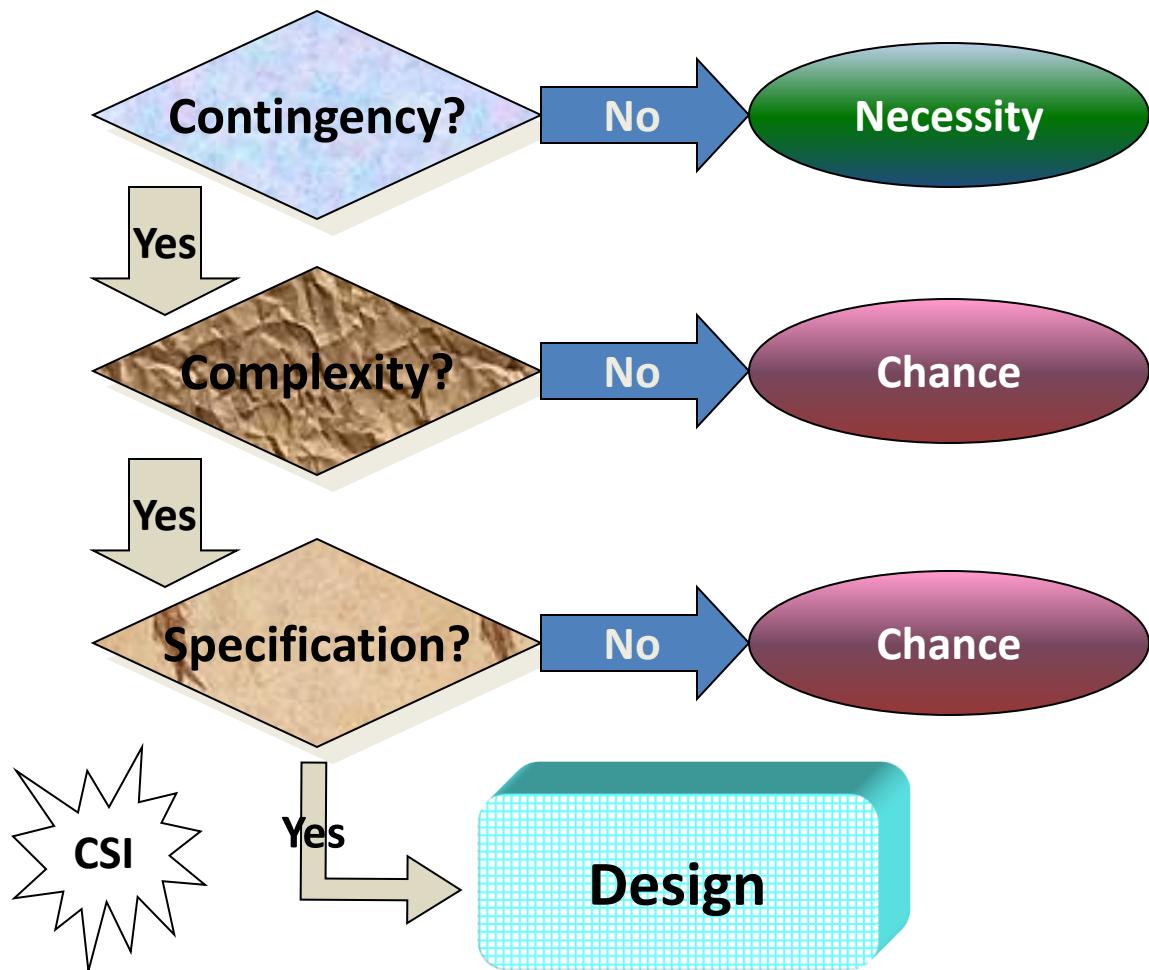


Mutating and selecting the optimal fitness would require directional knowledge across a complex landscape with choices among localized high fitness possibilities.

# Rigorous Methodology

## Top-Down Explanatory Filter

*Start here to explain an event, object or structure*



Contingency means not automatic. Other possibilities exist.

Is there only a very small probability of occurrence?

Is there an independent pattern showing evidence of intelligence?

# CSI in Biological Organisms

*(Inference to the Best Explanation)*

TRUTH TABLE

Hypothesis:

$H_0$ : No Intelligence

No Designer

Designer

$H_a$ : Intelligence

Accept  $H_0$   
*(Time + Chance + Natural Selection + Mutation are sufficient.)*

Reject  $H_0$   
*(Time + Chance + Natural Selection + Mutation are NOT sufficient.)*

D  
E  
C  
I  
S  
I  
O  
N

Correct

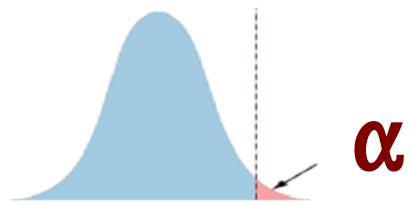
False  
Negative  
Type II  
 $\beta$  error

False  
Positive  
Type I  
 $\alpha$  error

Correct

# Eliminating False Positives

$$\alpha = \frac{1}{2} \times 1/N$$



$$N = 10^{80} \times 10^{45} \times 10^{25} = 10^{150}$$

Total  
Estimated  
Elementary  
Particles  
in the Universe

Possible  
Alterations  
per  
Second  
(based on  
Planck Constant)

Total  
Estimated  
Seconds until heat  
death  
of the Universe

Population  
Resources

## Origami Frog

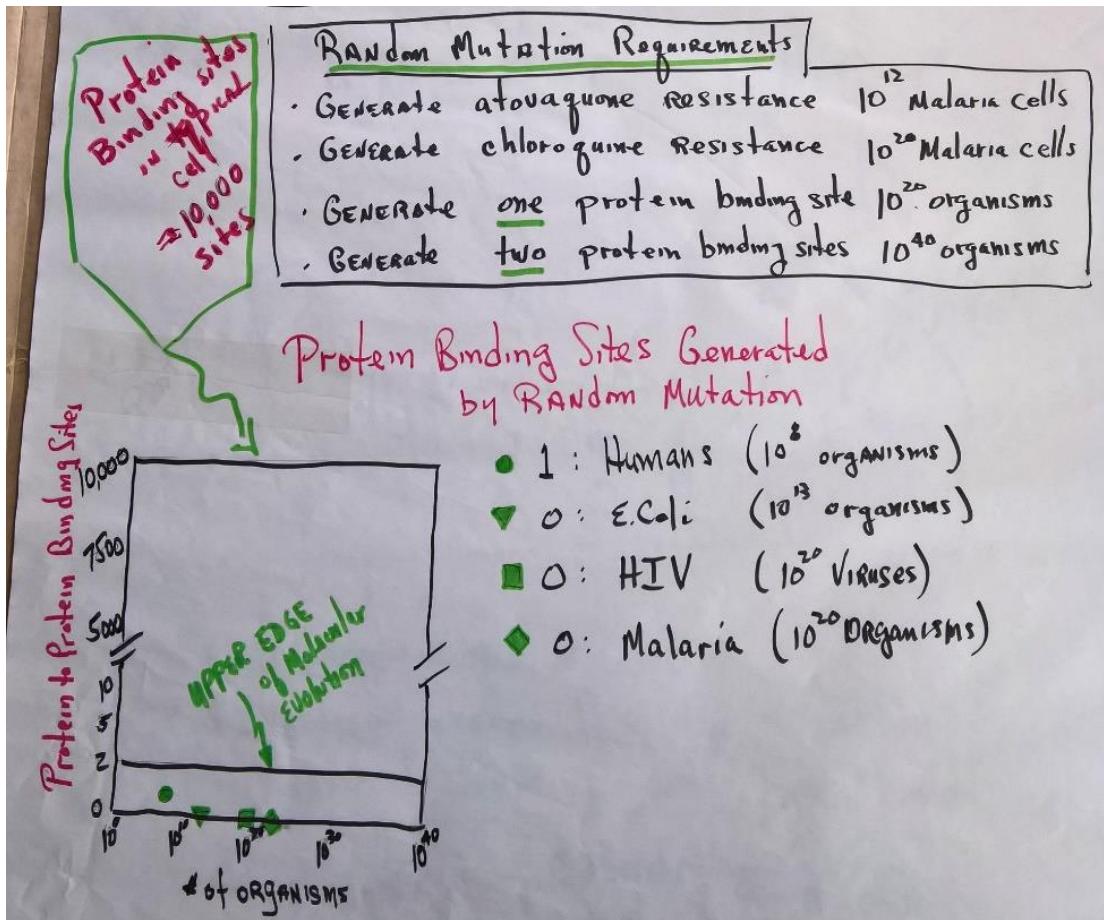


# **WEEK 7 –**

## **TWO BINDING SITES RULE**

### **DO THE MATH**

# Protein Binding Sites



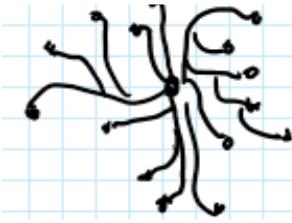
Reiser  
Michael J. Behe  
Edge of Evolution

Reference Table 7.1

	Population
Malaria cells in one sick person	$10^{12}$
Malaria cells Worldwide/year	$10^{20}$
Bacterial cells in history of life on Earth	$10^{40}$
Primates in past 10 million years	$10^{12}$

# Did He know? Does He know?

- ... that we would be born or aborted in Krumme or the City of Destruction?
- ... that Satan would cause pain and havoc when tossed into this world?
- ... that Death would hold sway over us?
- ... that Vices & Virtues would be unbalanced, and we would lose perspective of right and wrong?



(it's worse . . .) Job 19:6, 23-27

*Know then that God has wronged me and has closed His net around me.*

*Oh, that my words were written! Oh, that they were inscribed in a book! That with an iron stylus and lead they were engraved in the rock forever!*

*As for me, I know that my Redeemer lives, And at the last He will take His stand on the earth.*

*Even after my skin is destroyed, Yet from my flesh I shall see God;*

*Whom I myself shall behold, And whom my eyes will see and not another.*

*My heart faints within me!*

# Situation Analysis, i.e., where are we?



The incredible distance of the fall from Grace is often lost on Christians wondering the canyons and broad valleys of the world.



Perspective of Thomas Aquinas on rationalism and revelation:

# GKC perspective of Thomas Aquinas on rationalism and revelation

GK Chesterton provides insight into St. Thomas Aquinas that may be different from other biographers.

- Some in the Christian community see Thomas as the rational thinker who provided five proofs of the existence of God.
- Some disagree with his doctrinal stand on transubstantiation.
- Some see him as the baptizer of Aristotle.
- Surely a rational thinker.

GKC captures Thomas' argument for Revelation showing it is not in the least an argument against Reason. On the contrary, He seems inclined to admit that truth could be reached by rational process, if only it were rational enough; and if it were long enough.

He does emphatically believe that men can be convinced by argument; when they reach the end of the argument.

His common sense tells him the argument never ends.

His arguments are rational and natural; but his deduction is all from the supernatural.

GKC – *that is, I might convince a man that matter as the origin of mind is quite meaningless, if he and I were fond of each other and fought each other every night for forty years.*

*But long before he was convinced on his deathbed, a thousand other materialists would be born, and nobody can explain everything to everybody.*

St. Thomas takes the view that the souls of all the hard-working and simple-minded people are quite as important as the souls of thinkers and truth-seekers; and he asks how all these people are possibly to find time for the amount of reasoning that is required to find truth.

The whole tone of the passage shows both a respect for scientific enquiry and a strong sympathy with the average man. The conclusion he draws is that man must receive the highest moral truths in a miraculous manner; or most men would not receive them at all.



*. . . The message out of the sky; the fairy-tale that is really true.* – GK  
Chesterton biography of Saint Thomas Aquinas

Aquinas (c. 1221–1274)

Obviously, he predates the Reformation writers who insisted on the depravity of mankind as a result of the Fall.

Aquinas is not saying the same thing. Have we moved too much toward Reformation thinking?



# Not Out of this World

John 17:13-21 (part of High priestly prayer)

But now I come to You;

and these things I speak in the world so that they  
may have My joy made full in themselves.

I have given them Your word; and the world has  
hated them,

because they are not of the world,  
even as I am not of the world.

I do not ask You to take them out of the world, but  
to keep them from the evil one.

**They are not of the world, even as I am not of the  
world. Sanctify them in the truth;  
Your word is truth.**

As You sent Me into the world, I also have sent  
them into the world.

**For their sakes I sanctify Myself, that they  
themselves also may be sanctified in truth.**

**"I do not ask on behalf of these alone, but for those  
also who believe in Me through their word;  
that they may all be one;**

**even as You, Father, are in Me and I in You, that they  
also may be in Us, so that the world may believe  
that You sent Me.**

# Gird up your loins

Job 40:1-2

**Then the LORD said to Job,**  
*"Will the faultfinder  
contend with the Almighty?  
Let him who reproves God answer it."*

Job 40:6-8

**Then the Lord answered Job**  
*out of the storm and said,  
"Now gird up your loins like a man;  
I will ask you, and you instruct Me.*

*"Will you really annul My judgment?  
**Will you condemn Me that you may be justified?***

## *Will you annul My judgment?*

Job 42:1-2, 5-6

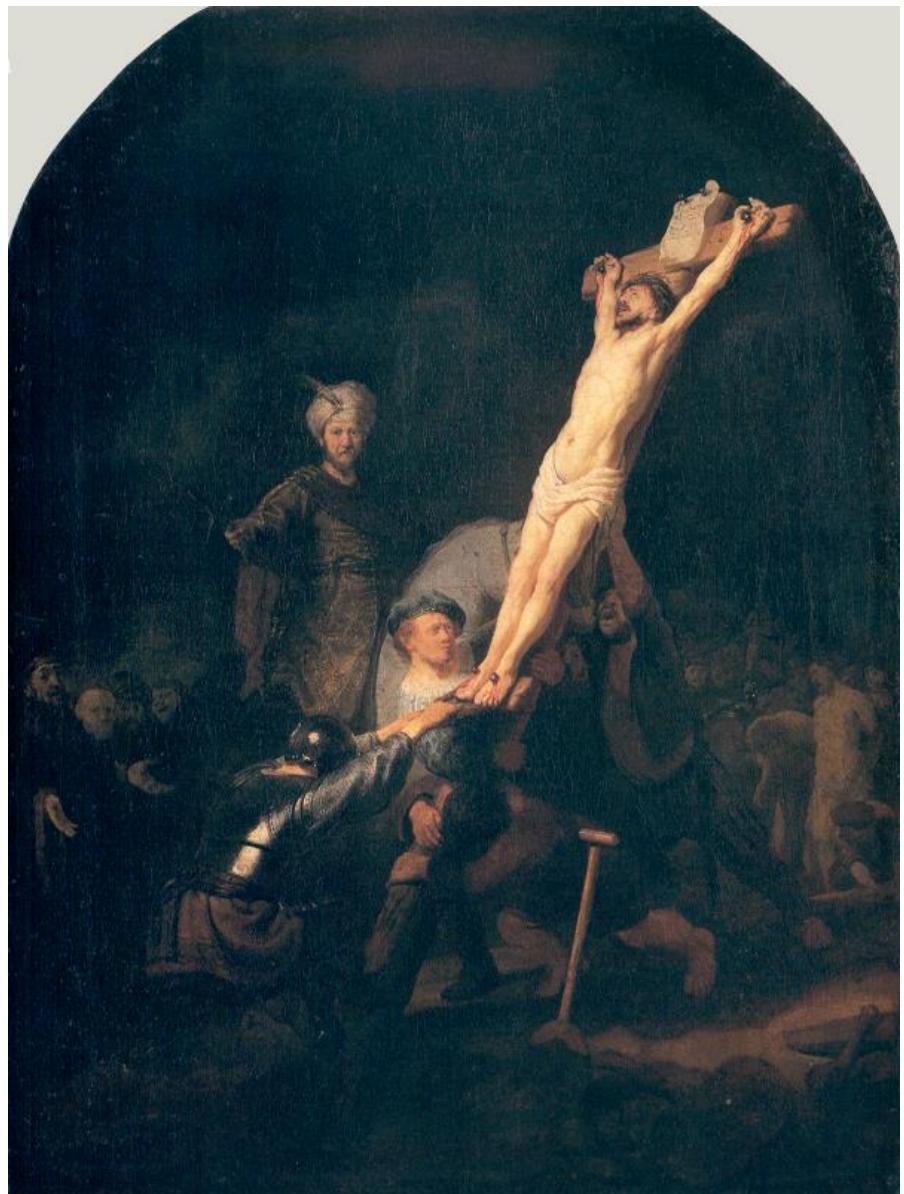
Then Job answered the LORD and said,

*"I know that You can do all things, and that no purpose of Yours can be thwarted*

*"I have heard of You by the hearing of the ear; but now my eye sees You;*

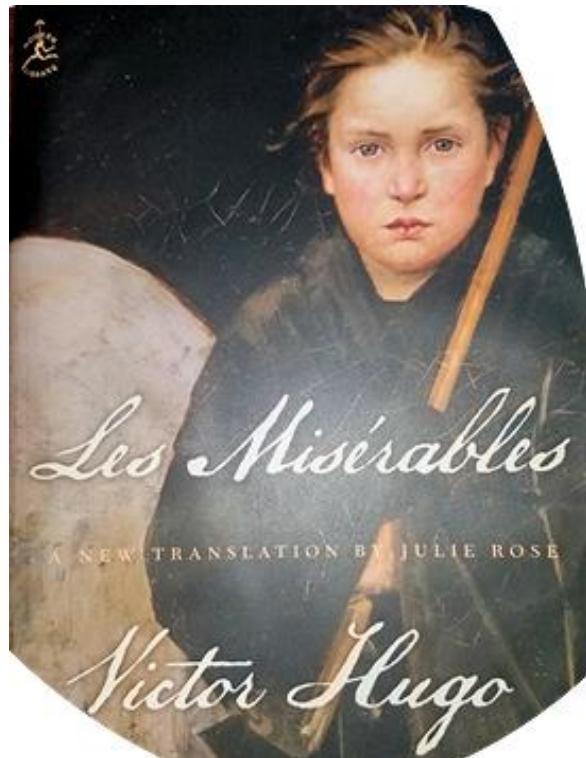
*therefore, I retract, and I repent in dust and ashes."*

