

# Science Apologetics

## Sessions

1. [Science Basics](#)
2. [Origin of the Universe](#)
3. [Fine Tuning of the Universe](#)
4. [Design in the Cell and Consciousness](#)
5. [Information in the Cell](#)
6. [Critical Issues in the Origin of Life and Evolution](#)

**Matthew 22:37-38- “*Love the Lord* your God with all your heart and with all your soul and with all your *mind*.’**

Target Group:

Christian Youth (High School and College age) that are in, or considering, STEM degrees.

General Christians with an interest in Science

## **Study Findings:**

About 25% of college professors are professing atheists or agnostics (5-7% of the general population is atheistic or agnostic). Only 6% of college professors said the Bible is "the actual word of God".

How Religious are America's College and University Professors?

Neil Gross, Solon Simmons (2006), <https://coldcasechristianity.com/writings/are-young-people-really-leaving-christianity/>

2018 report: 13- to 18-year-olds in Generation Z

a. "I have a hard time believing that a good God would allow so much evil or suffering in the world" (29%)

b. "Christians are hypocrites" (23%)

c. **"I believe science refutes too much of the Bible"**  
**(20%)**

d. "I don't believe in fairy tales" (19%)

e. "There are too many injustices in the history of Christianity" (15%)

f. "I used to go to church but it's not important to me anymore" (12%)

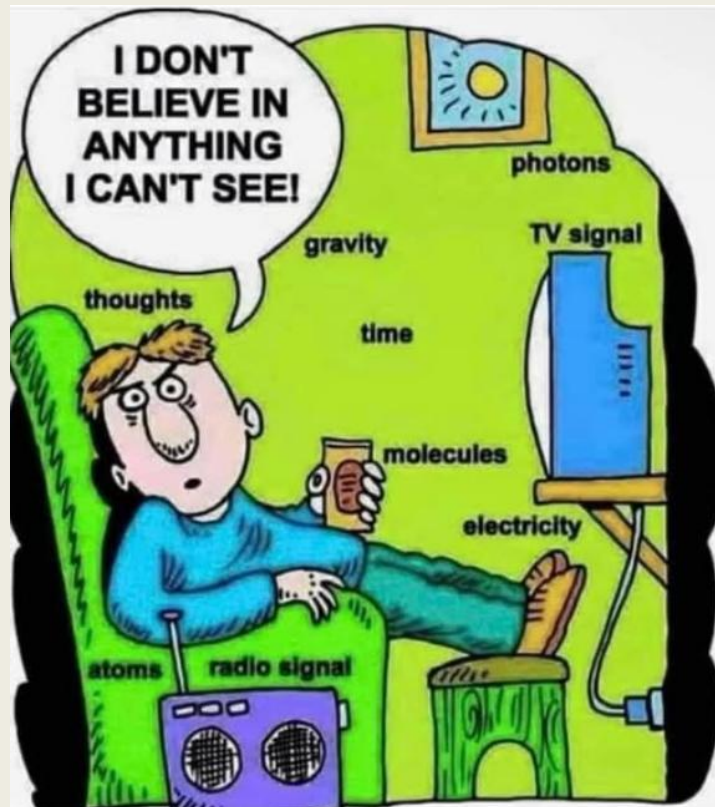
g. "I had a bad experience at church with a Christian" (6%)

# Part 1 -Science Basics

Brendon Biggs

# Can Science account for everything? – Peter Akins (Chemist)

<https://www.facebook.com/reasonablefaithorg/videos/10155635356823229/>





Is there any scientific proof for God?

Are faith and science incompatible?

Can a Christian be a good scientist?

Is faith in God a leap in the dark?

Do Christians use God of the gaps?

Has science made miracles impossible?

Has science disproved God?



# In the Beginning God...

Original movement of science dealt with Christians. They were at the start of modern science because of their belief was there was a God who created everything who was logical and coherent and so therefore everything He created could be studied and make sense and was orderly.



- 1) God was worthy of study,
- 2) The world was a product of a singular, orderly, rational God,
- 3) God was distinct from creation
- 4) They had a desire to worship the God who created the universe,
- 5) They could understand God better through nature, they founded a place to study and advance science, universities and more.



- 1) God was worthy of study,
- 4) The had a desire to worship the God who created the universe,



Jesus followers didn't simply contribute to the sciences, they founded and led the sciences

"Well, I can tell you honestly, my feeling on all of this goes back to my faith," Wilmore said. "It's bound in my Lord and Savior, Jesus Christ.

"He is working out his plan and his purposes for his glory throughout all of humanity, and how that plays into our lives is significant and important, and however that plays out, I am content because I understand that."

"I understand that he's at work in all things, some things are for the good — go to Hebrews Chapter 11 — and some things look to us to be not so good. But it's all working out for his good, for all those that will believe," he said. "And that's the answer."

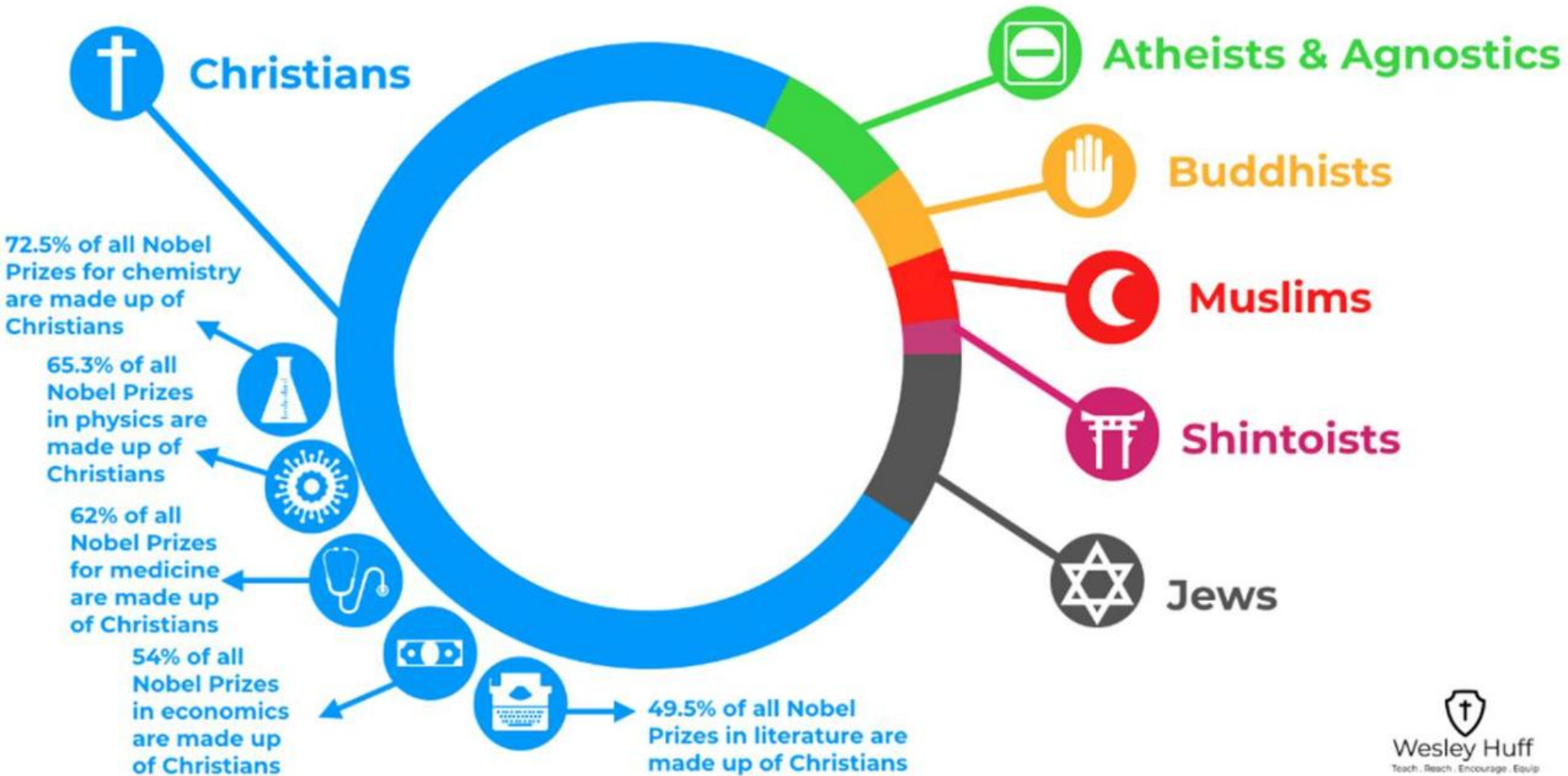


Astronaut  
Barry "Butch" Wilmore  
2025



# NOBEL PRIZE WINNERS' WORLDVIEWS

100 Years of Nobel Prizes, by Baruch A. Shalev, pp. 57-59



# Types of Science

Empirical Science – Repeatable and testable (gravity, chemistry, physics)

Forensic Science – origins (origin of Universe, life on earth, crime scene, Archeology, history) – one time never to be repeated



Why is the pot of water boiling on the stove?