*. . . And Job prayed for his friends*

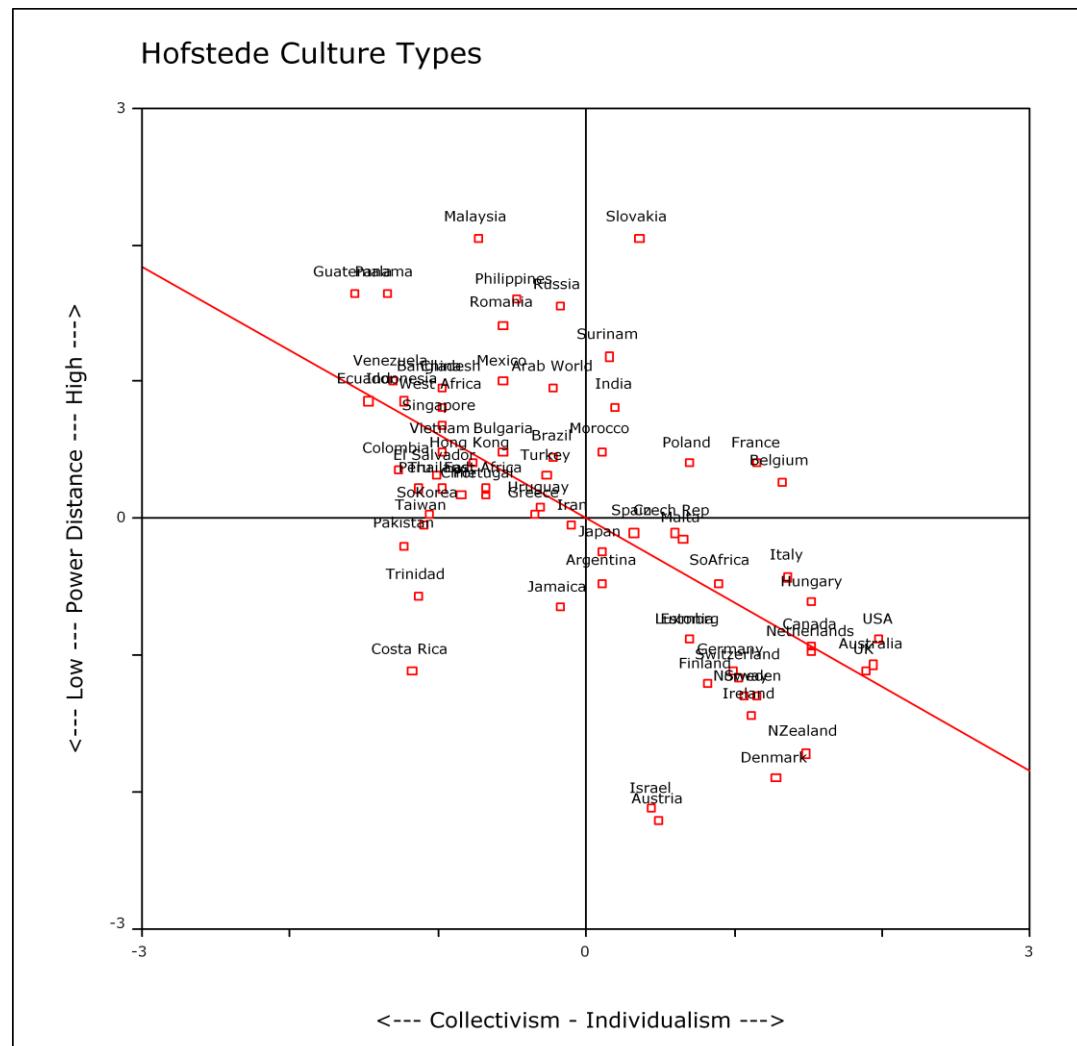


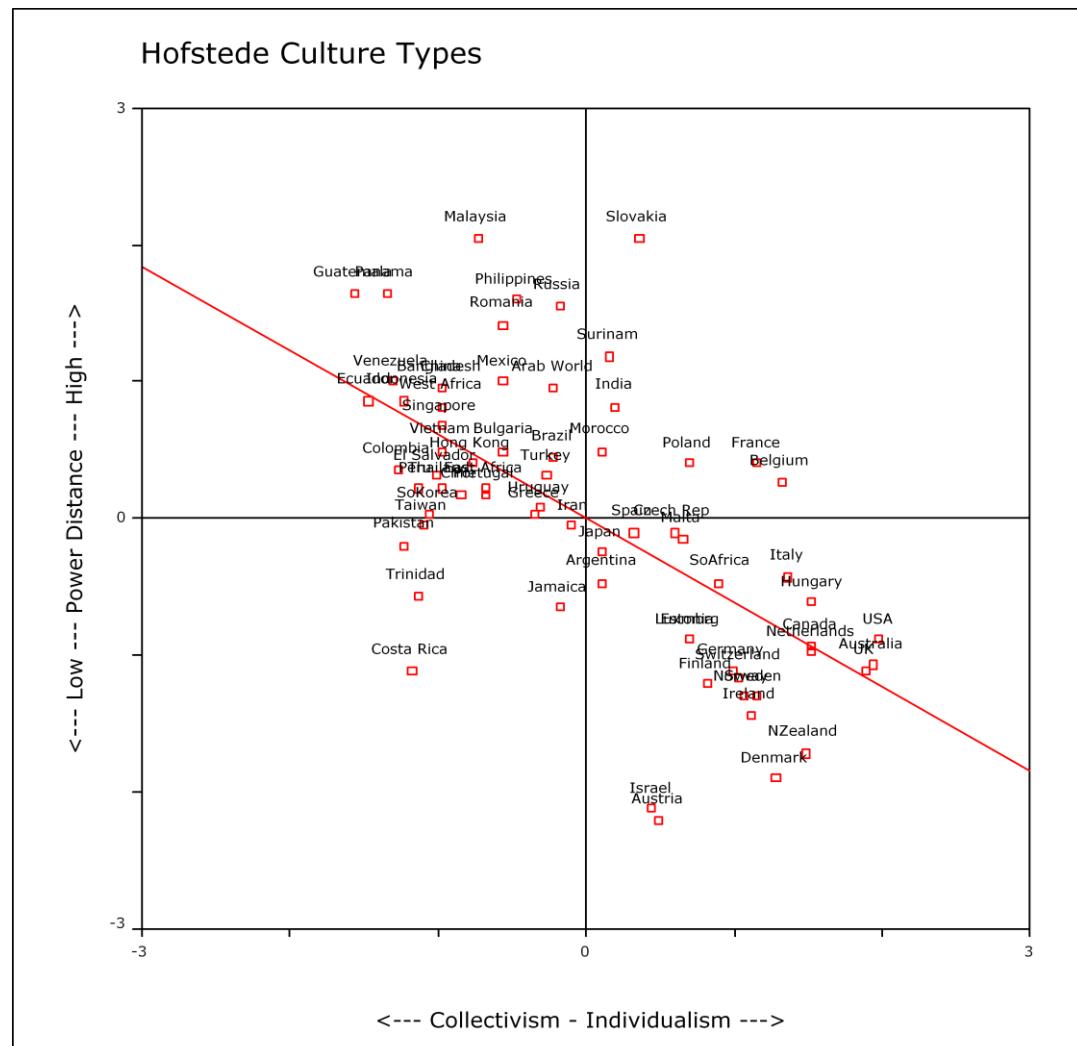
# Fighting Evil in the Sewers of Paris

- “Jean Valjean, I have this day purchased your soul for God”, Bishop

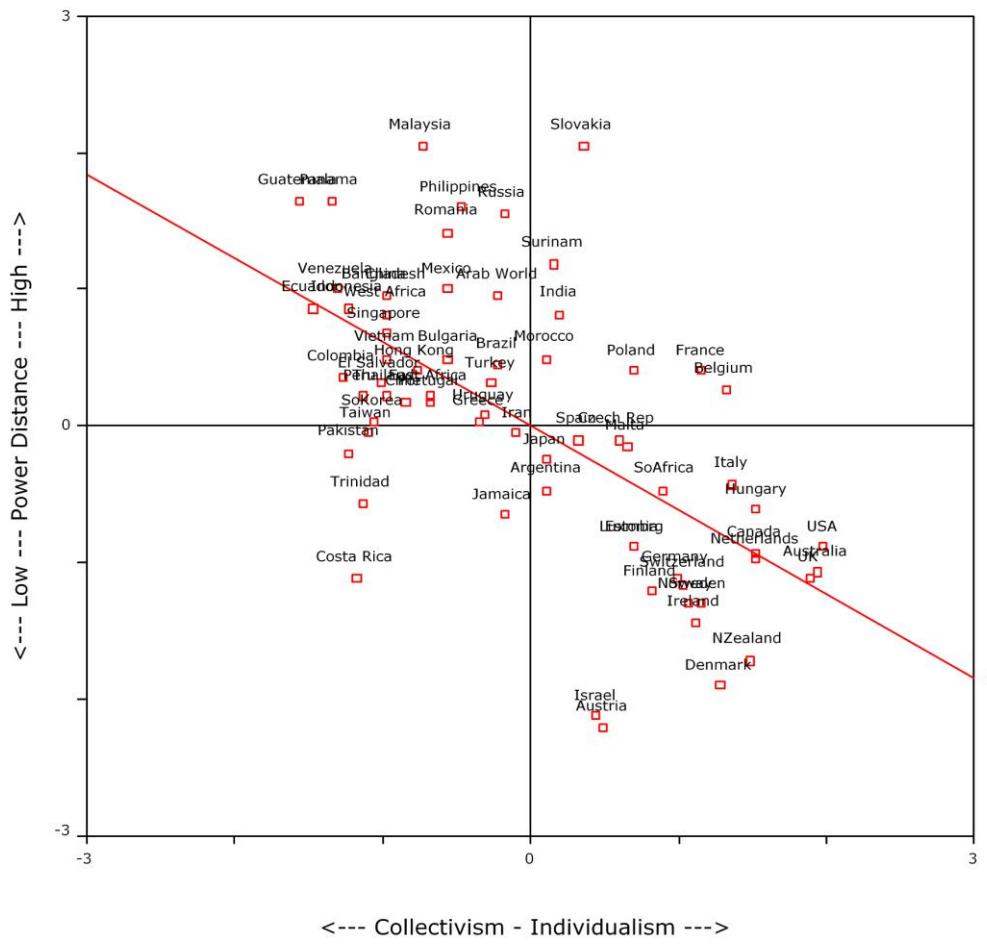


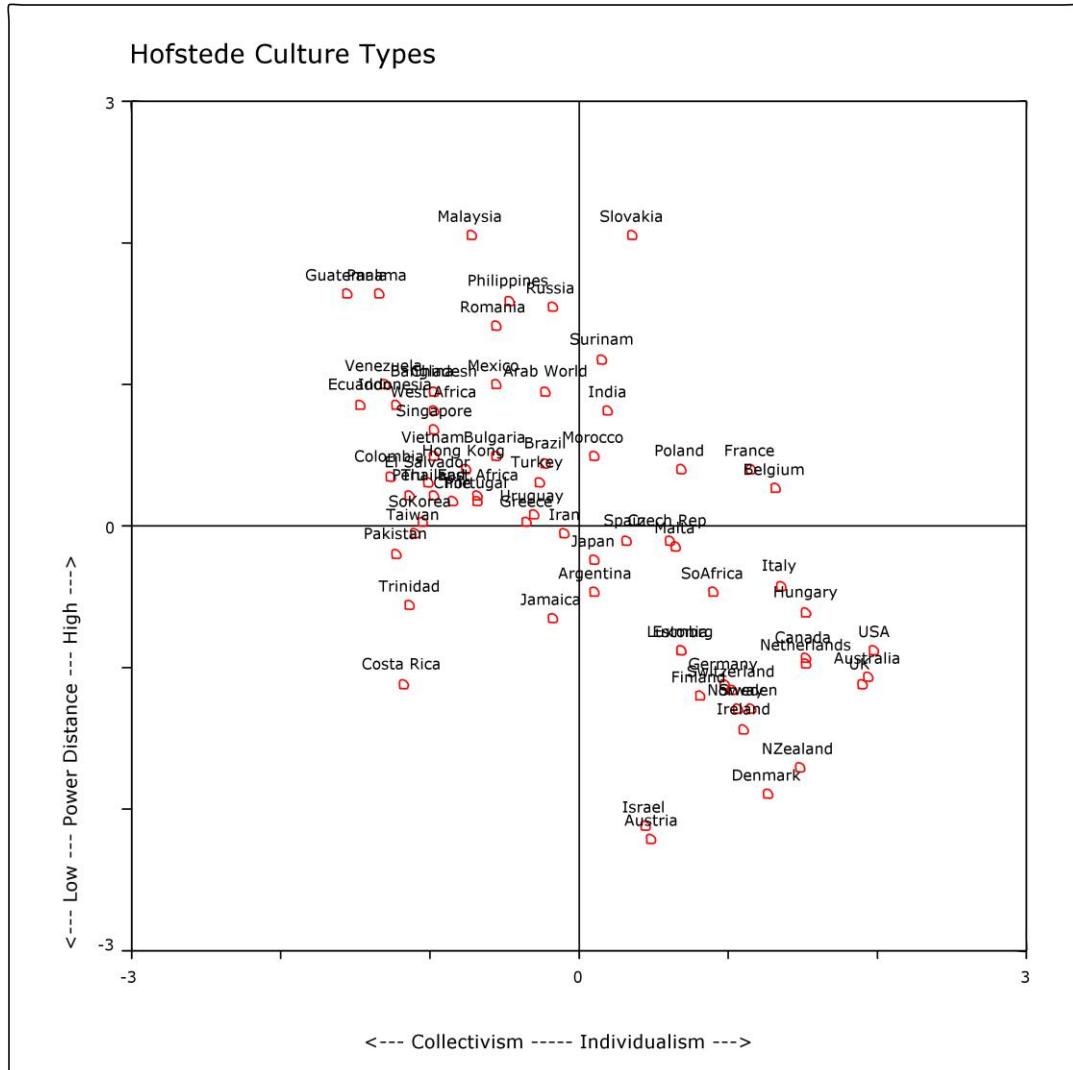
**WEEK 6 –**  
**FROSTY THE SNOWMAN**  
**PROTEIN STRUCTURES AND AMINO ACIDS**

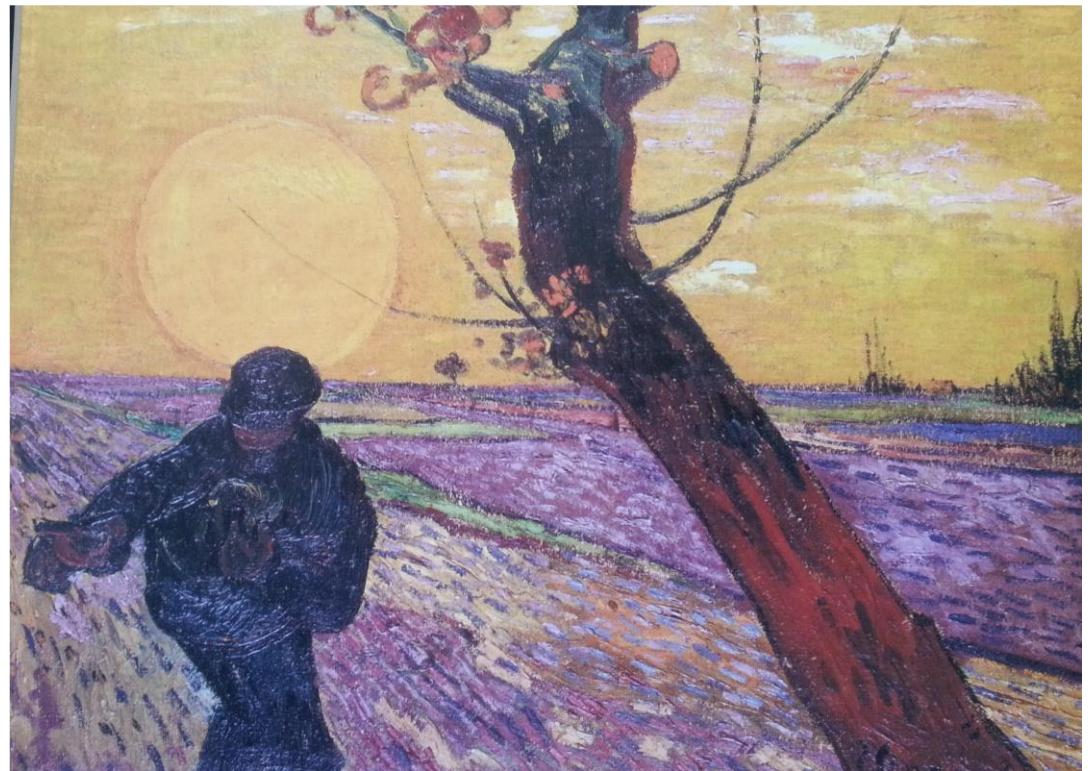




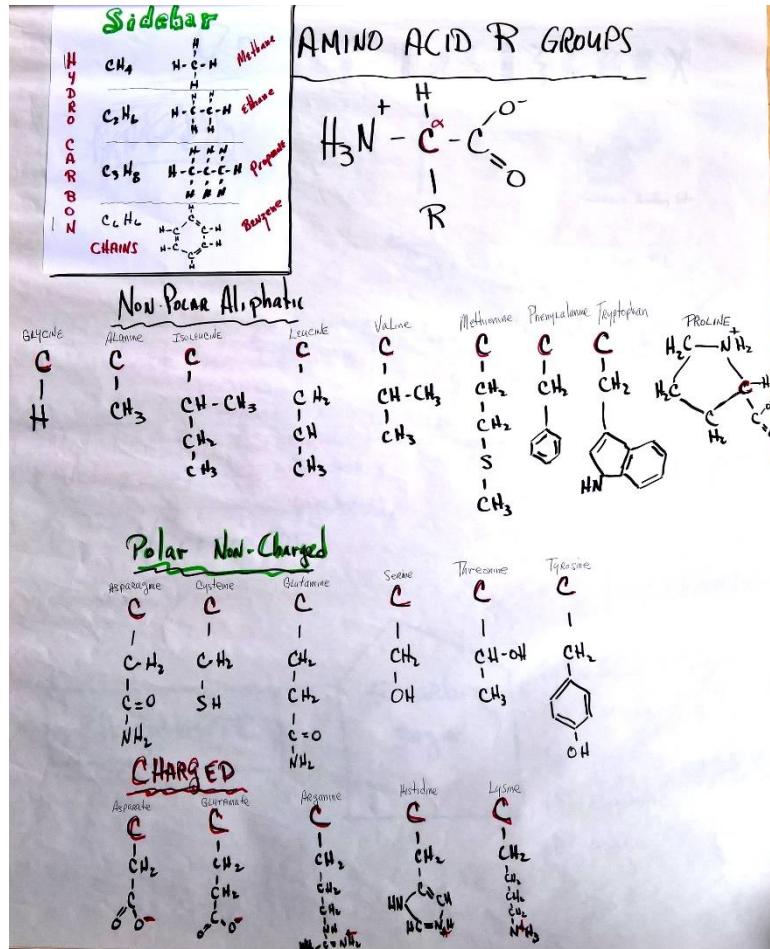
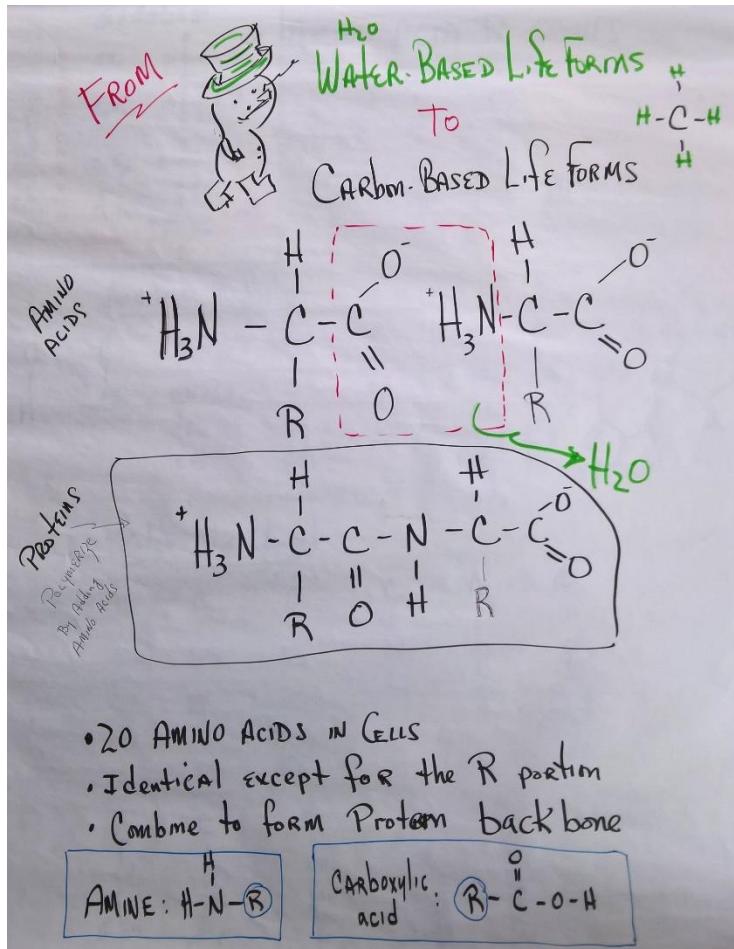
## Hofstede Culture Types







# Queue up the Song



Destructive Mutation

- Single Change to position #6 on Chromosome #11

Normal Hemoglobin	Sickle Cell
Nucleotide GAG codes for AMINO ACID GLU	Nucleotide GTG codes for AMINO ACID VAL