Modern answer- Water boils at 212deg F and the stove is applying sufficient heat to cause it to boil

...But that is just saying HOW it boils

Why is it boiling? – Answer: To make a cup of hot tea

Modern scientists have replaced the WHY with the HOW

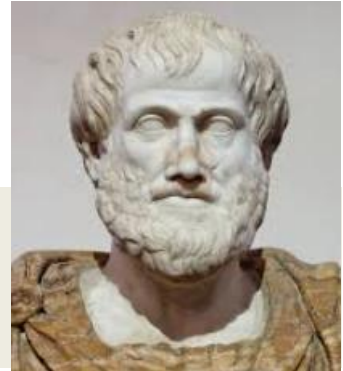
Science- HOW. Processes. Material. Data

Philosophy- WHY. Logic, inference to the best explanation, teleology,  
Personal

Aristotle's four causes are a way to answer "why" questions about the existence and behavior of things. The four causes are:

- **Material cause:** What something is made of
- **Formal cause:** The form or shape of something
- **Efficient cause:** The primary source of change or rest
- **Final cause:** The end or purpose of something

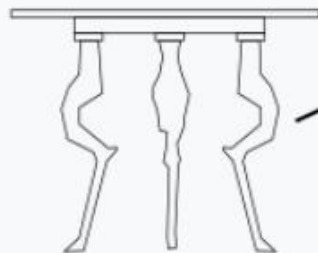
Aristotle believed that understanding the causes of something was essential to understanding the thing itself.



Material Cause:  
Wood



Final Cause:  
Dining



Formal Cause:  
Design

Efficient Cause:  
Carpentry



**Aristotle's** Four Causes illustrated for a table: material (wood), formal (structure), efficient (carpentry), final (dining).





Formal Cause- design/idea of a house



Material Cause- building materials



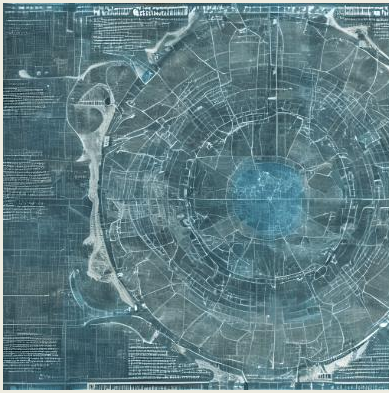
Efficient Cause- workers



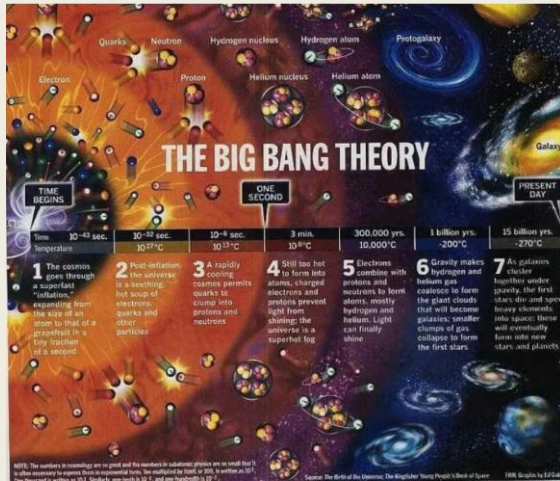
Final Cause- teleology.  
A 3-bedroom house  
in a specific neighborhood  
for a specific size family

HOW

WHY



Formal Cause- design/idea of a Universe



Material Cause- planets, stars, chemistry

HOW

WHY

Efficient Cause- Laws of physics, biological processes



Final Cause- teleology.  
A place for creation to be in relationship with the creator



# PATTERNS

INTELLIGENT

NATURAL



*Mount Rushmore*



*Valley of the gods*

# PATTERNS

INTELLIGENT

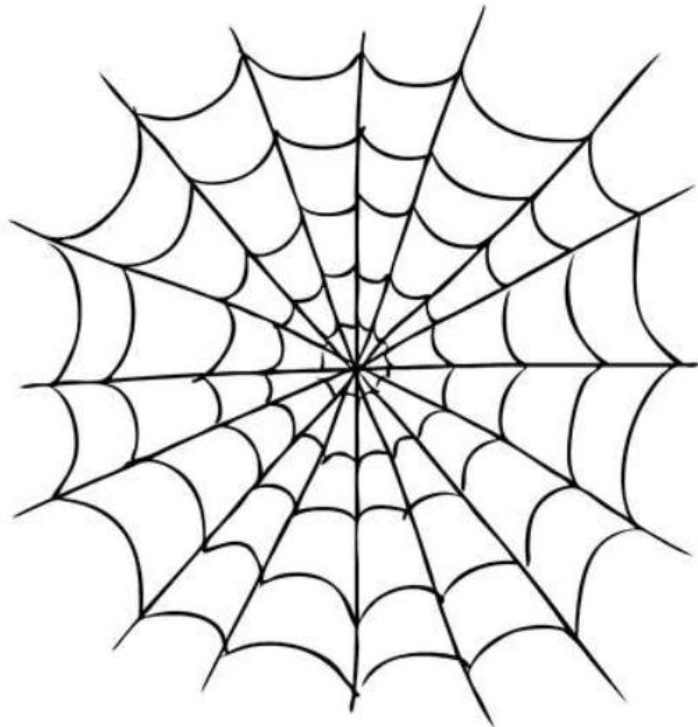
NATURAL



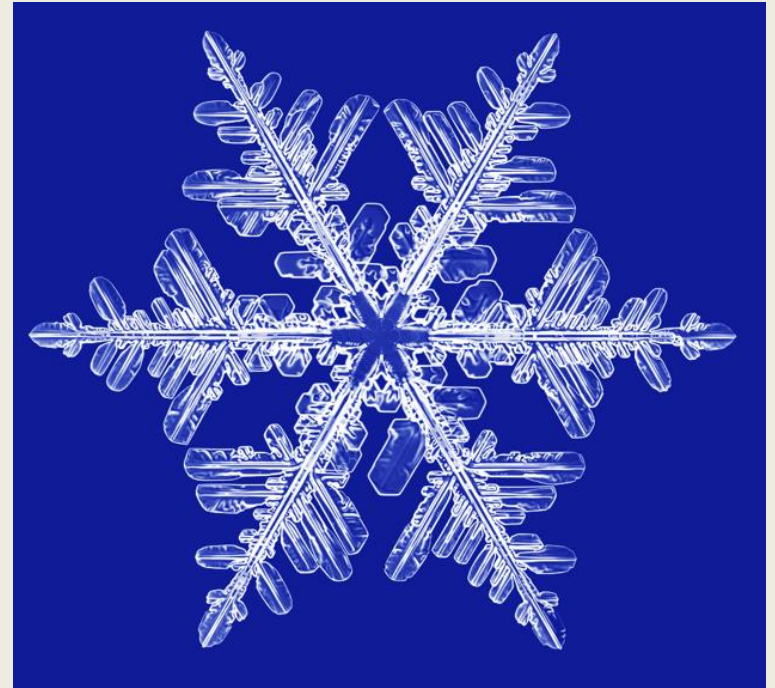
# PATTERNS

**INTELLIGENT**

**NATURAL**



Intentionality



Symmetry



## Mud Puddle Analogy?

Doesn't things just adapt like water to the shape of a hole?



Mud puddles don't have intentionality. Intentionality is not talking about things adapting to shape or symmetrical like a snowflake. Intentionality is like the spider web which is a project being built for a purpose and intent.





I found a signal from Vega that  
contains a sequence of  
prime numbers



That means we found  
intelligent life right!



That means we found  
intelligent life right?

## Inference to the best explanation

- sharks in the area
- sand shows imprint
- towel shows bit marks
- inference=shark came on shore and ate him

Crime scene scientists,  
historians, archeologists, etc  
use inferences



# Terms

Contingent: My name is Brendon, but it could have been Roger

Necessary:  $2+2=4$ . It has to be true regardless of circumstances

Naturalism- take contingent and matter at the bottom.

Could have been different.

“You get what you get and you don’t get upset”

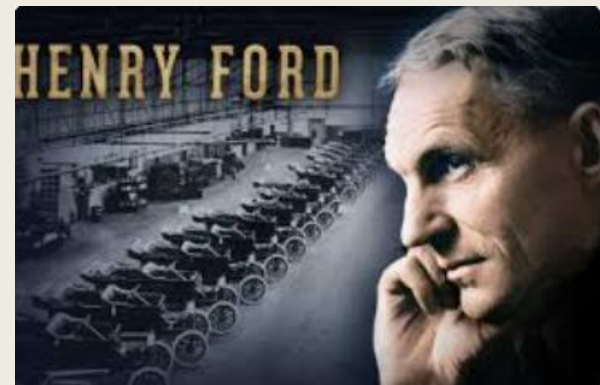
Theism- take necessary + mind at the bottom.

God must exist. Different mode of existence.



# Atheist: We understand how the universe works so therefore we do not need a god.

This takes the HOW and makes a conclusion about the WHY



Knowing How a car works

No need for inventor or designer?

Physical world we explore with science

How do we explore the immaterial world?

Metaphysics – The discipline of philosophy that addresses the fundamental nature of reality.

Ontology– concerned with the question of “being” or ultimate reality.

Epistemology– concerned with how we come to know what we know. Any evidence, axiom, or chain of reasoning that provides justification for a given proposition or belief.

# How do we explore the immaterial world?

Induction- Moves from specific observations to broader generalizations or theories.

Example: Observing that every swan I've seen is white, and concluding that all swans are white (this example is illustrative of a potential flaw in inductive reasoning, as not all swans are white, as the black swan exists).

Starts with specific observations or data. Reasoning upwards from specific observations to general patterns.



# How do we explore the immaterial world?

Deduction- Moves from the general to the specific, applying the general principle to a particular case.

Example: If all humans are mortal, and Socrates is a human, then Socrates is mortal

Starts with a general statement or principle that is assumed to be true. Reasoning downwards from general knowledge to specific instances.

# How do we explore the immaterial world?

Abduction- a form of inference or reasoning used to make inferences for the possible causes of events in the remote past that we did not witness (e.g. origin of life, origin of the universe.).

Example: Seeing footprints in the snow, and concluding that someone walked through the snow (the abduction here is inferring the presence of a person from the footprints).

# How do we explore the immaterial world?

Abduction Continued:

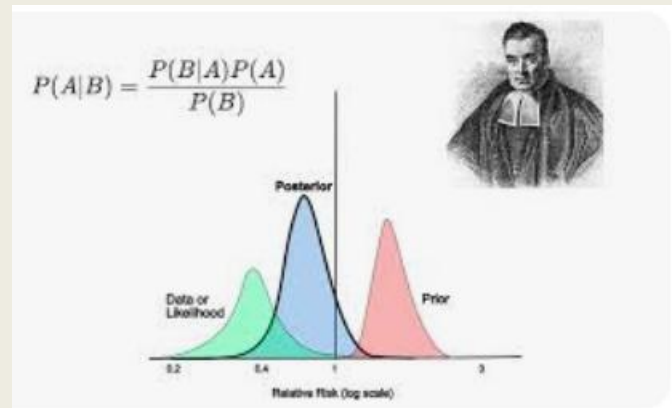
Past conditions or causes from present clues or evidences. Starts with observations and seeks to find the most plausible explanation for those observations. Reasoning to form the most likely explanation for a phenomenon based on available evidence.

# How do we explore the immaterial world?

Abduction- does not arrive at certainty like a deductive argument would.

It concludes “as a matter of course” that we should expect something to follow based on evidences

Use of Bayesian probability analysis can assist in evaluating “likelihoods” and narrowing down the options



# How do we explore the immaterial world?

Immaterial tools – laws of logic, ethics, morals, math, design, intentionality, function, specified complexity, information, etc.

These are immaterial tools and can help us to arrive at the inference to the best explanation

# Information

“I carefully define the type of information that reliably indicates the activity of an intelligent agent (*functional* or *specified* information, also known as *specified complexity*) and distinguish it from a type of information that does not, namely, Shannon information (or mere *complexity*) — in the latter case, information that may not perform a function. I also distinguish functional information generally from a special type of functional information (semantic information) in which *meaning* is conveyed to, and perceived by, conscious agents.



# Information

DNA contains *functional* information but definitely *not* semantic information...DNA contains functional or specified information and argue (based upon our uniform and repeated experience) that such information, as opposed to Shannon information, reliably indicates the activity of a designing intelligence.

DNA, or deoxyribonucleic acid, is the molecule that carries the genetic instructions for the development and functioning of an organism, resembling a twisted ladder or double helix, with specific base pairings (A with T, and C with G) forming the rungs.



Atheists demand experimental evidence for immaterial realities.  
This is like saying a metal detector needs to detect wood. Wrong tool.



We can ask if they can provide an experiment that shows consciousness emerged from material?

Can they show information arising out of material and chemicals?



# Emergence?

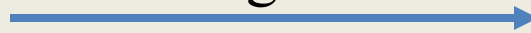
One H<sub>2</sub>O molecule may not feel wet. but a bunch of H<sub>2</sub>O molecules does produce wetness. However, the water doesn't really become something different.

When we take billions of water molecules and put them on our fingertip, it just feels different from what we would have expected.

Emergence- as applied to the brain and mind- unlike to water and wetness, asserts an ontological difference. Emergentists assert that brain tissue becomes a completely different kind of thing — a thinking thing — when the mind magically emerges from matter.



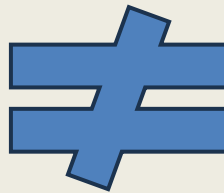
Emerges?



“Mental things share nothing in common with matter. Thoughts are intentional (refer to other things), private, dimensionless, massless, not composite, etc. Matter is non-intentional (doesn't inherently refer to anything else), public, has dimensions and mass, is composite, etc. Obviously, materialism as a metaphysical system has nothing to offer for the understanding of the mind.”

Loosing awareness if your brain is damage just shows they correlate not that the mind emerged.

Correlation is not causation.



Brain activity -external



Actual thoughts-  
1<sup>st</sup> person private -internal

## Example Conversation

Christian – Do you think there is evidence for God?

Non-believer- No. I would need scientific proof for that.

Christian – What kind of proof would that be?

Non-believer- Well if God appeared in the sky or even to me or wrote something in the stars that would be a start. I want observational evidence.

Christian – Is that the only evidence you would accept? Have you considered other types of evidences?

## Example Conversation

Non-believer – Like what?

Christian – Dark matter/energy is also not observable yet interacts with the physical realm. We can see its effects.

Non-Believer – I don't think scientists would make that conclusion.

Christian - Some of the greatest philosophers, scientists and theologians have developed reasons to believe in God. Would you like to hear some?

## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation opener realistic? Why or why not?**
- 2. What problems do you think you would have in a conversation like this?**



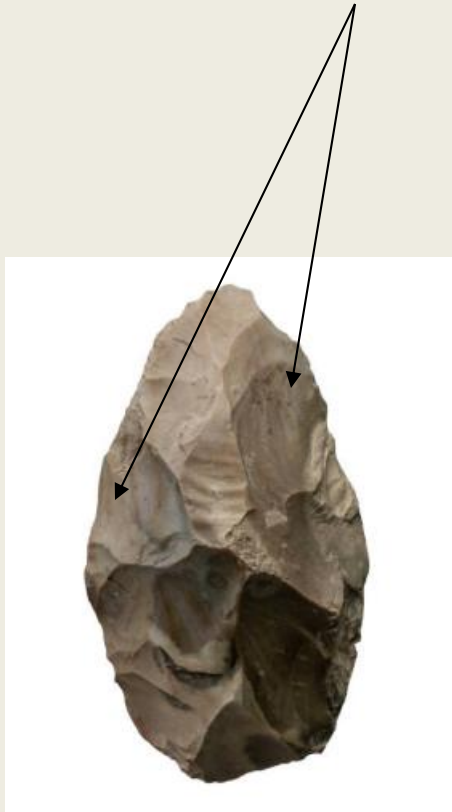
Rosetta Stone

The top and middle texts are in Ancient Egyptian using hieroglyphic and Demotic scripts, respectively, while the bottom is in Ancient Greek. The Rosetta Stone is a key to deciphering the Egyptian scripts.

Do we need to know who or what designed it to know if it was designed? – NO!

Specified complexity – The words are not random. They communicate a message. We can therefore infer it was designed.

Intentionality: Special cuts  
to fit hand and fingers. Hard material to hold up while in use.

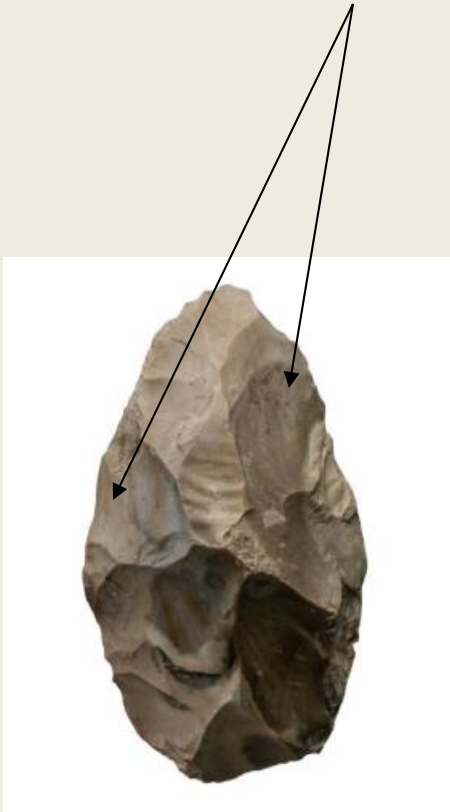


Science/ HOW:  
Material cause —stone  
Efficient cause- primitive human



Why?  
Formal cause —Idea of tool  
Final cause- Hand tool for  
cutting, chipping, etc

We can use intentionality to determine intelligent cause. We look for signatures and use abduction to infer intelligence



We do not need to determine who or what created it to know it originated from intelligence.



## Inferring Intelligence

For example, forensic scientists can determine whether or not an individual died as the result of natural processes, by accident, or by the intentional action of another person—an intelligent agent.

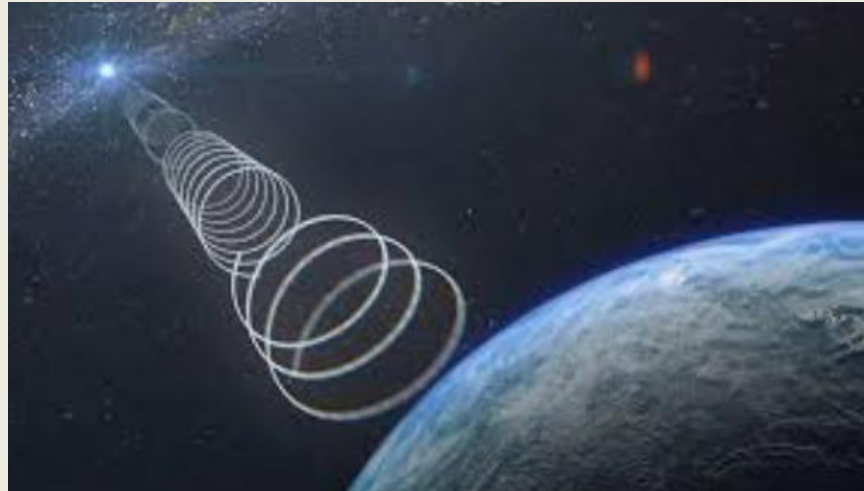


Anthropologists can examine pieces of rock and determine whether the stones were intentionally fabricated into a tool by a hominid (such as Neanderthals) or merely shaped by natural processes.