NUCLEOTIDE

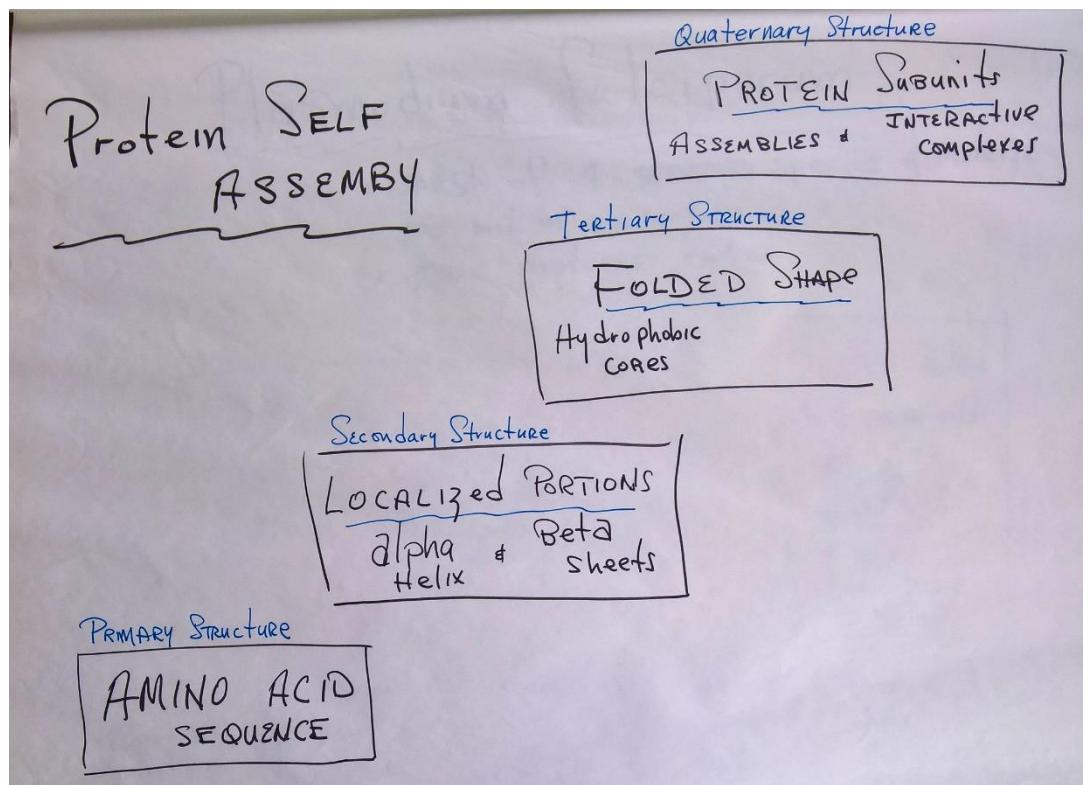
PHOSPHATE

5 CARBON SUGAR

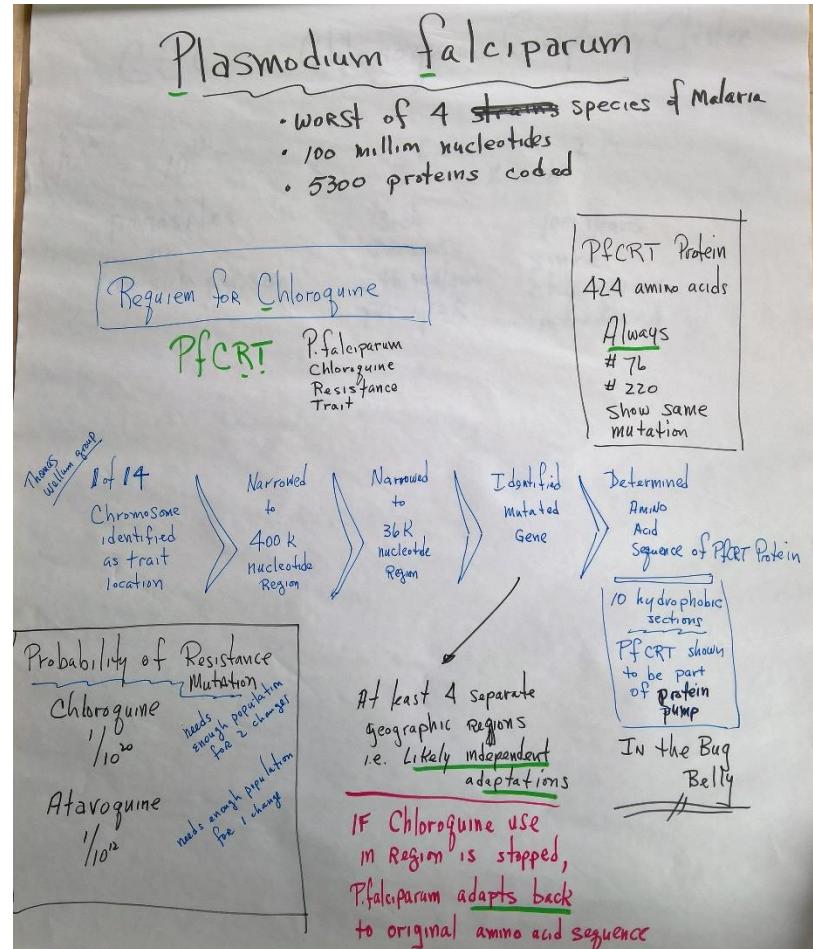
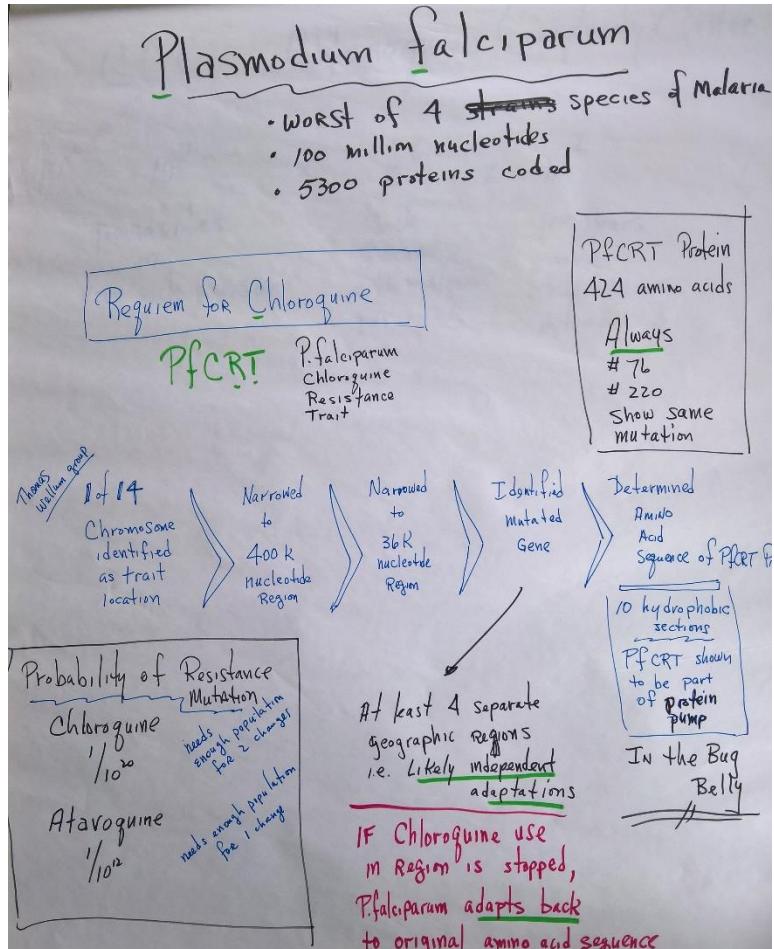
Nitrogen Base

BASES

- [A] Adenine
- [G] Guanine
- [C] Cytosine
- [T] Thymine
- [U] Uracil



# Plasmodium falciparum



# **WEEK 4 –**

## **BACTERIAL FLAGELLUM**

### **IRREDUCIBLE COMPLEXITY**

# Protein Machinery

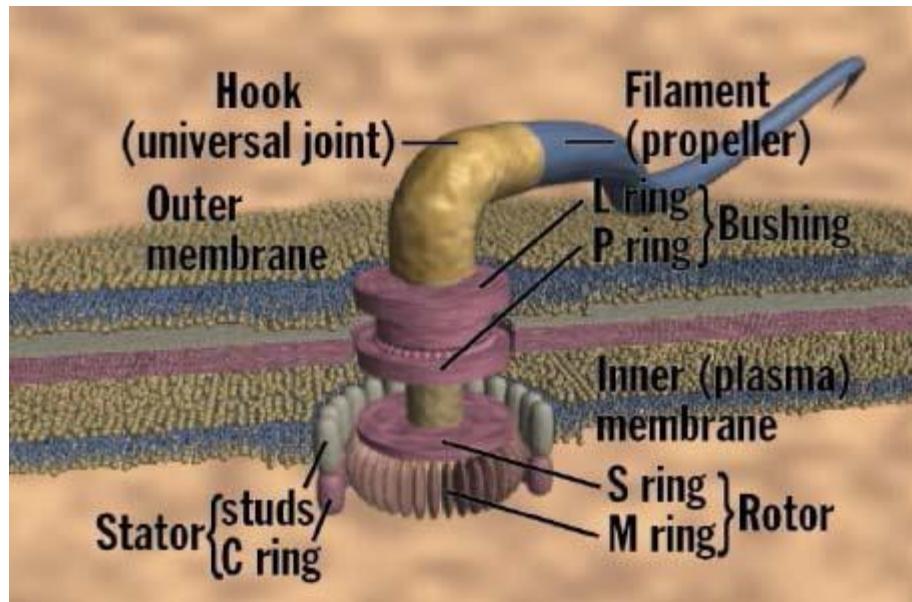
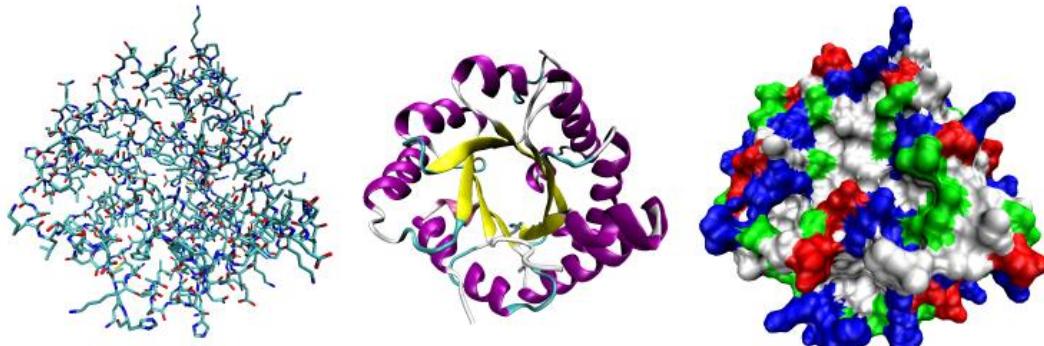
## Nano Factory

- Protein Structures & Systems
- Shape determines function
- Precision folding

## Cellular Lean Manufacturing

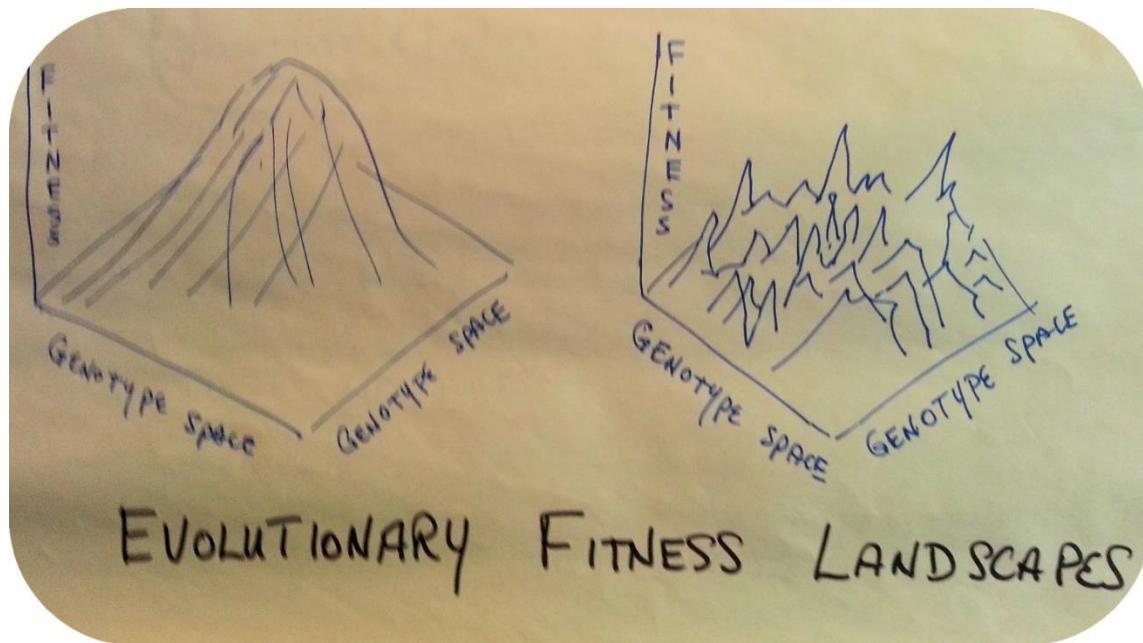
- Marshalling the right stuff at the right time in the right place in precise quantities
- Using catalysts to conserve energy
- Minimizing inventory
- Controlling access to parts
- Initiating process control sequences
- Using multilayer feedback loops
- Dismantling, reallocating, reusing
- And doing it quickly

*Knee-high by the 4<sup>th</sup> of July*



# **WEEK 5 – RUGGED LANDSCAPE NAVIGATING SHAPE SPACE, I.E., “RECALCULATING”**

# Devil in the Details?



# **WEEK 8 –**

## **MOVIE NIGHT: IMAGINAL CELLS**

**WEEK 9 –  
SYSTEMS  
POLYMERASE  
FRUIT FLIES**

# **WEEK 10 – RANDOMNESS, I.E., CONTINGENCY IS REAL**

**WEEK 11 – REVISITING FIRST QUESTIONS**  
**DEMBSKI DESIGN METHODOLOGY**  
**CSI COMPLEX SPECIFIED INFORMATION**  
**IS GOD? VS. WHO IS GOD?**

## **WEEK 12 – FINAL NOTES ON MICHAEL BEHE ADDITIONAL MATERIALS**

# Isotope Half Life

Direct Measurements began ~1905

Isotope Decay Constants are Known & Do Not Vary over Time

Table 1: Naturally-Occurring Radioactive Isotopes and Their Half-Lives		
Radioactive Isotope (Parent)	Product (Daughter)	Half-Life (Years)
Samarium-147	Neodymium-143	106 billion
Rubidium-87	Strontium-87	48.8 billion
Rhenium-187	Osmium-187	42 billion
Lutetium-176	Hafnium-176	38 billion
Thorium-232	Lead-208	14 billion
Uranium-238	Lead-206	4.5 billion
Potassium-40	Argon-40	1.26 billion
Uranium-235	Lead-207	0.7 billion
Beryllium-10	Boron-10	1.52 million
Chlorine-36	Argon-36	300,000
Carbon-14	Nitrogen-14	5715
Uranium-234	Thorium-230	248,000
Thorium-230	Radium-226	75,400

Most half-lives taken from Holden, N.E. (1990) *Pure Appl. Chem.* 62, 941-958.

Direct Measurement of Geologic Materials

$$t = \frac{1}{\lambda} \ln \left( 1 + \frac{D}{P} \right)$$

$t$  = age of rock

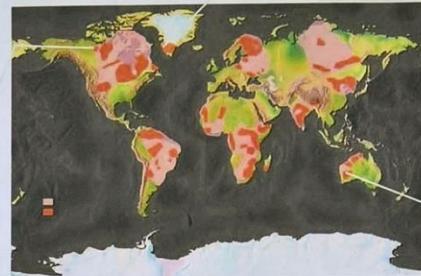
$\lambda$  = decay constant

$D$  = amount of daughter isotope in atoms

$P$  = amount of parent isotope in atoms

Archean Rock  
Zircon Crystals  
Bentonite Clays

Acasta Gneiss 4 Ga  
Oldest intact rock, i.e. formed under ground



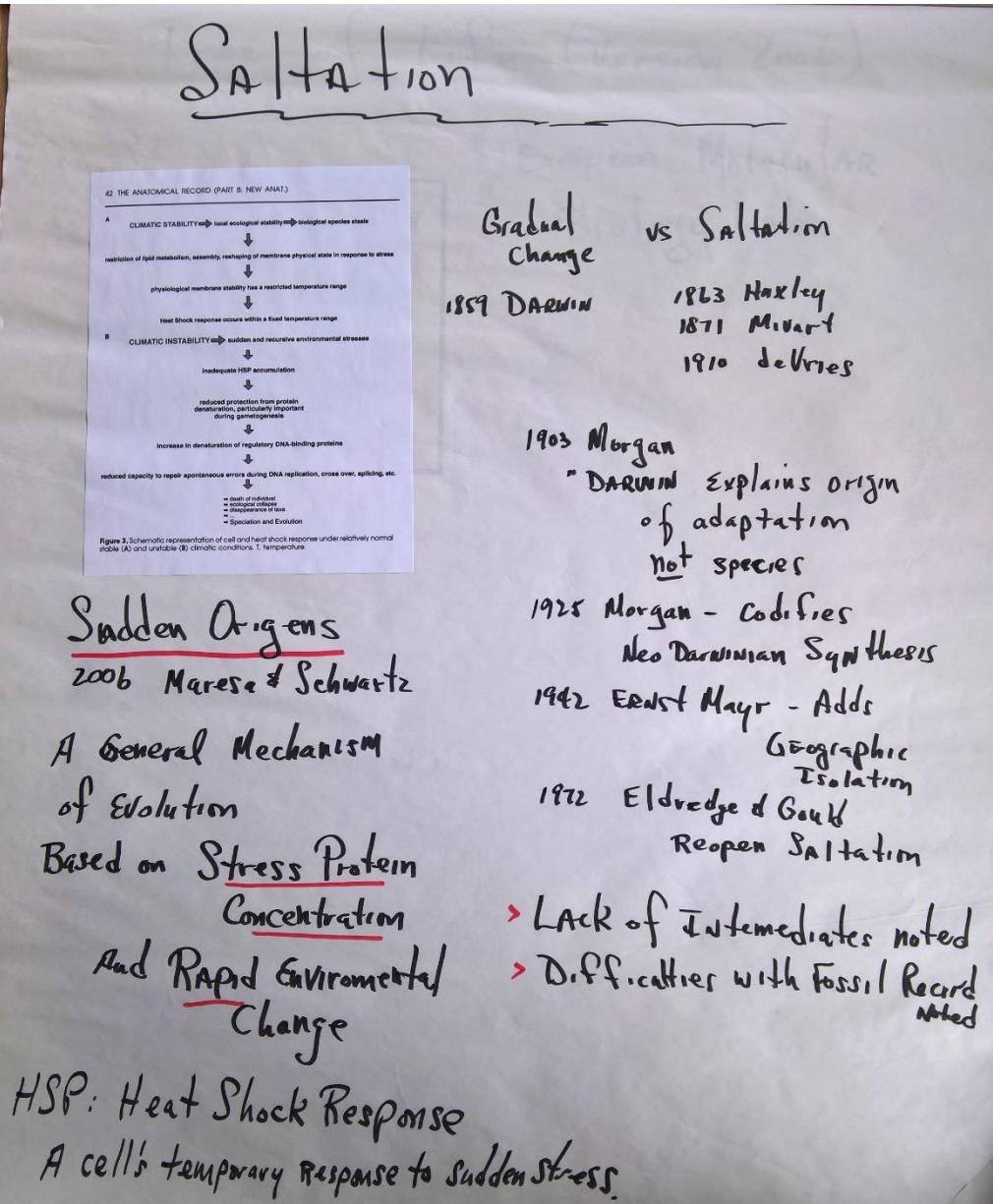
Isua sediments  
3.8 Ga  
Oldest  
Life Form ? record?