## Inferring Intelligence

In the quest to identify alien civilizations, researchers at SETI monitor electromagnetic radiation emanating from distant stars looking for signatures that bear the hallmark of intelligent agency.



Christian –Do you think there is a purpose for why we are here?

Non-believer –I don't know. Seems like most people think there is.

Christian –Do you ever think about why humans can discover and understand laws of logic and math or see that some morals seem to be objective or what is consciousness in the first place? Those seem, like non-physical things right?

Non-believer –I don't usually think about those things.

Christian These types of questions motivate the greatest thinkers. Understanding the *Why* and the *How* complete a robust understanding of life's realities.

Non-believer –How can we see the “WHY”

Christian Have you ever seen a snowflake? It has great symmetry and pattern.

Non-believer –Yes but that is caused by natural forces

Christian –How does that compare to a round spider web?

Non-believer –They both are symmetrical and have a pattern and both are natural.

Christian –But the spider is intelligent and creates the web for a purpose. To catch a bug. The location, the shape, the stickiness, etc are all designed to work towards and end goal of catching a bug. Do you see that?

Non-believer –Ok. What does that have to do with God?

Christian –That is called intentionality. Nature is random, like a snowflake, but a signature of intelligence is intentionality. Another signature is specified complexity like the words in a sentence. They are not random letters. They communicate.

Non-believer –ok

Christian –We see intentionality and specified complexity in nature and can infer intelligence behind it. Like code in DNA, machinery inside the cell and even fine tuning in the universe. Do you know about these?

## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic? Why or why not?**
- 2. What problems do you think you would have in a conversation like this?**

# Part 2 -Science Basics

## Origin of the Universe

Brendon Biggs



**Using the tools for detecting intelligence in science. Lets review the following from last week:**

**Intentionality**

**Specified complexity**

**Functionality**

**Abductive arguments**

**Deductive arguments**

**Inductive arguments**

**1. Whatever begins to exist has a cause.**

**2. The universe began to exist.**

**3. Therefore, the universe has a cause.**

**We can add the following steps:**

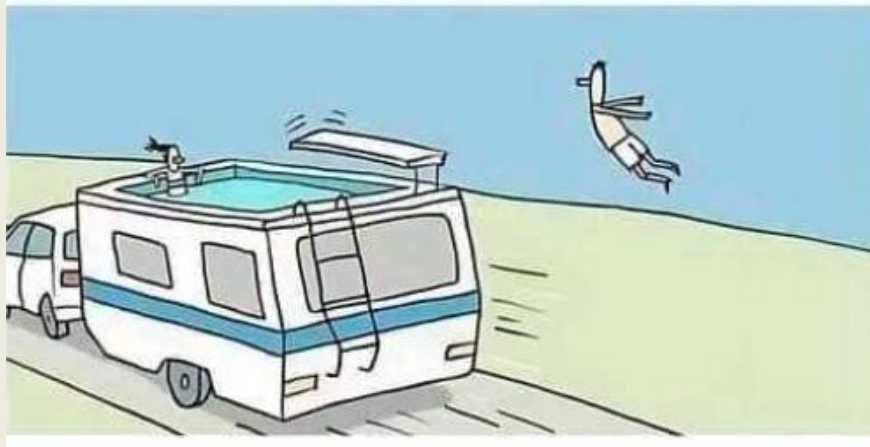
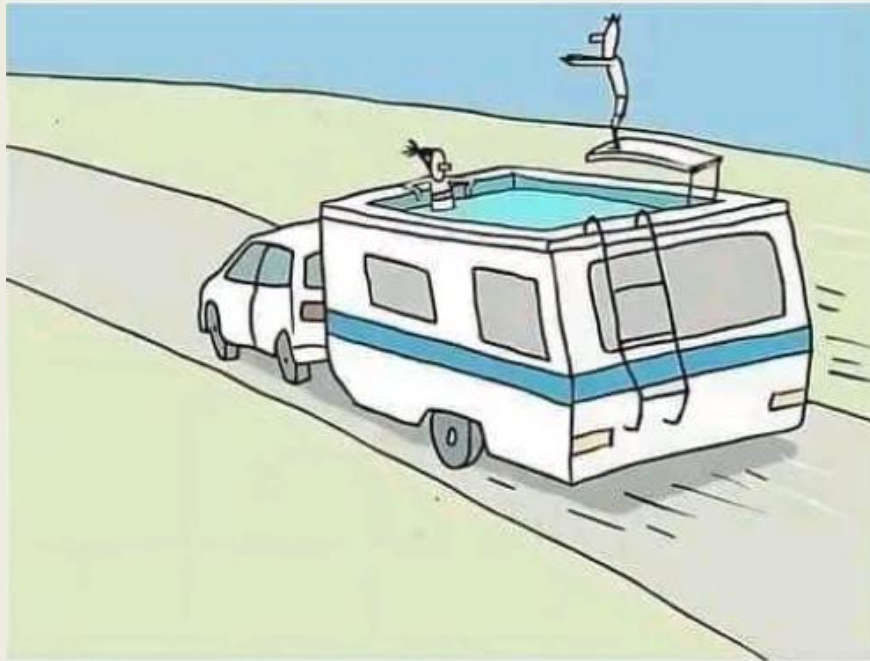
**4. The universe (all space, time, and matter) cannot cause itself.**

**5. The cause of the universe must be spaceless, timeless, immaterial, and uncaused.**

**6. This uncaused, immaterial and timeless cause of the universe is what everyone means by God.**

**7. Therefore, God exists.**

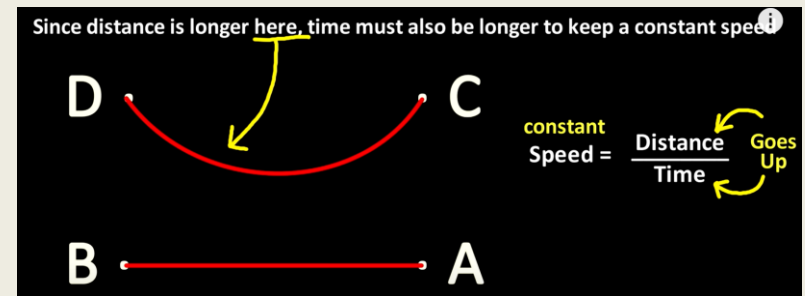
# Relativity



# History

Einstein's theory of relativity led him to recognize that our measurements of space and time are linked. Thus *spacetime* combines time and 3d space into a 4-dimensional continuum (x, y, z, ct) where “c” is the speed of light.

Astronomers confirmed this theory experimentally during a solar eclipse which observed starlight passing by our own sun.



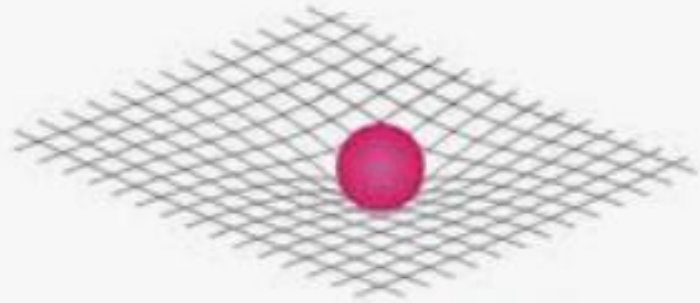
14min video on General relativity: <https://www.youtube.com/watch?v=tzQC3uYL67U>

Source: Stephen C. Meyers, Return of the God Hypothesis, P. 87-129.

Einstein also realized that if gravity were the only thing acting on material, it would cause material to congeal and spacetime to contract in on itself. Since this hasn't happen, Einstein knew something was pushing on it outward causing expansion to account for the empty space. A cosmological constant.



William de Sitter and Aleksandr Friedmann also solved Einstein's equations which implied an expanding universe. Friedmann described a dynamic universe which could change over time.


$$G_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu}$$

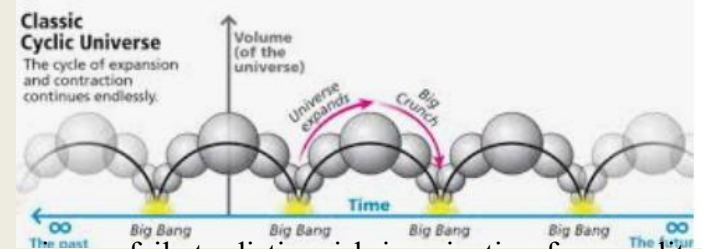
1927-Belgian priest Georges Lemaitre also solved the equations and incorporated observational data about the doppler shifts from galaxies which confirmed expansion of space itself.

With this confirmation, scientists were forced to confront the data that showed a creation type event that produced matter, space, time and energy.

Many alternative models were developed to escape a beginning which failed.

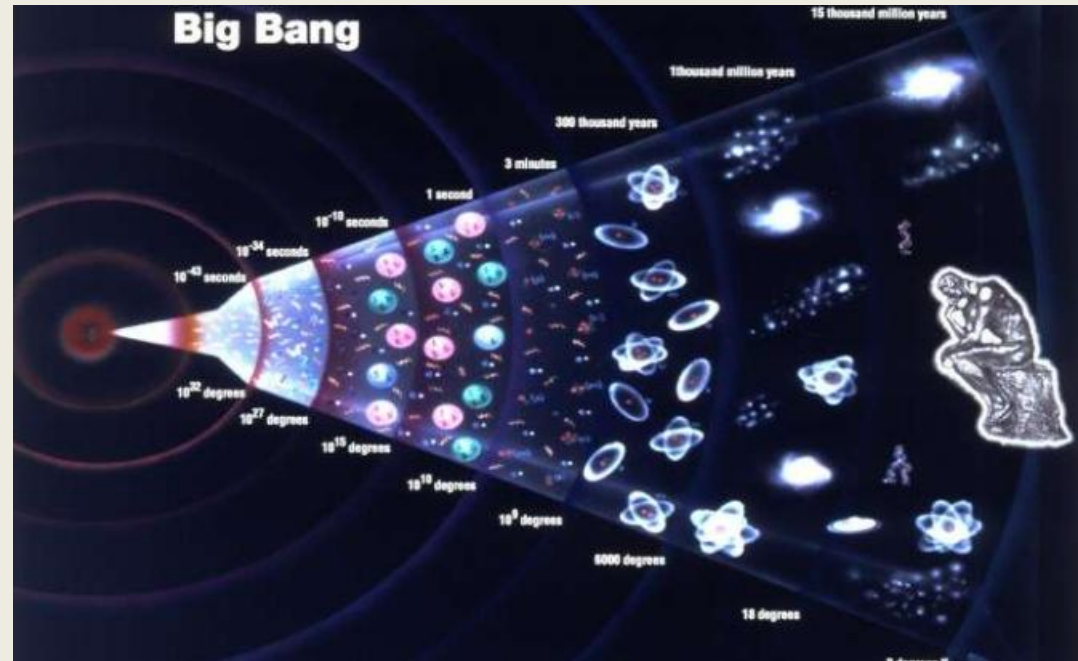
*Guth showed that, according to the second law, the entropy (or disorder) of the matter and energy in the universe would increase over time in each cycle which would result in less energy available to do work in each cycle. That would cause progressively longer and longer cycles of expansion and contraction. Each cycle in the past would have been progressively shorter. Since the periods of each cycle cannot decrease indefinitely, the universe — even in an oscillating model — would have had to have a beginning.*

Entropy-things fall apart over time





Astrophysicist Hugh Ross lists over 30 lines of evidence supporting the Big Bang origin of the universe



<https://reasons.org/explore/publications/facts-for-faith/a-beginner-s-and-expert-s-guide-to-the-big-bang-sifting-facts-from-fictions>

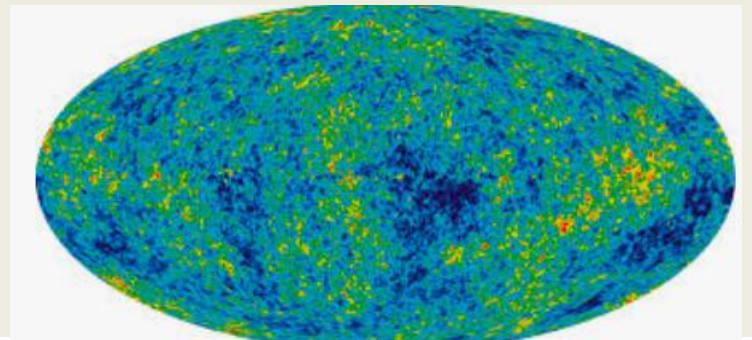
Further confirmation of a beginning came with the 1948 theory of the Cosmic Microwave Background Radiation (CMBR) which represented the afterglow of the big bang just after atoms were formed, which was confirmed in 1965.

Many other lines of evidence confirmed the beginning. Some of the greatest astronomers: Allan Sandage, Robert Jastrow, and Owen Gingerich noted the convergence of modern cosmology and the biblical narrative.

In the 1990s, Arvind Borde and Alexander Vilenkin concluded that the universe had a beginning even if inflationary cosmology was correct

In 2003, Borde, Guth, and Vilenkin developed a proof (BGV) theorem, that used geometric arguments and Einstein's theory of special relativity (speed, light, time) and concluded that any universe that is on average expanding has a beginning.

General relativity, red shift , 2nd law of thermodynamics(entropy), CMBR, and numerous other measurements confirm that the universe has a beginning. This is the Standard Model



## Stephen Hawking

“Although the singularity theorems of Penrose and myself, predicted that the universe had a beginning, they didn't say how it had begun. The equations of General Relativity would break down at the singularity. Thus, Einstein's theory can not predict how the universe will begin, but only how will evolve once it has begun.”



[https://newsarchive.berkeley.edu/news/media/releases/2007/03/16\\_hawking\\_text.shtml#:~:text=Although%20the%20singularity%20theorems%20of,view%20of%20Pope%20John%20Paul](https://newsarchive.berkeley.edu/news/media/releases/2007/03/16_hawking_text.shtml#:~:text=Although%20the%20singularity%20theorems%20of,view%20of%20Pope%20John%20Paul)

## Stephen Hawking

“The conclusion of this lecture is that the universe has not existed forever. Rather, the universe, and time itself, had a beginning in the Big Bang, about 15 billion years ago. The beginning of real time, would have been a singularity, at which the laws of physics would have broken down.”

“All the evidence seems to indicate, that the universe has not existed forever, but that it had a beginning, about 15 billion years ago. This is probably the most remarkable discovery of modern cosmology. Yet it is now taken for granted.”



<https://www.hawking.org.uk/in-words/lectures/the-beginning-of-time>

# Alexander Vilenkin

"But now Vilenkin says he has convincing evidence in hand: The universe had a distinct beginning — though he can't pinpoint the time. After 35 years of looking backward, he says, he's found that before our universe there was nothing, nothing at all, not even time itself."

"Vilenkin joined forces with Guth and Long Island University mathematician Arvind Borde. Using a mathematical proof, they argued that any expanding universe like ours had to have a beginning"



# Alexander Vilenkin

"So when you follow this space traveler's history back in time, you find that his history must come to an end."

"The universe, in other words, could not always have been expanding. Its expansion must have had a beginning, and inflation — a particularly explosive form of cosmic expansion — must have had a beginning, too. By this logic, our universe also had a beginning since it was spawned by an inflationary process that is eternal into the future but not the past. "

"A universe with a beginning begs the vexing question: Just how did it begin? Vilenkin's answer is by no means confirmed, and perhaps never can be, but it's still the best solution he's heard so far: Maybe our fantastic, glorious universe spontaneously arose from nothing at all."



# Alexander Vilenkin

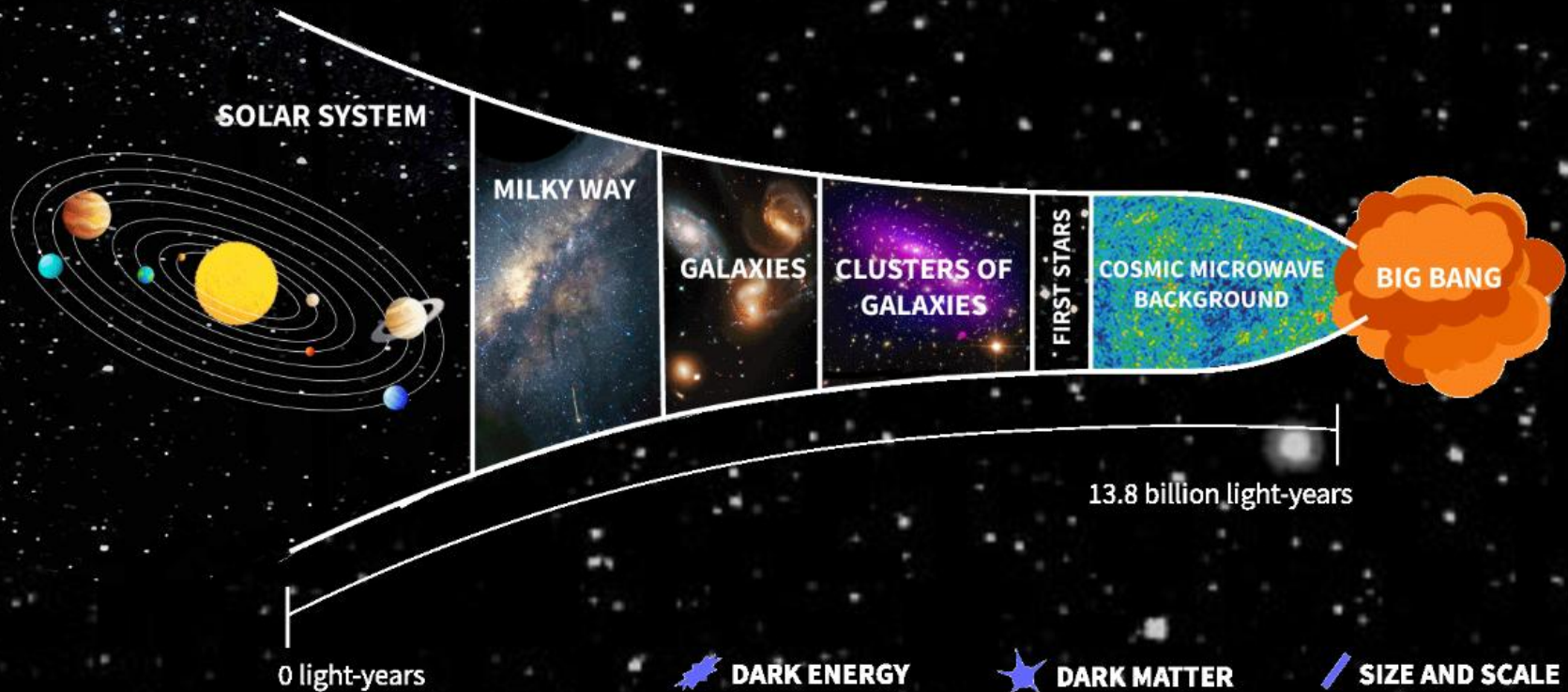
"Time begins at the moment of creation, putting to rest the potentially endless questions about “what happened before that.”