... but not fossils.  
Using  $^{13}\text{C}/^{12}\text{C}$  Ratio  
And Thermochem  
Decomp of Non-Bio  
Carbonate can produce  
 $^{13}\text{C}$  &  $^{12}\text{C}$

Jack Hills Zircon 4.4 Ga  
Oldest Earth material

Source: Scientific American 2005

# Saltation



# Design Arguments through Time

<u>Design Arguments thru Time</u>	
	<u>Refuters</u>
• Thomas Aquinas	DARWIN - Random mutation Natural Selection
Evidence of Purpose points to designer	
• Analogy (RAY Bentley Durham)	Hume - The greater the dissimilarity the weaker the analogy
1600 Eye of Bird      Appearance 1700 Ear drum      Design Design Designer	DARWIN - gradual evolution of complex organisms over millions of years
• Paley's Watchmaker Coordinated parts operating in precision	
• Guided Evolution	
• Irreducible Complexity	
• Biological Information	
• Fine Tuning	

# Periodic Table

**Periodic table of the elements**

**Developed in the mid 1800's, the periodic table reflects the order and organization evident in the structure of atoms. Because all matter complies with the same basic laws of nature, differences and similarities among the elements can be explained, even predicted, based on atomic structure and, hence, the table. Dimitri Mendeleev was one of the first to recognize this periodicity "in the symmetry" of the table.**

*Note added by Tom Hennigan:  
Hand scale = 100 Hennigans*

Element	Root word	Symbol
G	Lithium	Li
Antimony	Silibum	Sb
Copper	Cuprum	Cu
Gold	Aurum	Au
Iron	Ferrum	Fe
Lead	Plumbum	Pb
Mercury	Hydrargyrum	Hg
Potassium	Kalium	K
Silver	Argentum	Ag
Sodium	Natrium	Na
Tin	Stannum	Sn

**Meaning**  
Inactive  
Stench  
Pale green  
Rainbow  
Hidden  
Stone  
New  
Artificial

**Latin**

**Elements in a "block" are related in that their outermost electrons, those with the most influence on chemical properties, fill a common type of orbital – s, p, d, or f.**

**“Elements are composed of indivisible particles of matter, called atoms, which are identical in all respects, particularly weight.”**  
**—John Dalton**  
**English school teacher, 1803**

**Not to be confused with a path, an orbital is a 3-D map of where you are likely to find an electron at a particular energy level.**

**From the editors of**  
**A Penton Publication**  
**MOTION SYSTEMS**  
**PTdesign**  
[www.ptdesign.com](http://www.ptdesign.com) 216.696.7000

**what on earth**

**scale matters**

**moving around the table**

**phases**

**color code**

**periodic table**

**sharp principal diffuse fine structure**

**filling the orbitals**

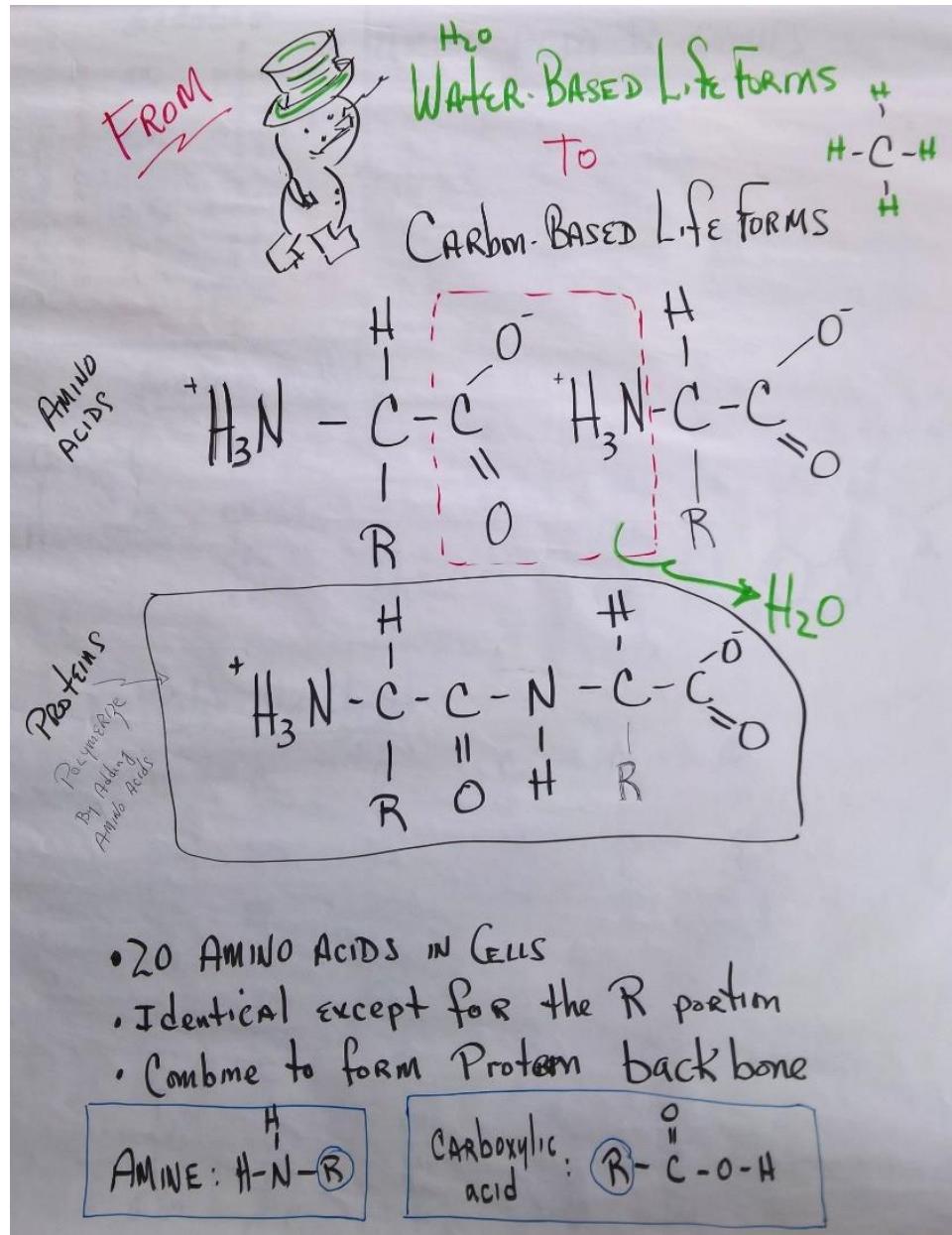
**atomic spectra**

## Queue up the Song

"Must have been some magic . . . "

From  
water-based life form  
to  
carbon-based life form

Water removed as proteins add amino acids together





# Resources for Further Study

Email contact

with the presentation group:

**design@openspc.com**

Many links & resources. Ask and we will email others.

## Website Links

[www.arn.org](http://www.arn.org) [Access Research Network]

[www.discovery.org](http://www.discovery.org) [Discovery Institute]

[www.iscid.org](http://www.iscid.org) [International Society for Complexity, Information, and Design]

## Published Resources

- Behe, Michael J.,
  - Darwin's Black Box
- Broom, Neil,
  - How Blind is the Watchmaker?
- Darwin, Charles
  - The Origin of Species
- Davis, Jimmy H. and Poe, Harry L.,
  - Designer Universe
- Dembski, William A.,
  - Intelligent Design
  - The Design Inference
- Denton, Michael
  - Evolution: A Theory in Crisis
- Farmelo, Graham, editor,
  - It Must be Beautiful: Great Equations of Modern Science
- Johnson, Phillip E.,
  - Reason in the Balance
  - Darwin on Trial
- Woodward, Thomas
  - Doubts about Darwin: History of Intelligent Design
- Wells, Jonathan
  - Icons of Evolution

Thank you for your interest and attention.

# nanoMfg Tech Group Resources

[www.sme.org/nano](http://www.sme.org/nano)

**Downloads of presentations  
Available free to SME members**

**Annual Micro/Nano Manufacturing  
Conference each Spring**

**Regular virtual events  
Reaching engineers, practitioners,  
scientists, academics, students,  
consultants, lawyers, environmental  
& safety regulators, policy makers**

**Worldwide Reach**



## Some papers and presentations available:

### **Webinars**

- [Breakthrough Nanotechnology Companies](#)
- [Nanotechnology Systems Diploma Programming for Technologists](#)
- [Large-Scale Engineered Synthesis of BaTiO<sub>3</sub> Nanoparticles](#)
- [Nanotechnology Workforce Requirements in Germany](#)
- [2009 Study of Nanotechnology Commercialization Trends in the U.S. Manufacturing Industry](#)
- [Overview of Nanotechnology Development in the UK and China](#)
- [Using molecular building blocks to create features in the Nano World – Dip Pen Nanolithography](#)
- [Today's Pioneering Nanotechnology Companies: The Race for a Trillion Dollar Market](#)

### **Online Video Presentations**

- An Introduction to Nano Manufacturing from an Additive Layer Perspective & Beyond ([Boris Fritz](#) on "Nanotechnology: Today's Tomorrow")  
[http://www.youtube.com/watch?v=ESuAJfxAo&feature=youtube\\_gdata\\_player](http://www.youtube.com/watch?v=ESuAJfxAo&feature=youtube_gdata_player)
- Nanotechnology: Risk perception vs risk management (PDF)
- [NanoInk Overview \(PDF\)](#)
- Fast Track to NanoManufacturing Products: Unique Issues of Intellectual Property, Patent and Barriers to Commercialization (PDF)
- The Next Step in RP: Four Approaches to Additive Layer Nanomanufacturing (PDF)
- Nanomanufacturing Tech Group Presentation, NanoManufacturing Conf., April 2008 (PDF)

Thank you



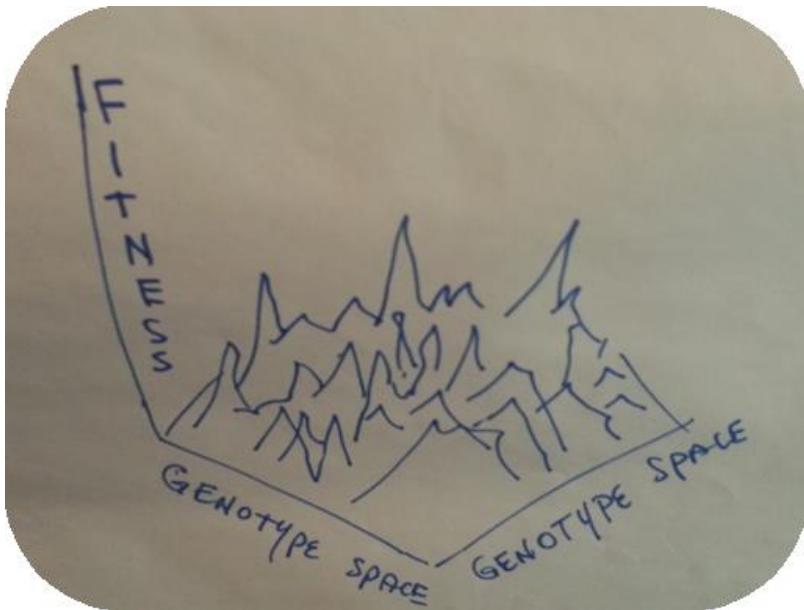
Contact Info:

Wes Starr, Director, Open Space Consultants  
[research@openspc.com](mailto:research@openspc.com)  
330-385-4813



# **METROLOGY**

# Ranked among the rNot



**1 Corinthians 1:26-31**

For consider your calling, brethren,  
that there were not many wise according to  
the flesh, not many mighty, not many noble;  
but God has chosen  
the foolish things of the world to shame the  
wise,  
and God has chosen  
the weak things of the world to shame the  
things which are strong,  
and the base things of the world and the  
despised  
God has chosen, the things that are not,  
so that He may nullify the things that are, so  
that no man may boast before God.

# In to Receive

Now we have received,  
not the spirit of the world,  
but the Spirit who is from God,  
so that we may know the things freely  
given to us by God, which things we also  
speak, not in words taught by human  
wisdom,  
but in those taught by the Spirit,  
combining spiritual thoughts with  
spiritual words.

I Corinthians 2:12-13

- We have received
  - We may know
  - We speak

## And what passes as acceptable in Krumme?

- Worshipping the works of our hands or ourselves as creators not discoverers
- Presuming our gifts bubbled up from the slime
- Using institutions to sow confusion, i.e., scrubbing the brains of children that seem to innately perceive that God Is.
- Laws as coded suggestions
- Flying buttresses, vaulted ceilings & stained glass relegated to tourist centers, i.e., leaky flat roofs for church.
- Engineer removed from NASA space mission for daring to consider design of the universe.
- Cloning humans for spare parts

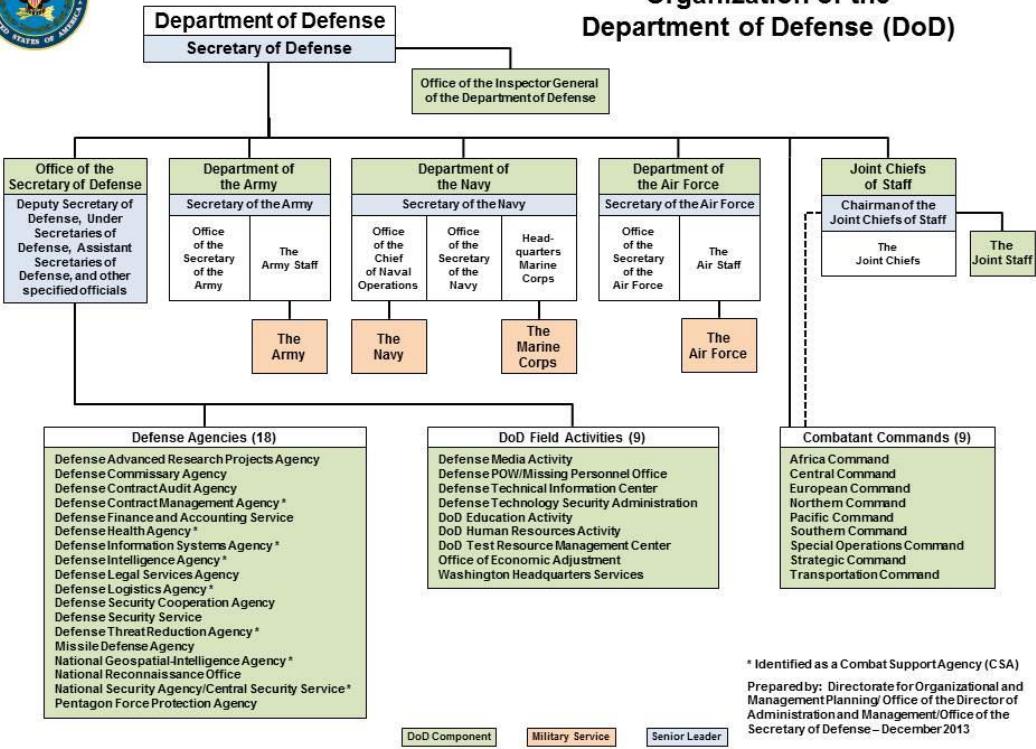




## Welcome to the Desert of the Real

**T**he red pill? (Who told us that?)

- Demands for conformity enforced by bombs, political correctness, and police state
- Assumptions of rational humanity challenged by inability to stop wars, genocides
- Car seats for those we did not abort because life defined by us is precious
- Phones smarter & we dumb-down
- Abu Ghraib – Our soldiers wouldn't?



# Maintaining Perspective

## Rains on the Just and the Unjust alike

- I do not ask that you take them out of the world.
- Who told us that?

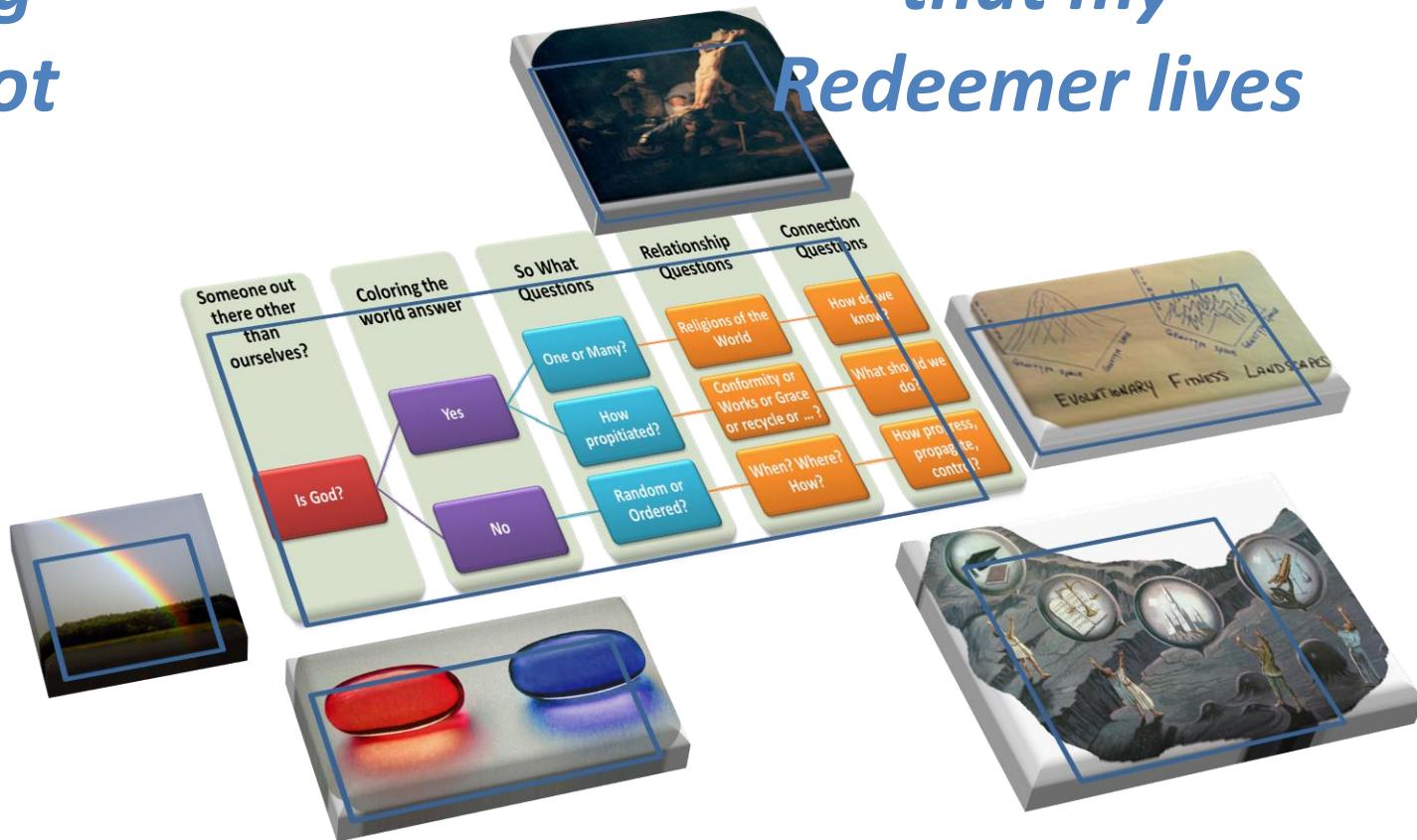


- Cracked earth or wonderful garden homeland?
- God has chosen the things that are not, that He may nullify the things that are



*Ranked  
among  
the rNot*

*Surely I know,  
that my  
Redeemer lives*



Ranked among the rNot

# Causes of \_\_\_\_\_

**Cause #2**

Poor Materials

Bad Design

Incompetent Employees

**Cause #1**

Ineffective Marketing

Cost of Materials

**Resultant Effect**

Wrong Answers

Long Hold Times

Fee Structure

**Cause #3**

	IA					
1	H	IIA				
2	Li	Be				
3	Na	Mg	IIIB	IVB	V	
4	K	Ca	Sc	Ti	V	
5	Rb	Sr	Y	Zr	N	
6	Cs	Ba	*La	Hf	T	
7	Fr	Ra	*Ac	Rf	H	

# Periodic Table of the Elements

						0
III A	IV A	V A	VI A	VII A		2 He
5 B	6 C	7 N	8 O	9 F	10 Ne	
13 Al	14 Si	15 P	16 S	17 Cl	18 Ar	
31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr	
49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe	
81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn	

\* Lanthanide Series

## + Actinide Series

58 <b>Ce</b>	59 <b>Pr</b>	60 <b>Nd</b>	61 <b>Pm</b>	62 <b>Sm</b>	63 <b>Eu</b>	64 <b>Gd</b>	65 <b>Tb</b>	66 <b>Dy</b>	67 <b>Ho</b>	68 <b>Er</b>	69 <b>Tm</b>	70 <b>Yb</b>	71 <b>Lu</b>
90 <b>Th</b>	91 <b>Pa</b>	92 <b>U</b>	93 <b>Np</b>	94 <b>Pu</b>	95 <b>Am</b>	96 <b>Cm</b>	97 <b>Bk</b>	98 <b>Cf</b>	99 <b>Es</b>	100 <b>Fm</b>	101 <b>Md</b>	102 <b>No</b>	103 <b>Lr</b>

# The Synthetic Theory of Evolution [NEO DARWINISM]

① Natural Selection

Darwin

② Inherited Characteristics

Mendel

③ Population Equilibrium Equations

Hardy & Weinberg

Had to be  
gradual  
change

but

New  
Saltation  
Being  
accepted

Seen in  
Population  
phenotypes  $\Rightarrow$

which  
prefer  
Genotype  $\Rightarrow$   
changes  
Selected  
for  
Advantage

$$(p+q)^2 = 1$$

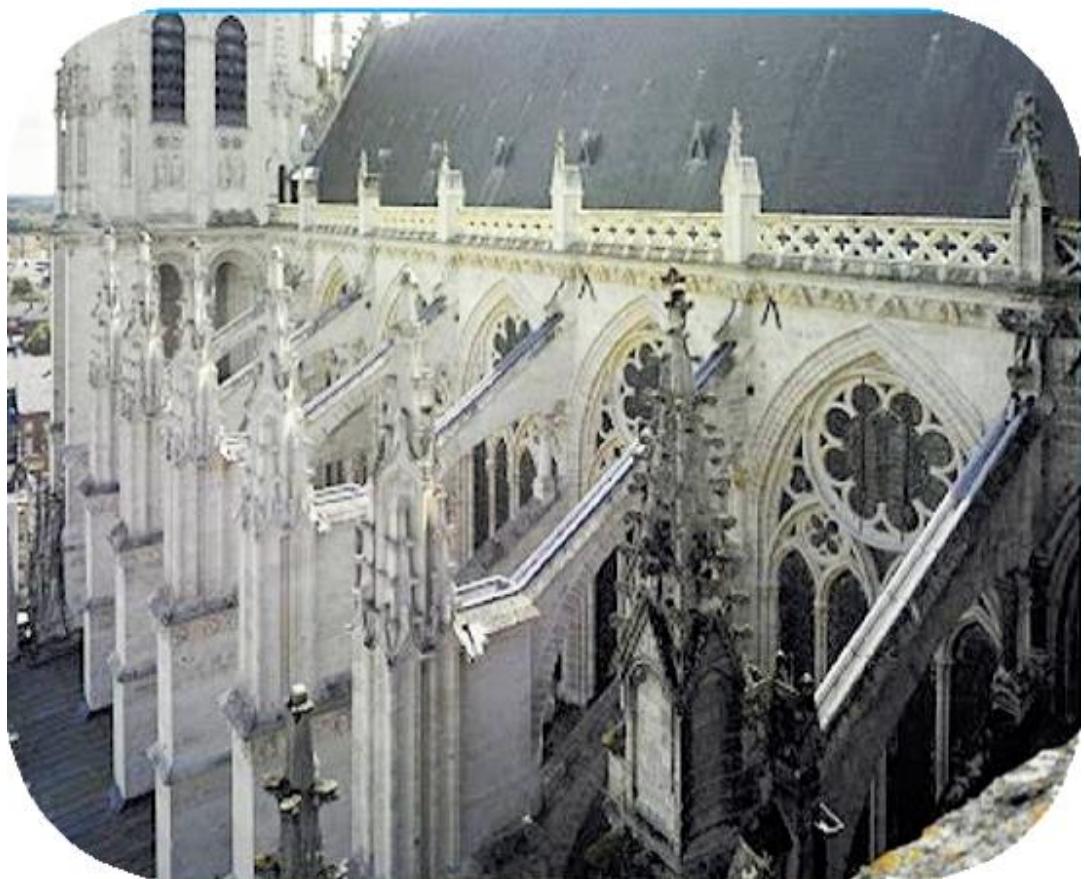
Alleles  
Genes

$$\underline{p^2 + 2pq + q^2 = 1}$$

Chromosomes

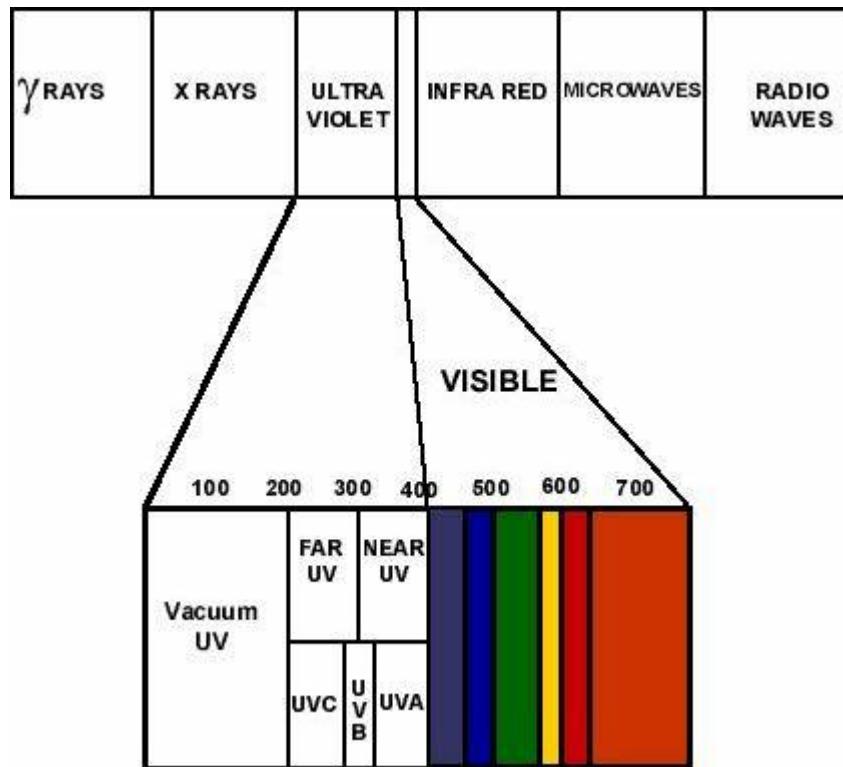


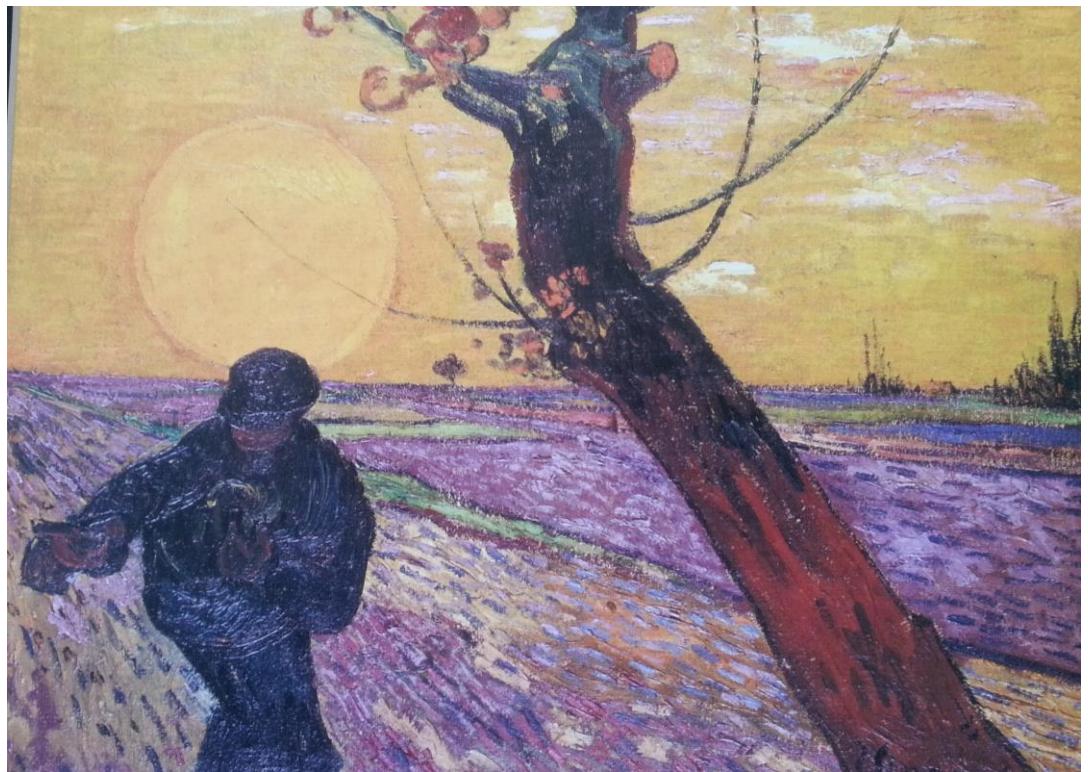














# Sorting Truth Claims

## Exclusivism

## Inclusivism

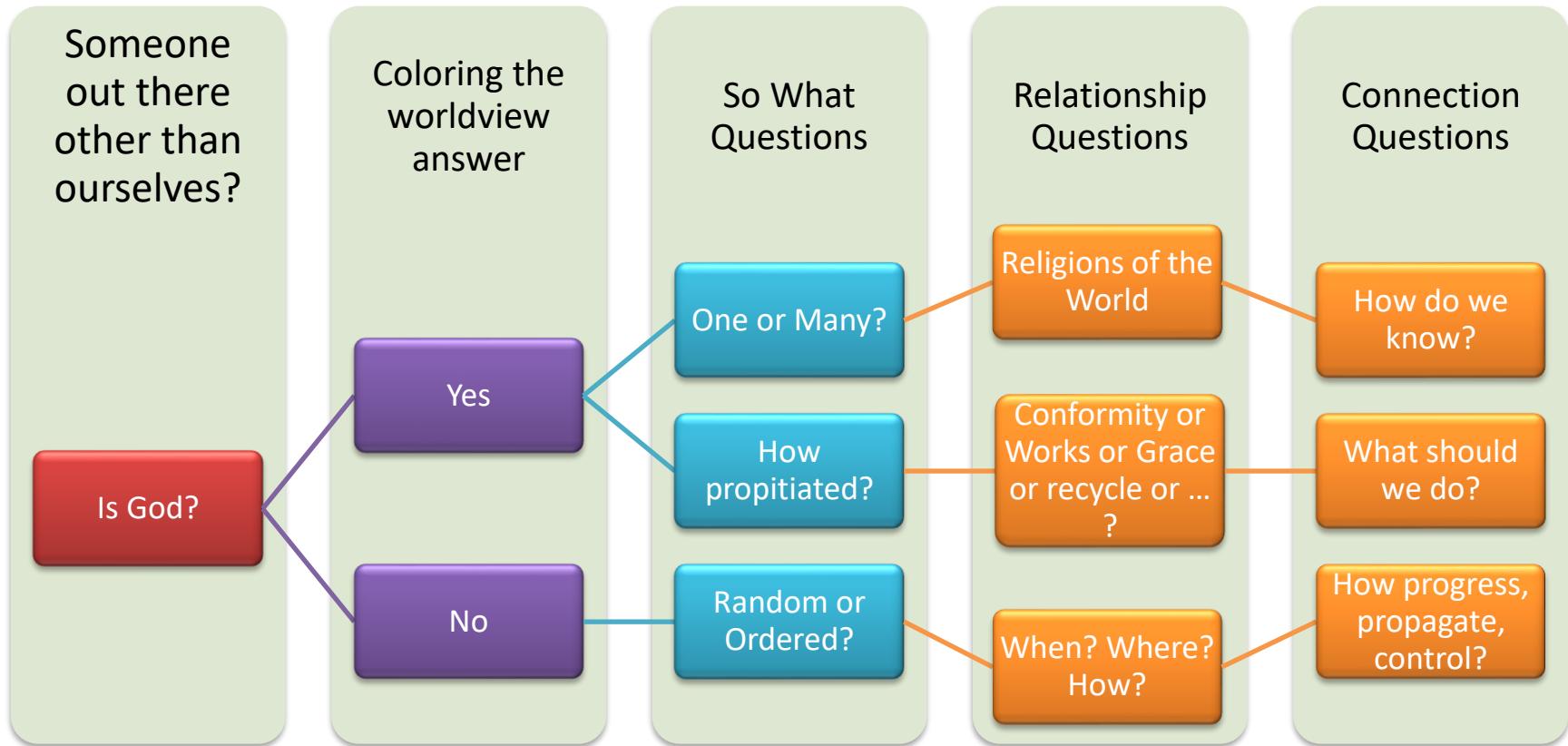
## Pluralism

Exclusivism	Inclusivism	Pluralism
<ul style="list-style-type: none"><li><input type="checkbox"/> Central claims of Christianity are true.</li><li><input type="checkbox"/> Where Truth claims conflict, other religions are false.</li><li><input type="checkbox"/> Jesus Christ is the unique incarnation of God.</li><li><input type="checkbox"/> Salvation is available only via person &amp; work of Jesus Christ.</li><li><input type="checkbox"/> God has revealed Himself definitively through the Bible.</li><li><input type="checkbox"/> Other religions must come to Jesus Christ as Lord and Savior.</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Central claims of Christianity are true.</li><li><input type="checkbox"/> Links to skepticism, higher-critical analysis of history &amp; scripture and recognizes Darwinian conclusions challenging creation and Truth claims.</li><li><input type="checkbox"/> Jesus is superior savior, but non-Christian religions may provide other saving ways.</li><li><input type="checkbox"/> Interreligious dialog emphasized as means of reaching mutual understanding of truths.</li><li><input type="checkbox"/> Karl Rahner: Anonymous Christian – implicit salvation w/o preaching or visible church.</li></ul>	<ul style="list-style-type: none"><li><input type="checkbox"/> Christian exclusivism is an intolerant vestige of immoral religious imperialism.</li><li><input type="checkbox"/> Rival Truth claims are part of a kaleidoscope of preferences &amp; values.</li><li><input type="checkbox"/> Rejects Christianity as superior, unique or normative. If there is a God, then obligated to soteriological universalism.</li><li><input type="checkbox"/> Salvation / Enlightenment / Liberation is reality of all major religions. Evaluate pragmatically.</li><li><input type="checkbox"/> Religion is private, i.e., not part of public domain of fact.</li></ul>

# Sorting Truth Claims

Exclusivism	Inclusivism	Pluralism
<ul style="list-style-type: none"><li>• Central claims of Christianity are true.</li><li>• Where Truth claims conflict, other religions are false.</li><li>• Jesus Christ is the unique incarnation of God. Salvation is available only via person &amp; work of Jesus Christ.</li><li>• God has revealed Himself definitively through the Bible.</li><li>• Other religions must come to Jesus Christ as Lord and Savior.</li></ul>	<ul style="list-style-type: none"><li>• Central claims of Christianity are true.</li><li>• Links to skepticism, higher-critical analysis of history &amp; scripture and recognizes Darwinian conclusions challenging Truth claims.</li><li>• Jesus is superior savior, but non-Christian religions may provide other saving ways.</li><li>• Interreligious dialog as means of reaching mutual truths.</li><li>• Expect Anonymous Christian – implicit salvation w/o preaching.</li></ul>	<ul style="list-style-type: none"><li>• Christian exclusivism is an intolerant vestige of immoral religious imperialism.</li><li>• Rival Truth claims are parts of kaleidoscope of preferences &amp; values.</li><li>• Rejects Christianity as superior, unique or normative. If a God, then expect soteriological universalism solution.</li><li>• Salvation / Enlightenment / Liberation is reality of all major religions. Evaluate pragmatically.</li><li>• Religion is private, i.e., not in public fact domain.</li></ul>

# What are the Key Questions?



# Sorting Truth Claims

## Exclusivism

- Central claims of Christianity are true.
- Where Truth claims conflict, other religions are false.
- Jesus Christ is the unique incarnation of God. Salvation is available only

## Inclusivism

- Central claims of Christianity are true.
- Links to skepticism, higher-critical analysis of history & scripture and recognizes Darwinian conclusions challenging Truth claims.

## Pluralism

- Exclusivism is a vestige of intolerant religious imperialism.
- Rival Truth claims are parts of kaleidoscope of preferences & values.
- Rejects Christianity as superior, unique or

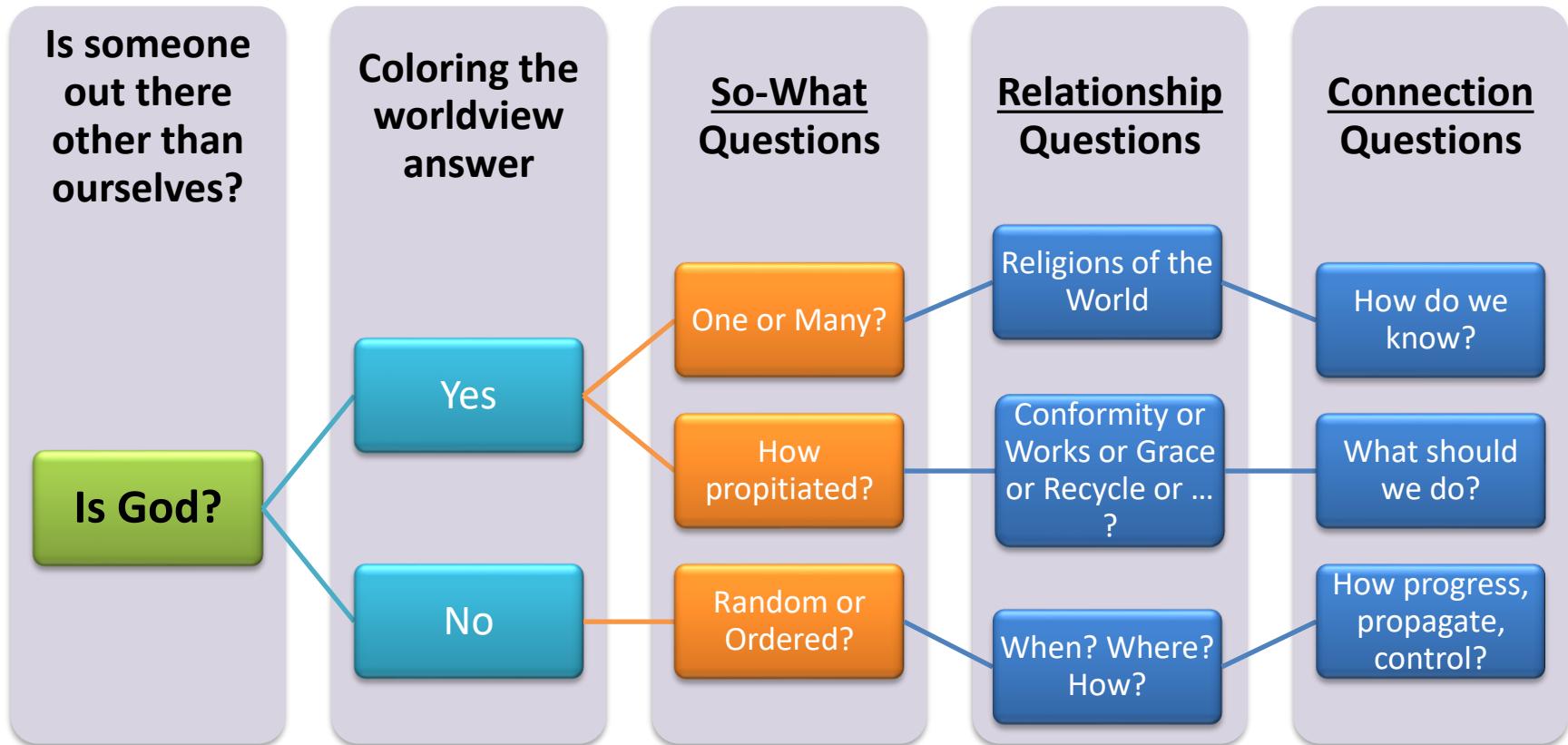
# Implications

And what passes as acceptable?