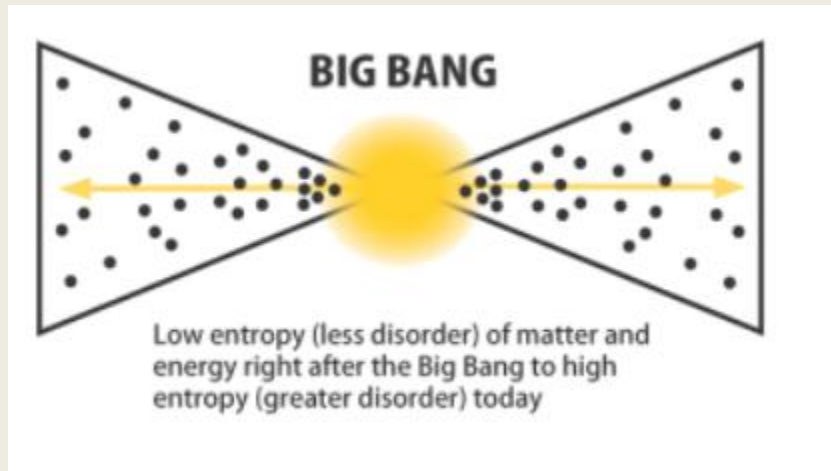
"Although a universe, in Vilenkin's scheme, can come from nothing in the sense of there being no space, time or matter, something is in place beforehand — namely the laws of physics. Those laws govern the something-from-nothing moment of creation that gives rise to our universe, and they also govern eternal inflation, which takes over in the first nanosecond of time."

"Indeed, says Vilenkin, among all the ideas we've thought of so far for a universe without a beginning, none of them seem to work. “So the answer to the question of whether the universe had a beginning is yes, it probably did.”



# Cosmological Argument





Nature tends to disorder (high entropy). Things fall apart over time. Where did the original order come from? Its like a wound up clock. We still have some usable energy left so universe cant be eternal or it would have already run out.

Entropy-degree to which energy in close system disperses or radiates (as heat) an ceases to be available for work. Effects can't be greater than their causes.

# If the Universe Had a Beginning Then it must have had a “Beginner”

The evidence leaves us with the following options:

1. Nothing Created Something Out of Nothing

Or

2. Something Created Something Out of Nothing

# In the Beginning God...

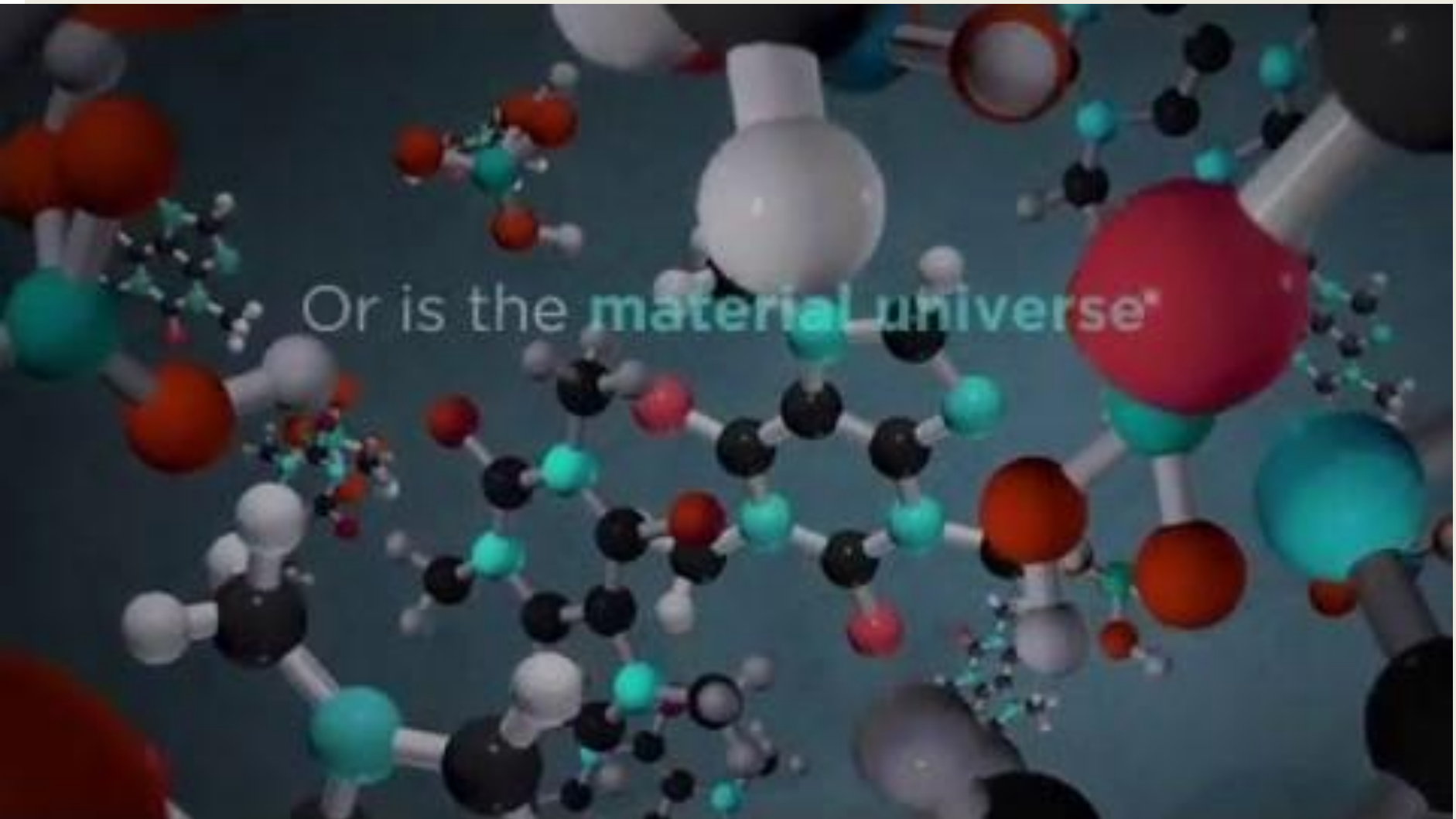
Original movement of science dealt with Christians. They were at the start of modern science because of their belief was there was a God who created everything who was logical and coherent and so therefore everything He created could be studied and make sense and was orderly.

## Cosmological Argument

**1) God is the best explanation of the origin of the universe –**

- a. Everything that begins to exist has a cause**
- b. The universe began to exist (i.e. Big Bang)**
- c. The universe has a cause**

Watch 4 min-



4:22 min) <https://www.youtube.com/watch?v=6CulBuMCLg0&t=7s>

## Group Activity

**Discuss the following in your group:**

- 1. Have you hear of this argument before?**
- 2. Do you have a non-believer you feel you could share this with?**
- 3. What questions or fears do you have with this argument?**
- 4. Do you think this is a good argument for theism?**

## Group Activity

**Discuss the following in your group continued:**

**5. What are some good conversation starters you could use to introduce this to a non-believer?**

**6. What would you tell them is a Christian perspective on this?**



## Group Activity

**Discuss the following in your group continued:**

**5. What are some good conversation starters you could use to introduce this to a non-believer?**

**6. What would you tell them is a Christian perspective on this?**

## Example Conversation

Christian –Are you interested in science? *Have you heard about the Big Bang? This theory says the universe had a beginning.*

Non-believer- yes I have heard of it. I do not know to much about it more than that.

Christian – well when scientist refer to the universe they say it includes all the physical things in the universe and even space and time itself. All of those things had a beginning from nothing. How do you think that could happen?

## Example Conversation

Non-believer – I always thought something must have caused it, but if the physical things had a beginning, I am not sure what could have caused it.

Christian – You are right! Great observation. The cause must be immaterial, spaceless and timeless. That certainly narrows down the cause. As a Christian, we believe this fits our understanding of God. Do you think that is a possibility?

Non-believer –I guess it could but I do not think about God much. I am assuming the scientists will think of a natural reason what caused it. If we find a natural explanation, there would not be any need for a god.

Christian –I always look for natural causes myself. But that explains how something works. Like figuring out how a car works. But that wouldn't rule out Henry Ford. What I try and look for is the WHY. Some things are created for a purpose or end goal so I don't want to stop with just the HOW. How about you?

## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic? Why or why not?**
- 2. What problems do you think you would have in a conversation like this?**

# Objections

## **Was there really such a thing as Nothing?**

Yes. By “nothing” I mean “no thing.” No physical things. The universe is Time, space, material and energy and this all had a beginning. The cause must be timeless, spaceless, immaterial.

## **Doesn't your God have to have a cause?**

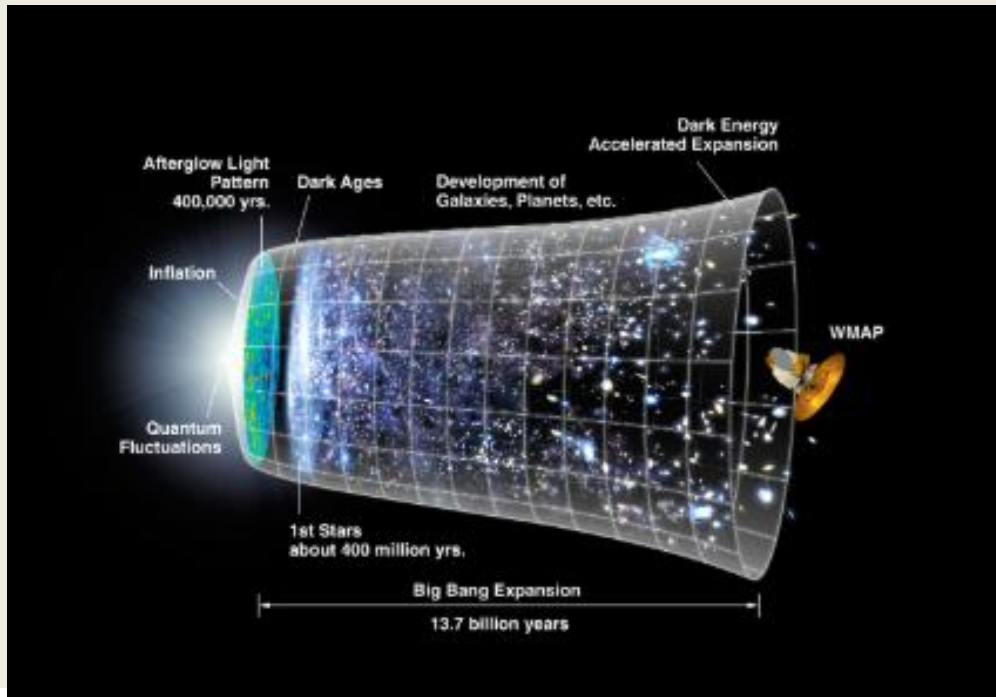
Only things that begin to exist have a cause. God did not begin to exist. He is what is referred to as a necessary being.

## **Isn't the “beginning” just mean the place where our physics break down?**

Yes because there are no more physical things

# Objections

**Isn't the “beginning” just mean the initial hot dense state? This confuses the modeling of the universe, which starts at the hot dense state forward with expansion, with the Theory which includes the origin of the Universe prior to that.**



Before the initial hot dense state of the Big Bang, there was a period called "cosmic inflation," where the universe underwent a rapid exponential expansion, effectively erasing any information about what might have existed prior to that point; meaning, based on our current knowledge, we cannot say definitively what existed before the Big Bang's hot dense state due to the nature of inflation

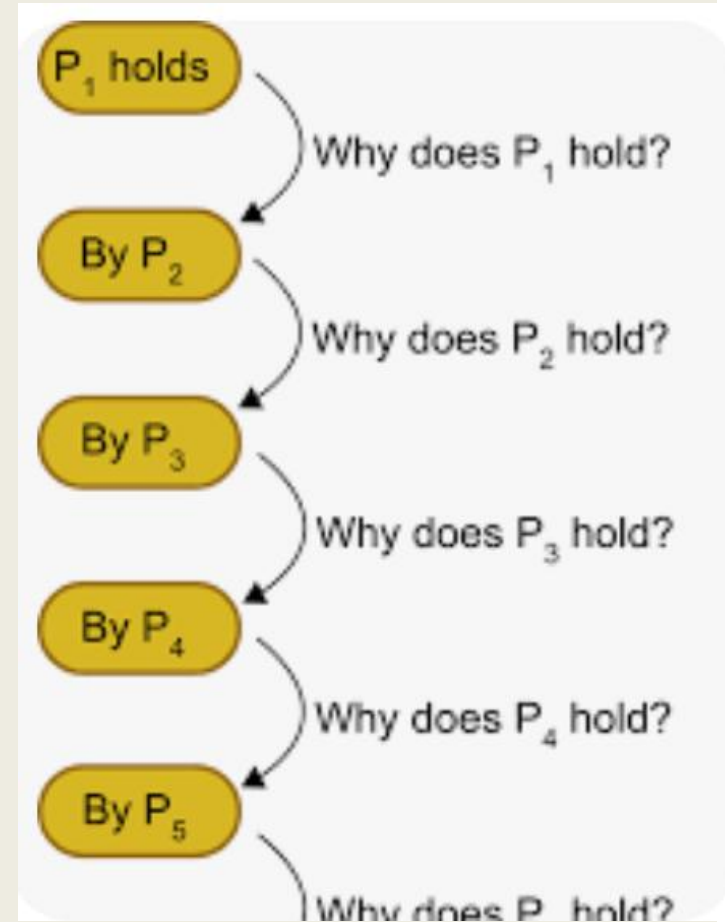


# Objections

## Why can't the universe be necessary?

Material is composed of parts and therefore contingent and caused. Material has potential. Potential cannot actualize itself.

There can be no actual infinite regress of causes so you will need a necessary cause to be the first cause. This would have to be a pure Act personal being who can decide to create and actualize the potentials.



# **Doesn't the first law say energy cannot be created?**

“The first law of thermodynamics is a law of nature, and therefore is a physical law that only applies within the arena of spacetime. But it doesn't apply to the origin of the arena itself. The first law of thermodynamics doesn't govern before the beginning of the universe or the causal conditions that would bring the universe into being, or apply outside the arena. It only applies once the arena is in place and exists. And then within that arena energy and mass are conserved...

Continued

...And that's why cosmologists who affirm the standard Big Bang model aren't troubled by the fact of an initial beginning and origin of the universe at which all matter and energy come into being, and then are conserved from that point on.”

# What Data/Science

Universe is time/space/material/energy

Universe began 13.8 billions years ago

No time/space/material/energy prior

At least 30 lines of evidence point  
to beginning

# Why Philosophy/Logic

Nothing caused it or  
something caused it

No physical thing caused it  
because there are no physical  
things

Cause must be timeless/  
spaceless/immaterial

Universe is not necessary

How can immaterial provide a cause in something material?

Volition is one way. We decide to move our arm. We can stop it, start it, pause it, etc., with our will.

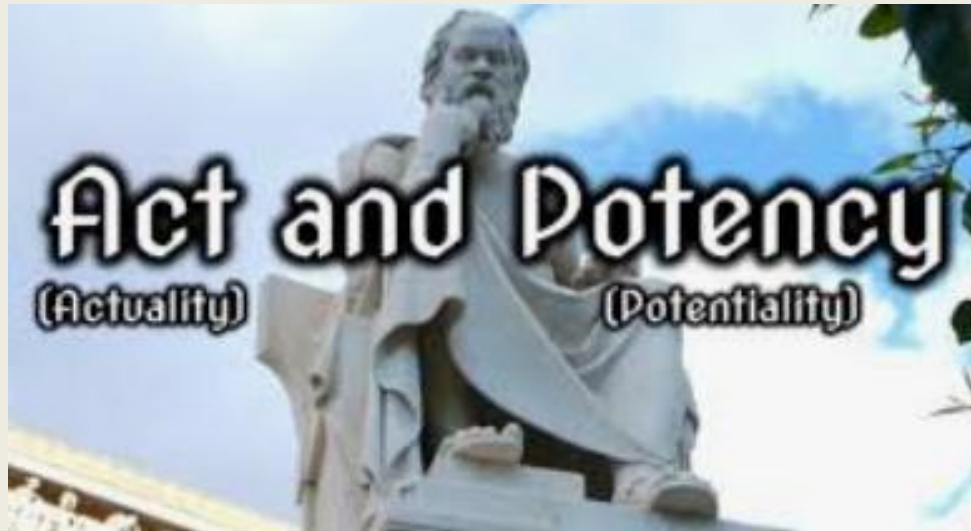


Philosophers talk about contingent things are composed of parts and therefore caused by something. They have potentiality. They have potential to be something.

Potentials need to be actuated. A cup of water has the potential to be hot. It needs heat to actualize it

Since every contingent things needs something to actualize its potentials, and there is no infinite regress of causes or actualizing, a first cause that can actualize all the potentials that itself is pure actuality with no potential is needed.

# Philosophical Arguments for a “Beginner”



1. Things change (e.g., come to be or cease to be).
2. Change is passing from potency to actuality.
3. Whatever changes is composed of potency and act.
4. But potency cannot actualize itself; only an actuality can.
5. Neither can another composed being actualize; it needs some actualizer to actualize it.
6. Therefore, every composed being is actualized by pure Act (what theists call God).

continued



continued

7. God is pure Actuality with no potency
8. Everything God creates must have potentiality in it.
9. God cannot make another pure Act.
10. The moment you came to be, you could —not be.
11. Biblical language says, —by him all things exist.  
a) Originating causality b) Conserving causality
12. Pure Act is aseity (self-existence).

1. Some limited, changing being(s) exist
2. The present existence of every limited, changing being is caused by another
3. there cannot be an infinite regress of causes of being
4. Therefore, there is a first Cause of the present existence of these beings.

continued

5. The first Cause must be infinite, necessary, eternal, simple, unchangeable, and one.

6. This first uncaused Cause is identical with the God of the Judeo-Christian tradition.

continued

1. Something exists (e. g., I do)
2. Nothing cannot produce something.
3. Therefore, something exists eternally and necessarily.
  - a. It exists eternally because if ever there was absolutely nothing, then there would always be absolutely nothing because nothing cannot produce something.

continued

continued

b. It exists necessarily because everything can not be a contingent being because all contingent beings need a cause of their existence .

4. I am not a necessary and eternal being (since I change).

5. Therefore, both God (a Necessary Being) and I (a contingent being) exist = theism).

Arguments show that since the Universe is contingent, it needs a cause. It cannot cause itself. Inserting another contingent cause just pushed the problem back. There is no infinite regress so a Pure Act/necessary being is needed.