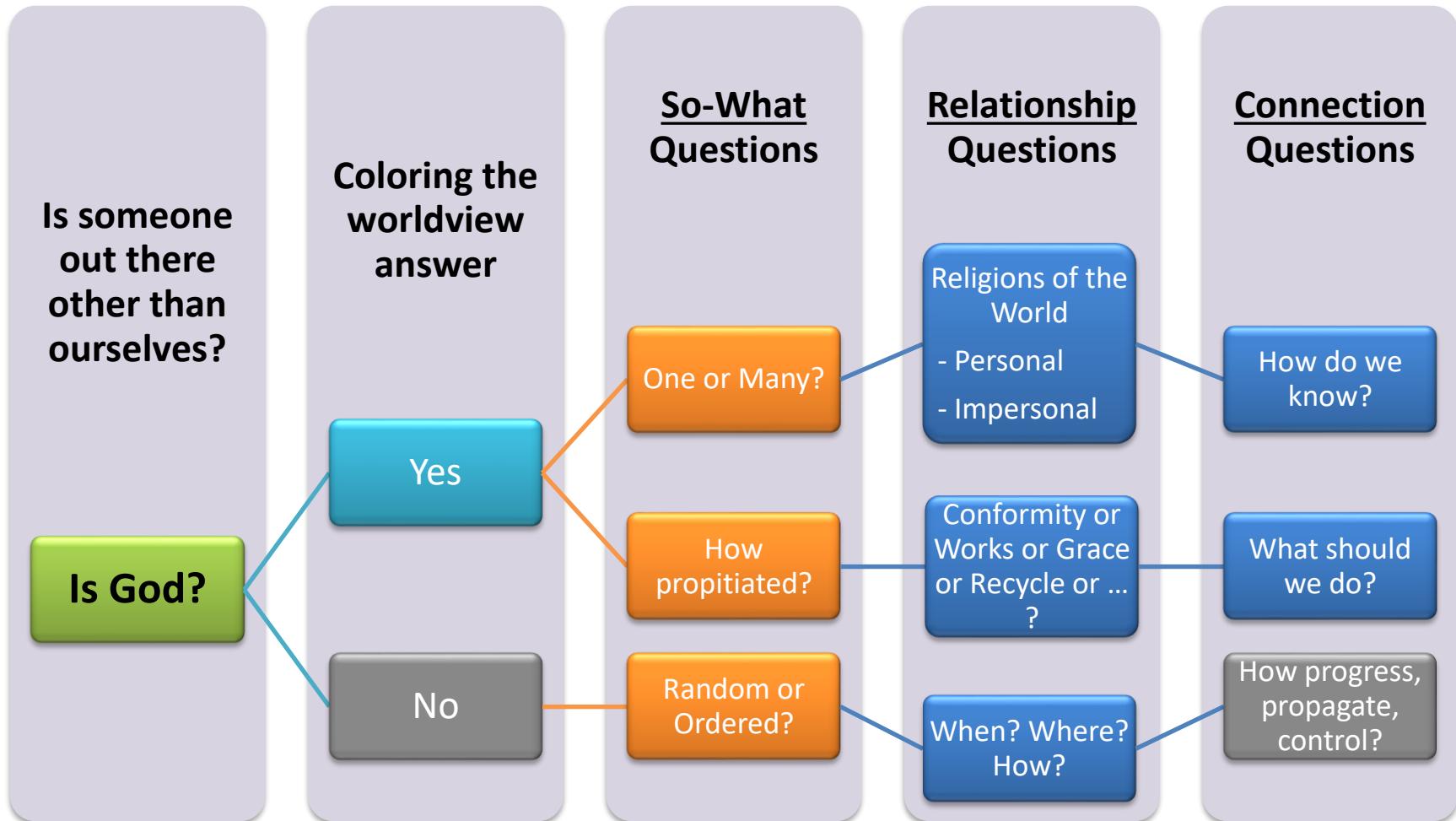
- Worshipping the works of our hands and ourselves as creators not discovers
- Presuming our gifts bubbled up from the slime
- Using institutions to sow confusion, i.e., scrubbing the brains of children that seem to innately perceive that God Is.
  - Laws as coded suggestions
  - Leaky flat roofs, i.e., no flying buttresses or vaulted ceilings
  - Engineer removed from NASA space mission for daring to consider design of the universe.



# What are the Key Questions?



# What are the Key Questions?



## God Is Revealed

# Pegging the Meter

**Oh, thou Holy Ghost, parade round  
our minds taking captive our thoughts  
unto the Christ.**



**Thou shalt love the Lord thy God with  
all thy heart, with all thy soul, with all  
thy mind and with all thy strength.**

- Trinitarian. The Lord bless you & keep you, the Lord make His face shine upon you & be gracious to you, the Lord lift up the light of His countenance upon you & give you peace.
- No break in Godhead
- Creator of all, seen & unseen
- Hear O Israel, the Lord thy God the Lord is one.

## Chalcedonian Christology

## Nicene – Apostles – Athanasian Creeds

- Fully God & Fully Man
- Virgin birth
- Mary is Theotokos

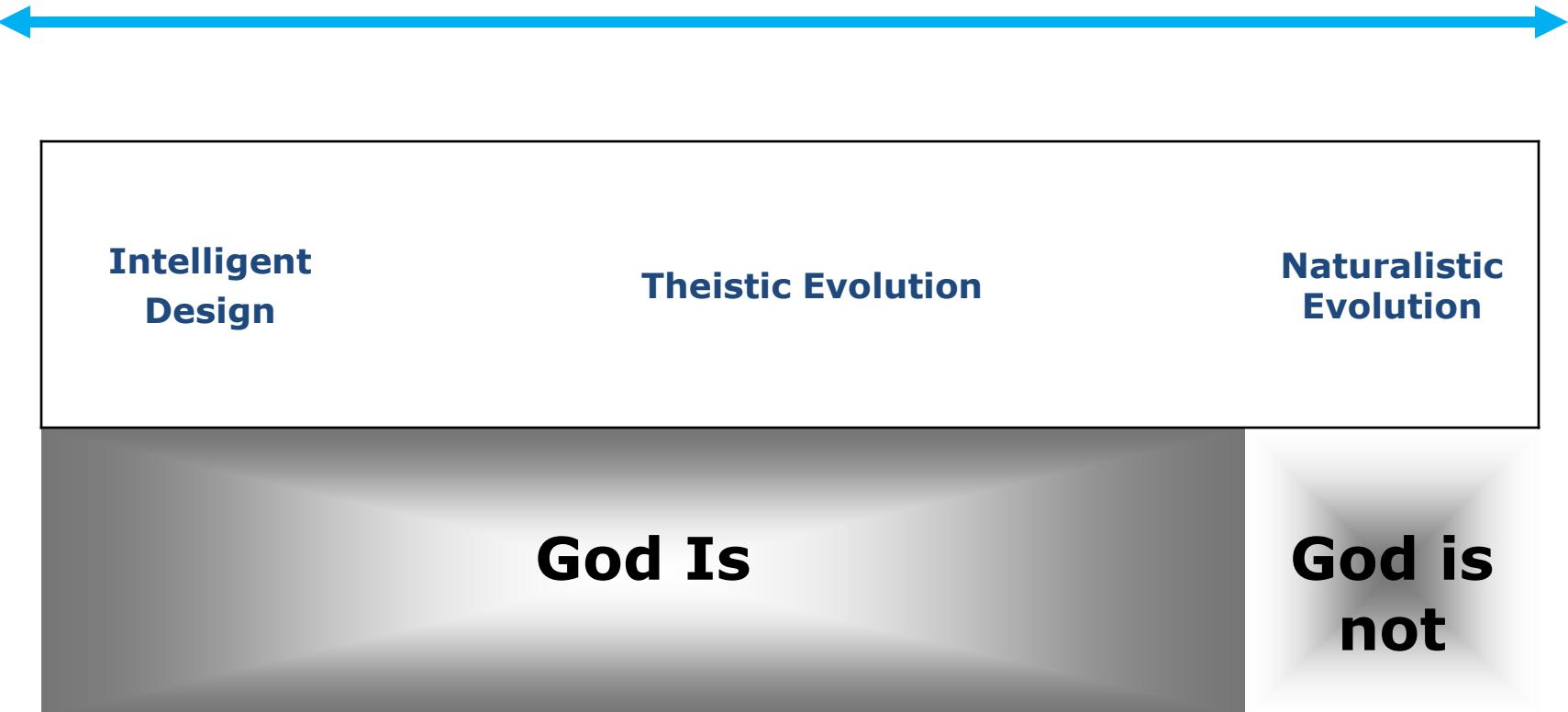
## Resolvable Conflicts

## General & Special Revelation

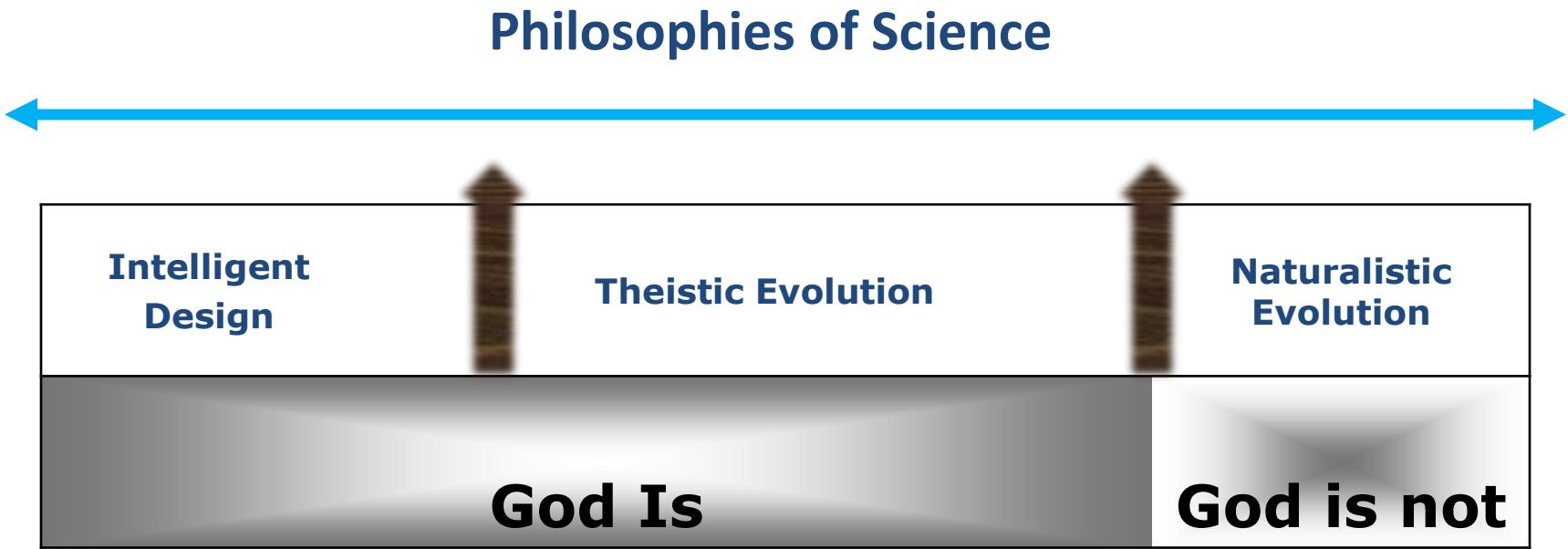
- Maintain Unity
- Science has a voice
- Young Earth position not required
- What is His purpose?
- Pray . . .

# Continuum of Thought

## Philosophies of Science

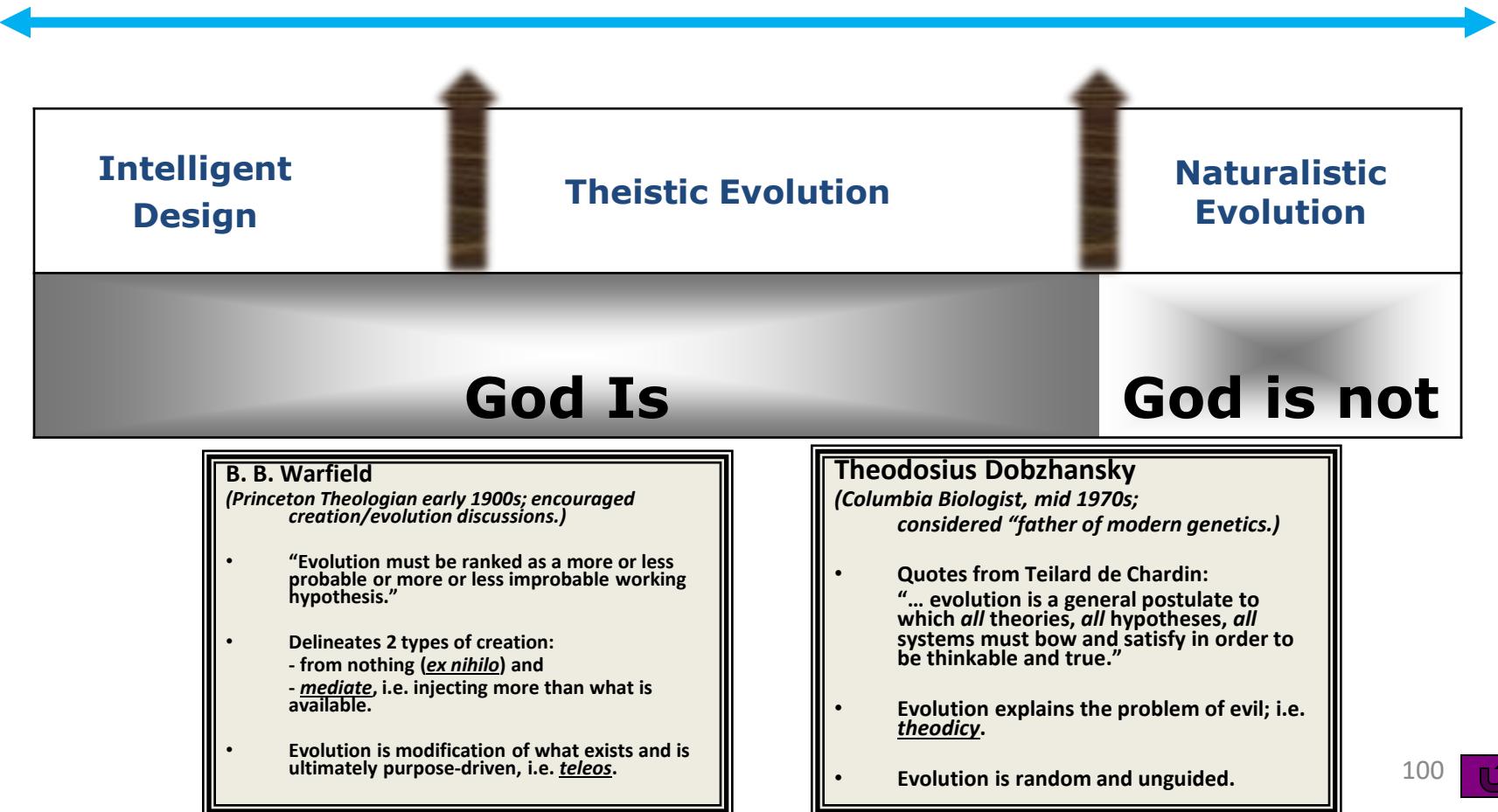


# Continuum of Thought



# Continuum of Thought

## Philosophies of Science



# Continuum of Thought

## Philosophies of Science



# Fence-Post Positions

## Theistic Evolution

### B. B. Warfield

(Princeton Theologian early 1900s;  
encouraged creation/evolution  
discussions.)

- “Evolution must be ranked as a more or less probable or more or less improbable working hypothesis.”
- Delineates 2 types of creation:
  - from nothing (*ex nihilo*) and
  - *mediate*, i.e. injecting more than what is available.
- Evolution is modification of what exists and is ultimately purpose-driven, i.e. *teleos*.

### Theodosius Dobzhansky

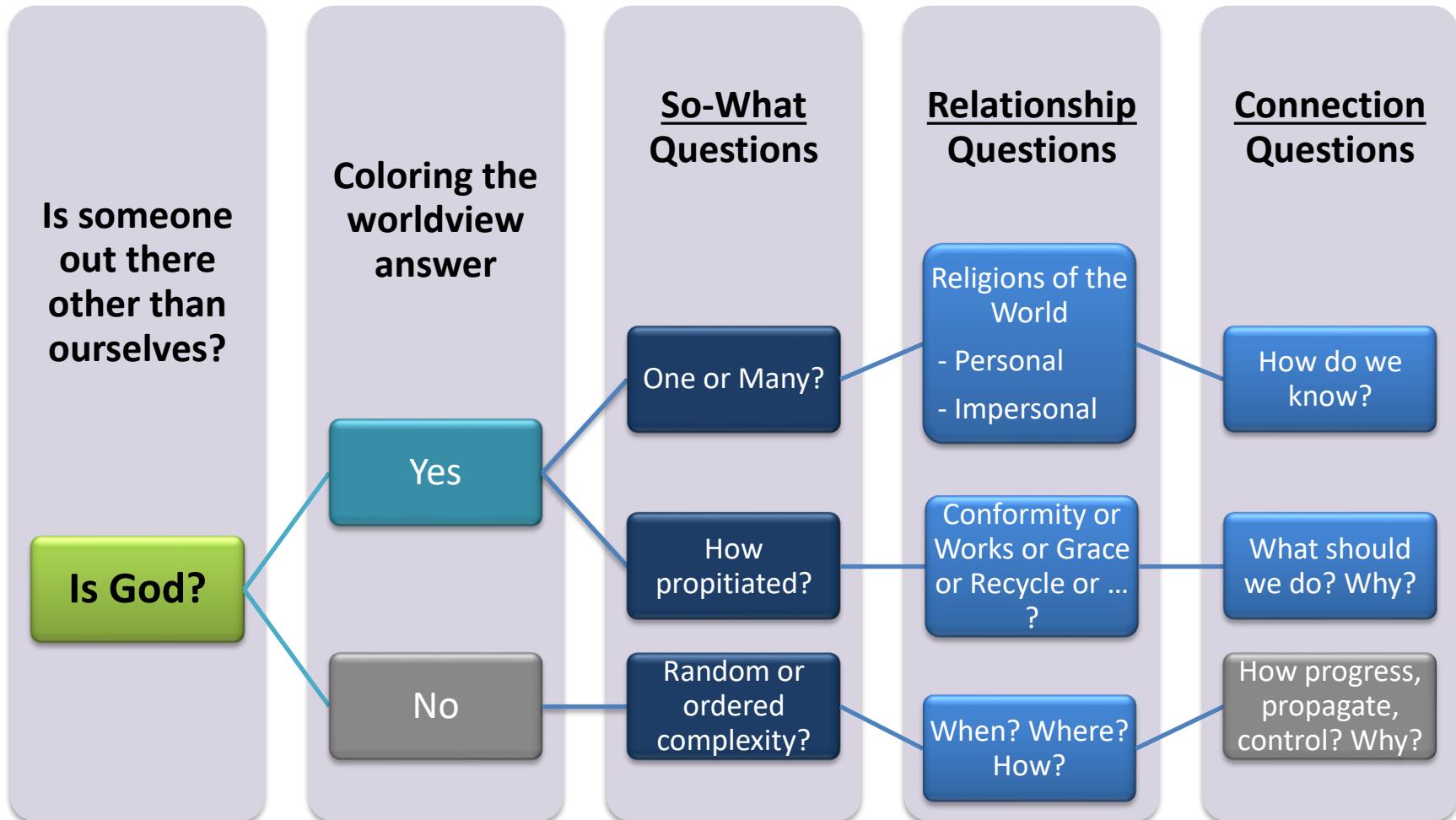
(Columbia Biologist, mid 1970s;  
considered “father of modern genetics.”)

- Quotes from Teilard de Chardin:

“... evolution is a general postulate to which *all* theories, *all* hypotheses, *all* systems must bow and satisfy in order to be thinkable and true.”
- Evolution explains the problem of evil; i.e. *theodicy*.
- Evolution is random and unguided.



# What are the Key Truth Questions?



# Sorting Truth Claims

## Exclusivism

- Central Truth claims of Christianity are true.
- Where Truth claims conflict, other religions are false.
- Jesus Christ is the unique incarnation of God. Salvation is available only via person & work of Jesus Christ.
- God has revealed Himself definitively through the Bible.
- Universe was created revealing His handiwork to all. Evolution may reflect some truths, i.e., recognizes both general & special revelation.

## Inclusivism

- Central Truth claims of Christianity are true and ...
- Links to skepticism, higher-critical analysis of history & scripture and recognizes Darwinian conclusions challenging Truth claims.
- Jesus is superior savior, but non-Christian religions may provide other saving ways.
- Uses interreligious dialog as means of reaching mutual truths.
- Expect anonymous Christian – implicit salvation w/o preaching. (*Karl Rahner*)

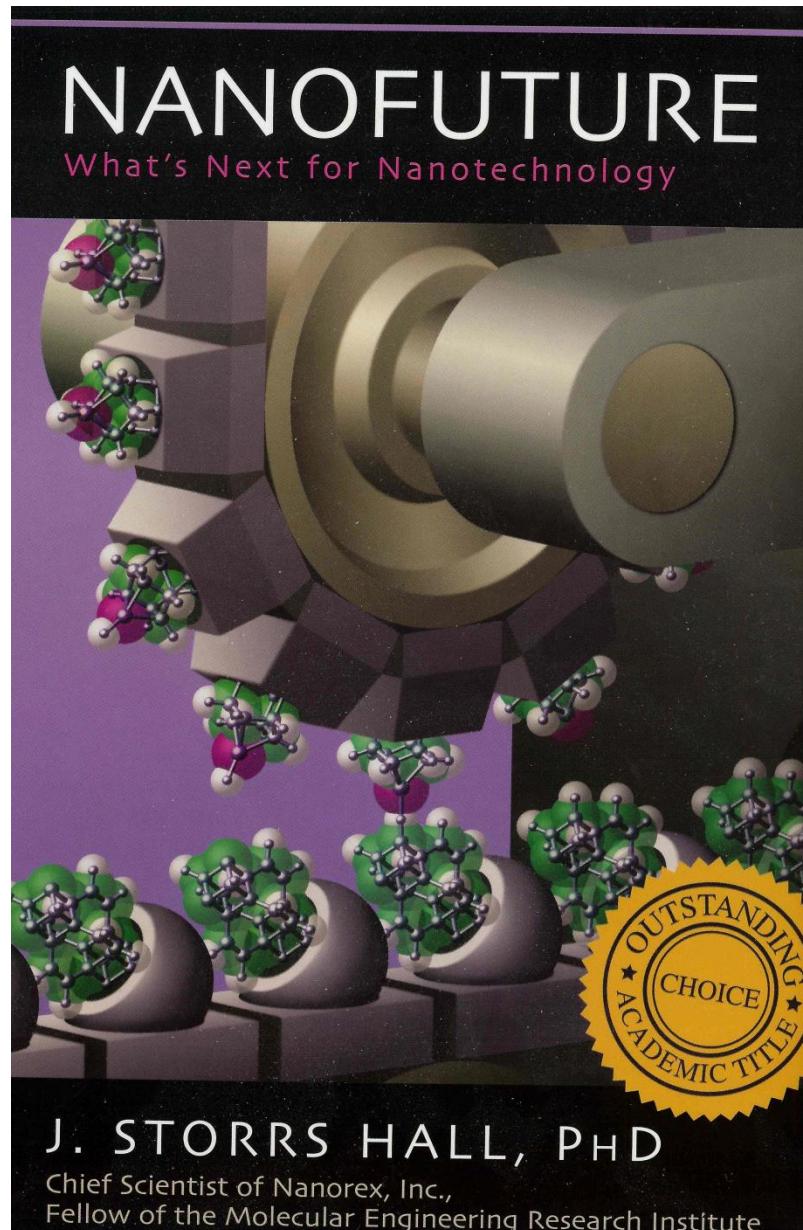
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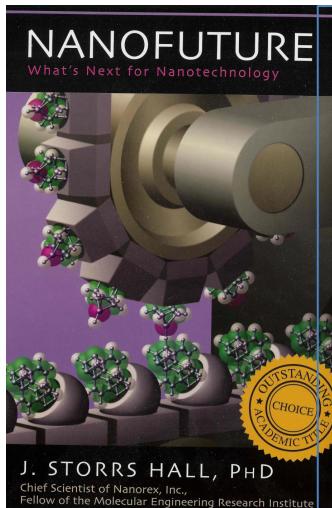
# Complexity

Some quotes from Josh Hall, 2005 –

- ‘*Current practice involves factories that make nanoscale products. Mature nanotechnology will involve nanoscale factories: working machines, atom-for-atom precise, that make things.*’
- ‘*Each living cell is an amazing factory jammed with molecular machines. Most are made of proteins.*’
- ‘*Sticking together properly is the key to how everything in the cell works.*’
- ‘*Need an “AB” machine? Then make an “A”; make a “B” and let them float & stick together. Floating & sticking is called self-assembly.’ ???*



# Complexity



- **Some quotes from Josh Hall, 2005 –**
- ***'Current practice involves factories that make nanoscale products. Mature nanotechnology will involve nanoscale factories: working machines, atom-for-atom precise, that make things.'***
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- ***'Sticking together properly is the key to how everything in the cell works.'***
- ***'Need an "AB" machine? Then make an "A"; make a "B" and let them float & stick together. Floating & sticking is called self-assembly.' ???***

*"Seen in retrospect, evolution as a whole, doubtless, had a general direction, from simple to complex, from dependence to relative independence of the environment, to greater and greater autonomy of individuals,*

*greater and greater development of sense organs and nervous systems conveying and processing information about the state of the organism's surroundings, and finally greater and greater consciousness.*

*You can call this direction progress or by some other name."*

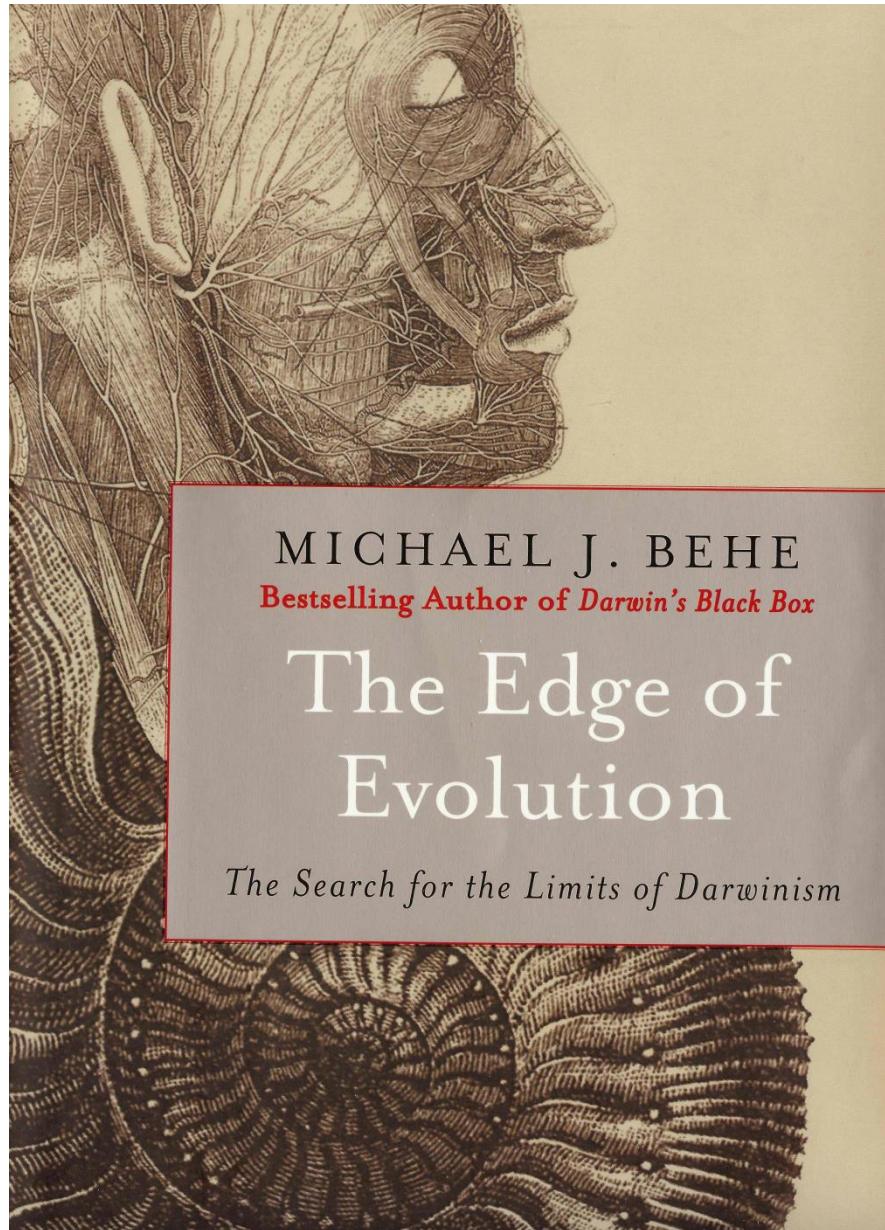
— Theodosius Dobzhansky

Per Michael Behe, 2007 –

**Goldilocks Problem:** Consider a well-stirred pool full of potential protein matches, i.e., lots of "A", lots of "B", lots of X,Y,Z.

- Bump and stick: the octopus with multiple "A" and "B" connect points and the cell clogs.
- Bump but mismatch on several points and the protein machine fails to operate or stay together.
- Proteins are both shape and charge specific.

*Floating & Sticking by Chance isn't just inefficient, it is likely inoperative.*



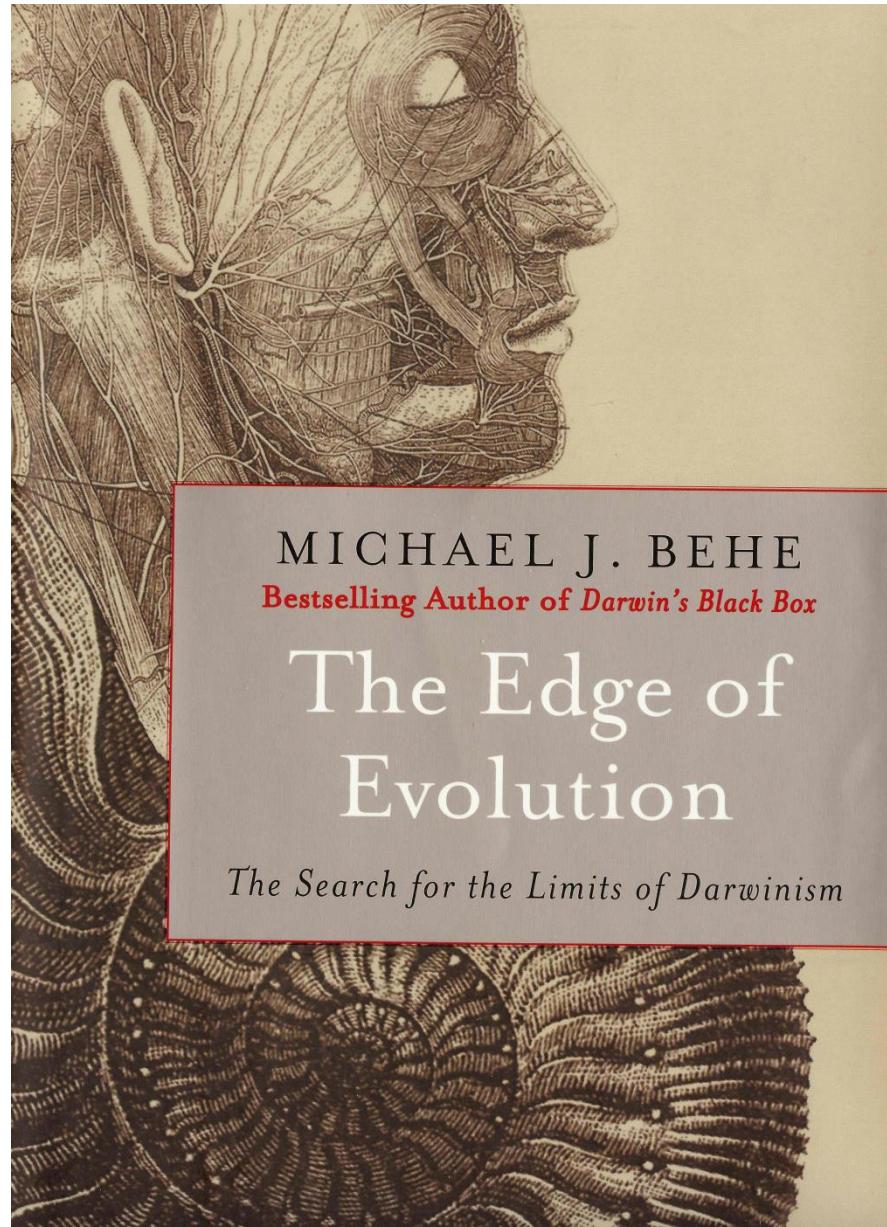
## Goldilocks Problem:

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# Mushing the Details

--- G.K. Chesterton, The Everlasting Man

*I do believe that the things on which I have insisted are more essential to an outline of history than the things which I have subordinated or dismissed.*

I do not believe that the past is most truly pictured as a thing in which humanity merely fades away into nature, or civilization merely fades away into barbarism, or religion fades away into mythology, or our own religion fades away into the religions of the world.

**In short, I do not believe that the best way to produce an outline of history is to rub out the lines.**



Mutating and selecting the optimal fitness would require directional knowledge across a complex landscape with choices among localized high fitness possibilities.

# Teleology / Study of Purpose

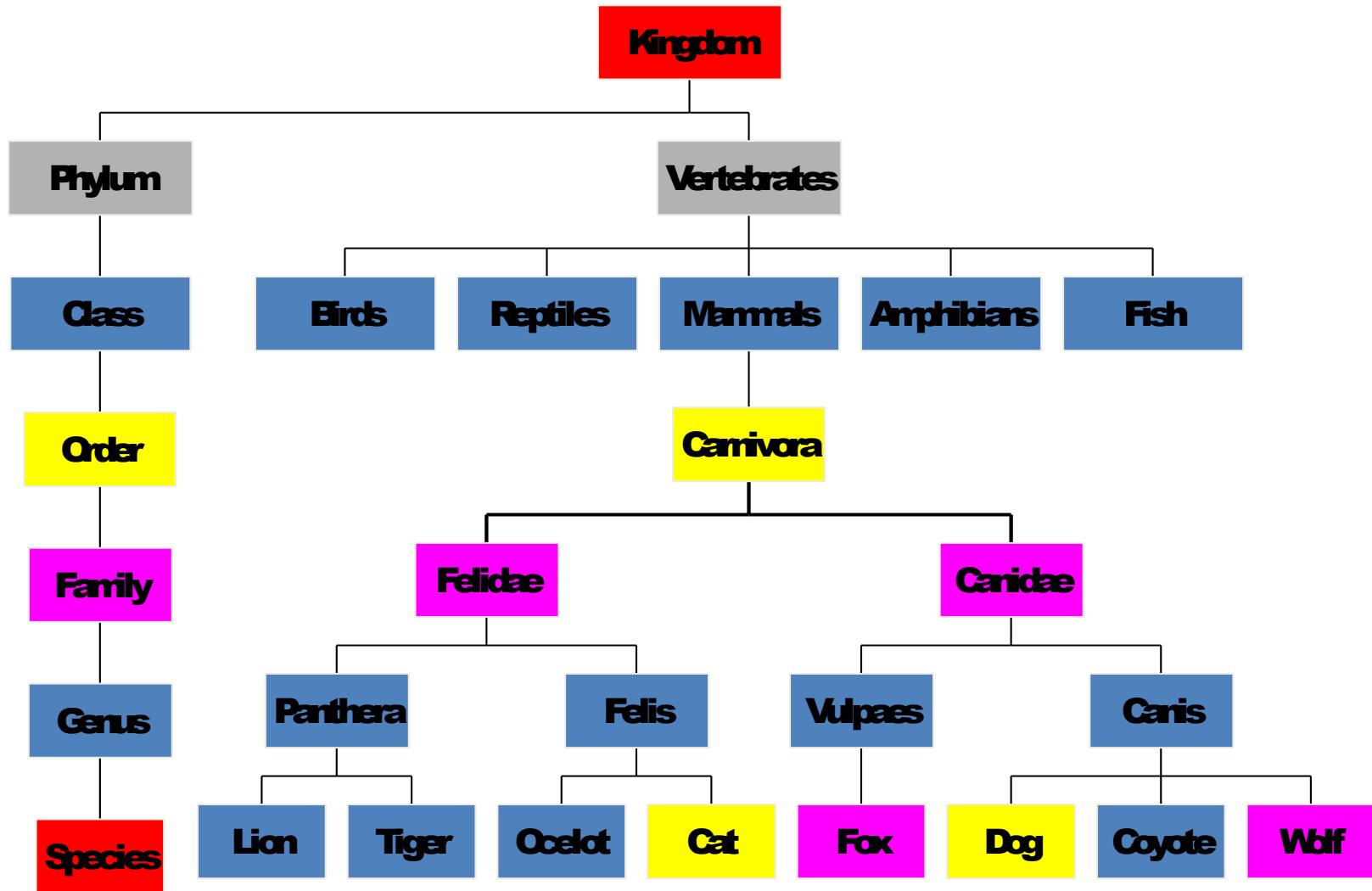
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You can call this direction progress or by some other name."

— Theodosius Dobzhansky

- Does life exhibit increasing complexity?
- If so,  
Where? When? Why?
- What quality of information is needed  
. . . for complexity to increase?  
. . . for verifying purpose?

# Grouping Living Organisms



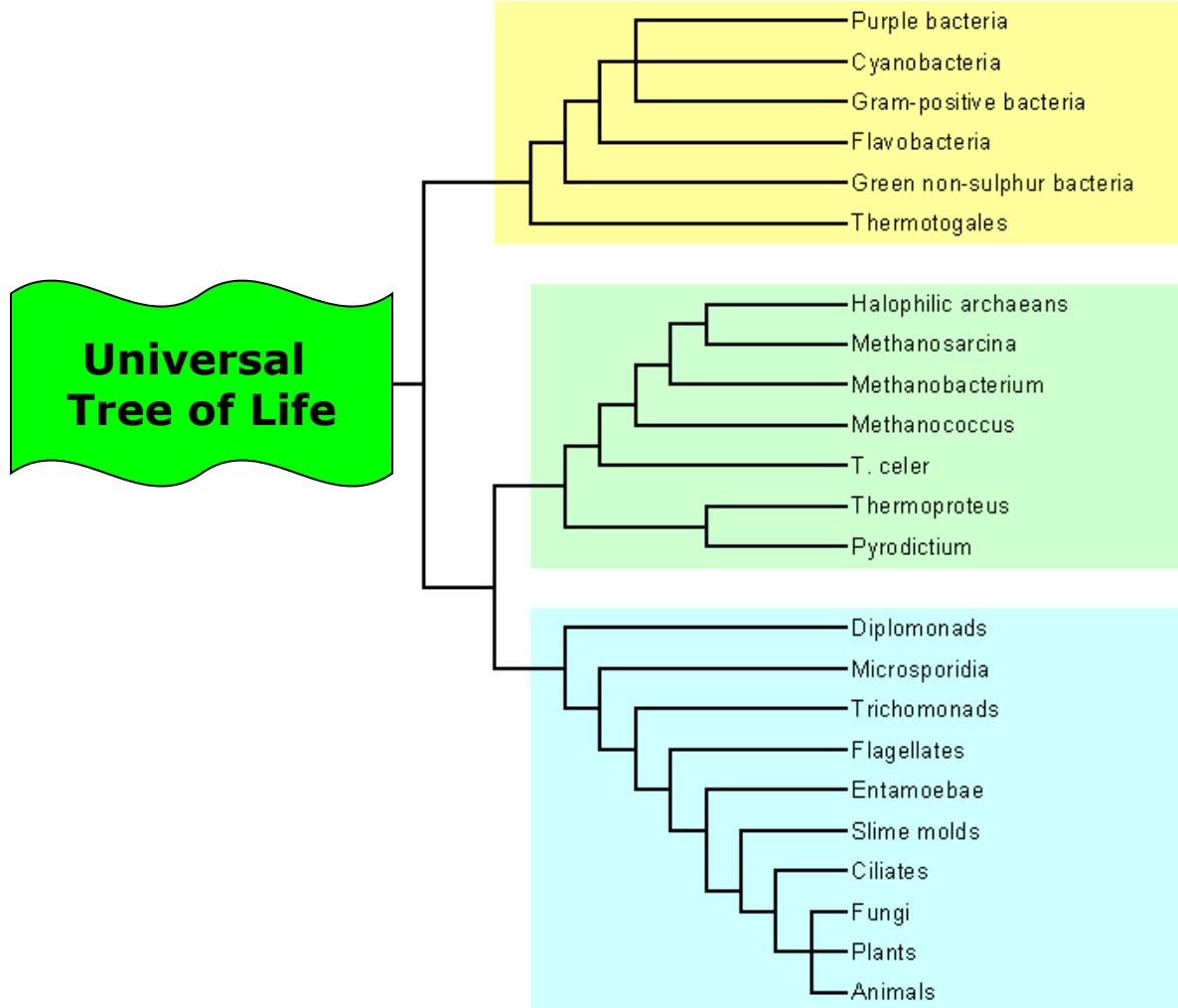


Fig. 1: An early "Universal Tree of Life" deduced from ribosomal RNA (rRNA) data [after Schopf 1999, p.105, fig. 4.2]. The study upon which this figure was based did not resolve the branching of the three kingdoms most familiar to all of us: plants, fungi and animals.

Subsequent analyses, however, have revealed that the biochemistry of fungi (in particular, the synthesis of chitin) is most similar to animals.

Thus, counter-intuitively, plants are likely to have diverged first, leaving fungi and animals as sister groups. (However, see Hedges 2002 for discussion of many inconclusive specifics.)

## *Will you annul My judgment?*

Job 42:1-2, 5-6

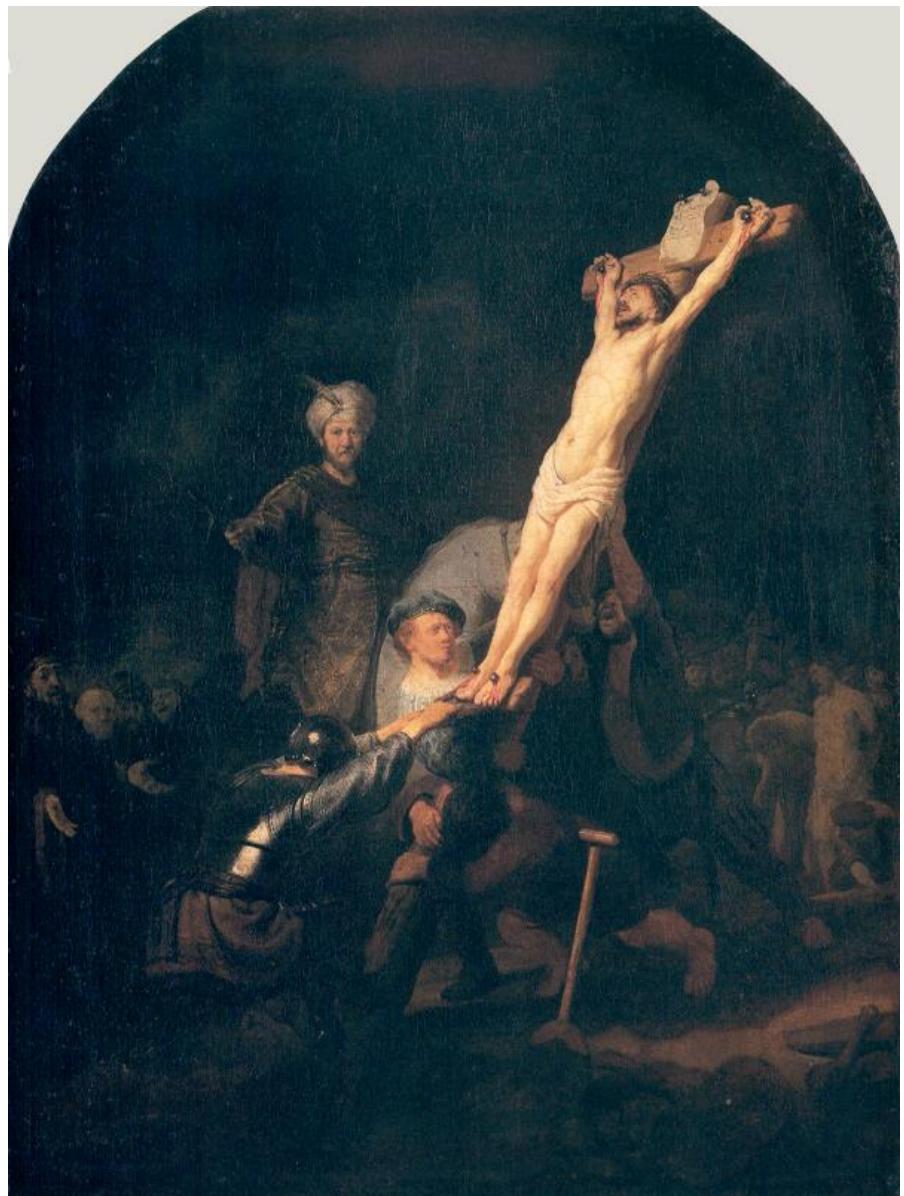
Then Job answered the LORD and said,

*"I know that You can do all things, and that no purpose of Yours can be thwarted*

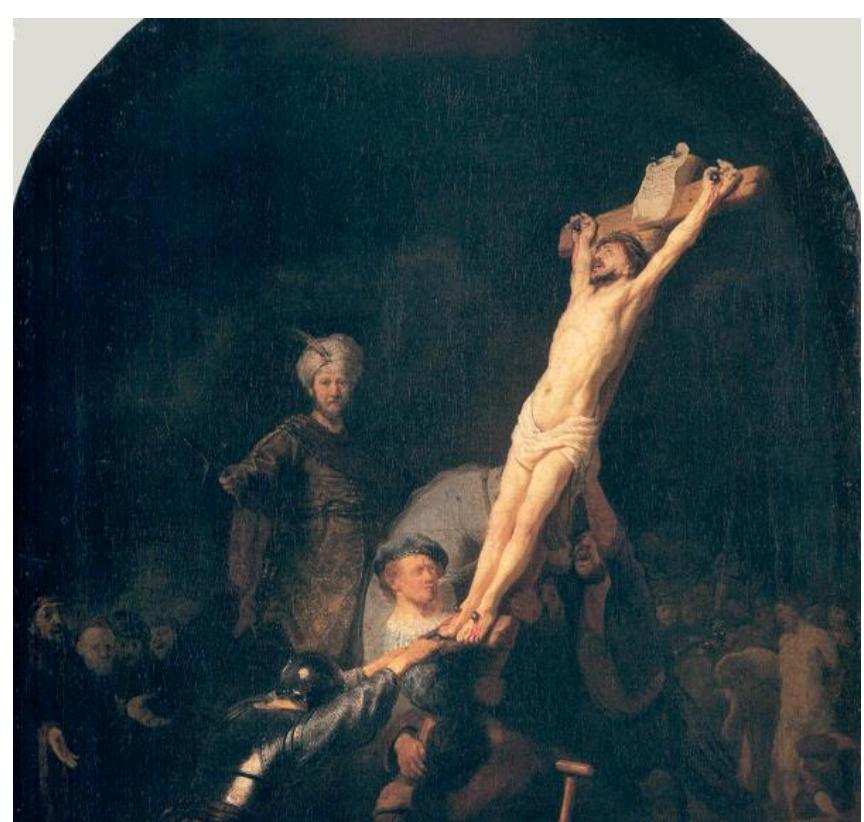
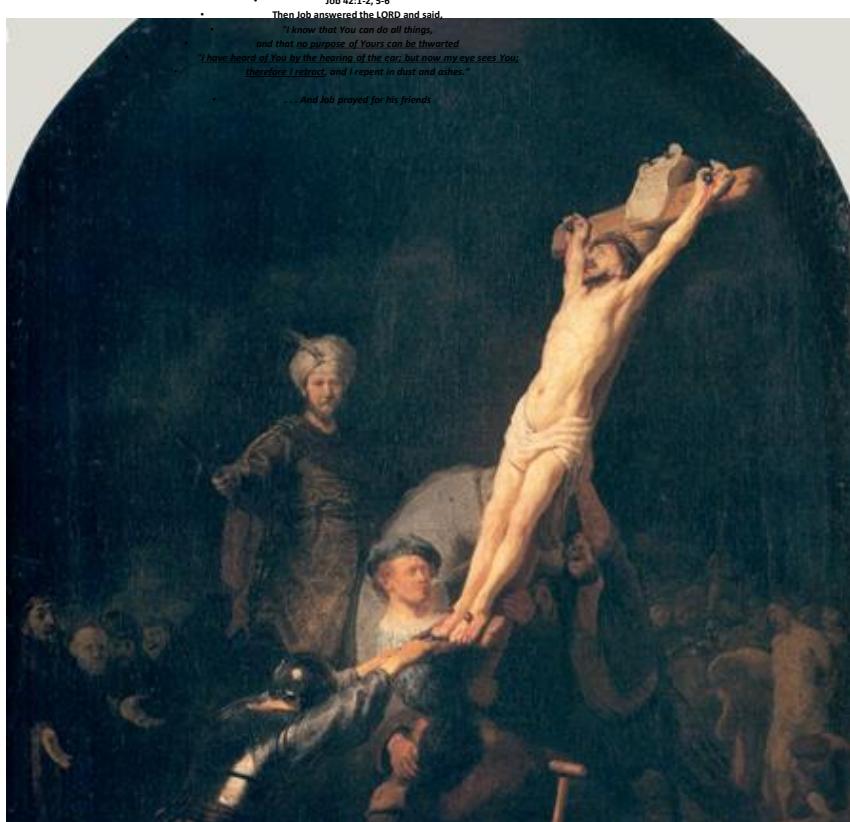
*"I have heard of You by the hearing of the ear; but now my eye sees You;*

*therefore I retract, and I repent in dust and ashes."*

*. . . And Job prayed for his friends*



# *Will you annul My judgment?*

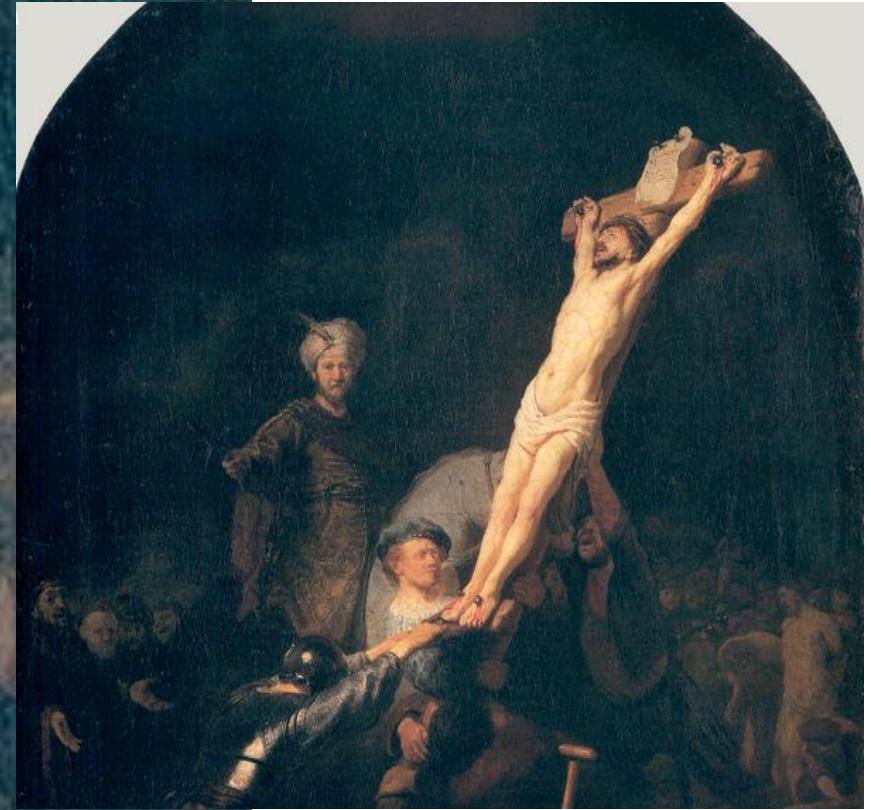


# dgment?



Job 42:1-2, 5-6  
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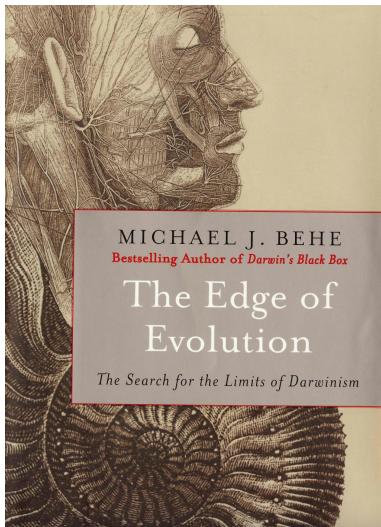
# **WEEK 2 –**

## **ORIGAMI FROGS**

### **THINKING BY ANALOGY VS. INFERENCE TO THE BEST EXPLANATION**

# Edge of Evolution

## Microevolution, Macroevolution, Devolution



- Michael J. Behe, 2007, Free Press, Simon & Schuster, New York, NY
- <https://youtu.be/7ToSEAj2V0s> This is a link to the current (2017) overview of Michael Behe's work, background and thinking. Intelligent Design and Irreducible Complexity are described early in the video.
- The Intelligent Design community is positioning Michael Behe side-by-side with Charles Darwin as a contributor to scientific thinking.
- Michael Behe's second book, 'The Edge of Evolution', allows us to understand the data available for defining the base requirements for evolution. It is neither a political nor a theological argument or approach. It is written with accessible language that will help readers think through the difficulties that are unanswerable by Darwinian arguments.

# General Outline

Week 1: Intelligent Design Overview  
First Questions

Week 2: Origami Frogs  
Thinking by Analogy vs. Inference to the Best  
Explanation

Week 3: Sickle Cell Anemia  
Requiem for Chloroquine

Week 4: Bacterial Flagellum  
Irreducible Complexity

Week 5: Rugged Landscape  
Navigating Shape Space, i.e., “recalculating”

Week 6: Frosty the Snowman  
Protein structures and Amino acids

Week 7: Two Binding Sites Rule  
Do the math

Week 8: Movie night: Imaginal Cells

Week 9: Systems  
Polymerase  
Fruit Flies

Week 10: Randomness, i.e., Contingency is real

Week 11: Revisiting First Questions  
Dembski Design Methodology  
CSI Complex Specified Information  
Is God? vs. Who is God?

Week 12: Final notes on Michael Behe  
Additional materials

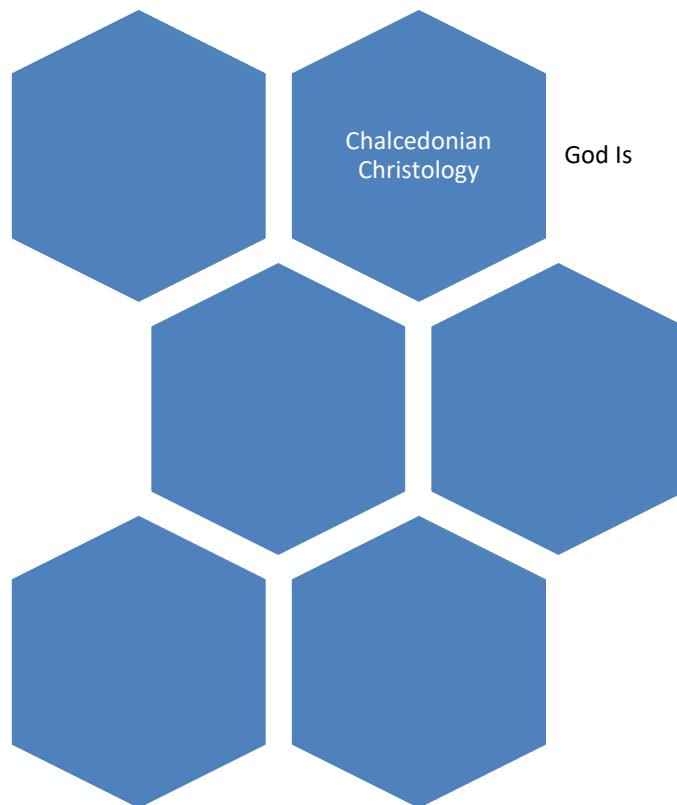
# **WEEK 3 – SICKLE CELL ANEMIA REQUIEM FOR CHLOROQUINE**

# Why bye, bye Miss American Pie?

- Assume we are Godly people passing on good moral values to our children (Why did we learn to read?)
- Expect to smooth over the details
- Assume we are a Godly nation passing on good moral values to the world (but the Africans are saying they will bring Christ back to us)
- Choose conformity rather than unity & build out onto sand
- Use Special Revelation to refute General Revelation, i.e., misapplication of the Word of Truth
- Promote of a picture of God that is other than what He has shown of Himself, i.e., incorrectly dividing the Word of Truth



The Establishment Tryptic



## The Metanarrative

- Pursuit of Truth
- Sorting Claims of Exclusivism vs. Inclusivism vs. Pluralism
- Infinitely Large, Infinitely Small, Infinitely Complex
- The Edge of Evolution - Quantifying the limits of Darwinism
- Overview of Intelligent Design
- Not out of this world: the sewers of Paris

*Is there a grand story able to command obedience?*

*The post-modern or post-post-modern world claims there is not.*

*How can Special & General revelation be more explicitly connected?*

*Who pegs the meter?*

*What have you? What are you learning about Truth?*

- 1<sup>st</sup> & 3<sup>rd</sup> Tuesdays
- 8-10:30 pm
- Location: Starr home
- East Liverpool OH

### Meeting



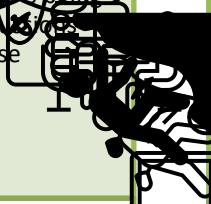
- Structured & guided discussion
- Reference charts will be used.
- Theology as Queen of the Sciences
- Technical background is not required
- Outside materials can be introduced
- Not a Bible study but scriptural insight is sought.
- Not for the uninitiated in the Faith once delivered.

### Format



- Your body, mind & spirit
- Local participants are preferred. Encouraged to be physically present.
- A live connection via Teams is being pursued but real-time discussions may prove difficult for those attending at a distance.

### Bring



- Send email to [design@openspc.com](mailto:design@openspc.com)
- An invitation to MS Teams will be sent.
- Respond to become a member. Some slides and review topics will be made available.
- Live interaction will be attempted.

### On-Line Connection



# The Metanarrative

- Pursuit of Truth
- Sorting Claims of Exclusivism vs. Inclusivism vs. Pluralism
- Infinitely Large, Infinitely Small, Infinitely Complex
- The Edge of Evolution - Quantifying the limits of Darwinism
- Overview of Intelligent Design
- Not out of this world: the sewers of Paris
- Discovering order in chaos

*Is there a grand story able to command obedience?*

*The post-modern or post-post-modern world claims there is not.*

*How can Special & General revelation be more explicitly connected?*

*Who pegs the meter?*

*What have you? What are you learning about Truth?*

*Definition and redefinition – ready?*

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