Short video:



<https://www.youtube.com/watch?v=FPCzEP0oD7I&t=172s>

# ex nihilo nihil fit(out of nothing, nothing comes)

Reference	Creation <i>ex nihilo</i> Statement
Genesis 1:1	Implies a singular beginning and that God created everything in its <i>totality</i>
Proverbs 3:19	By His wisdom God created the heavens and the earth
Psalms 90:2	Only God is eternal; the created order had a distinct beginning
John 1:3	Jesus Christ, who shares the divine nature, identified as taking part in the work of creation
Romans 4:17	God calls things into existence
Colossians 1:16	God created all things visible and invisible
Acts 4:24	God is the absolute Creator of everything
Acts 17:28	Creation is dependent on God for its very existence
2 Timothy 1:9; Titus 1:2	God existed before time, implying that He created time
Hebrews 11:3	An explicit statement of Creation <i>ex nihilo</i>
Revelation 4:11	Describes what creation's (humanity's) response to the Creator should be

## Group Activity

**Discuss the following in your group:**

- 1. Are these arguments convincing? Why or why not?**
- 2. What problems do you think you would have in initiating a conversation with this information?**

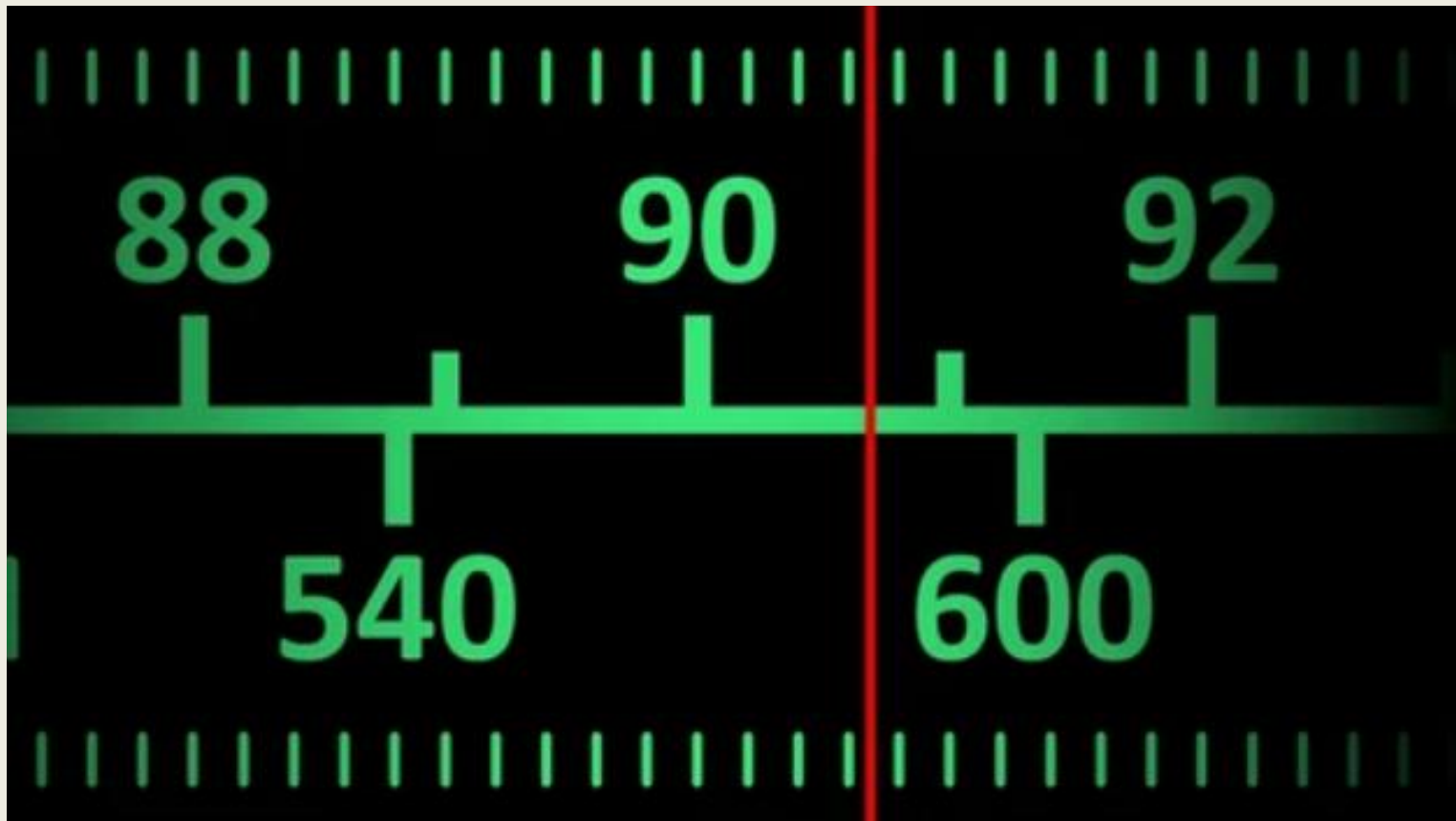


# Part 3 -Science Basics

## Fine Tuning of the Universe

Brendon Biggs

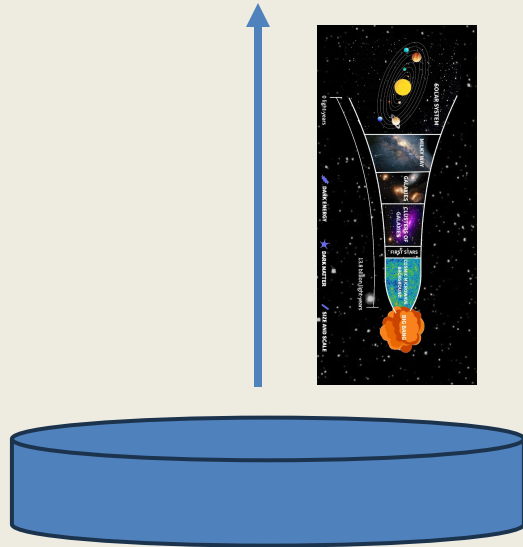
# Teleological Argument



# Teleological Argument

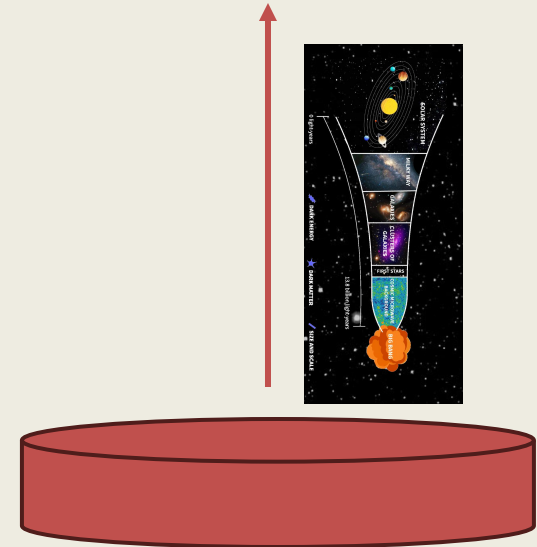
1. The fine tuning of the Universe is due to physical necessity, chance, or design
2. It is not due to physical necessity or chance
3. Therefore, its due to design

# At Realities Core, it is Necessary or Contingent?



Necessary

Foundation



Contingent

(could have been different)

Matter?

Mathematics?

Mind? Thoughts? Reason?

## Fine Tuning

Theism – most history of scientist were theists.

Search for rationality and order behind the appearance of the natural world. Belief there was a rational mind behind nature. Matter that obeys rational laws.

1 millionth of a second old.

-10 trillion degrees

-Perfectly smooth

-Contains simple building blocks (quarks, electrons, particles of light, dark energy) to hot for anything complex (protons and neutrons, atoms, molecules) and to smooth for any cosmic structures (stars, galaxies, etc)

Constants are cards the universe is holding and they encode what the universe will do in various environments over the next 13.8 billion years. These cards will be played in various times and various combinations.

## Terms

Reshuffle cards – periodic table disappears. No cosmic structures, etc. typical universe “you get what you get and no one around to get upset.”

If you put matter at the bottom, can it support minds above it?

If we put mind on the bottom, you can. First person subjective experience.

Consciousness presents a hard problem for matter foundation.

When simulating universes you work with matter and get matter structure. You cannot model matter to get consciousness that wakes up and has experiences, thoughts and feelings and inner thoughts. We cannot reduce to an emergent thing. Mind at the bottom and matter falls into place. Put matter at bottom and you lose your mind.

# WHICH IS A MORE COMPLEX DESIGN?







As we survey all the evidence, the thought insistently arises that some supernatural agency-or, rather, Agency-must be involved. Is it possible that suddenly, without intending to, we have stumbled upon scientific proof of the existence of a Supreme Being? Was it God who stepped in and so providentially crafted the cosmos for our benefit?

— *George Greenstein* —



GEORGE GREENSTEIN is Professor of Astronomy at Amherst College and the author of *The Symbiotic Universe* and *Frozen Star*. He is the recipient of both the Phi Beta Kappa Award for science writing and the American Institute of Physics/U.S. Steel Award.

## *God and the Astronomers – The Strange Developments Going On In Astronomy*

*"For the scientist who has lived out  
his faith in the power of reason, the  
story end like a bad dream.*

*He has scaled the mountains of  
ignorance; he is about to conquer the  
highest peak; as he pulls himself over  
the final rock, he is greeted by a band  
of theologians who have been sitting  
there for centuries."*

Robert Jastrow, Page 116



# Extreme Precision at the Beginning



“If the expansion rate of the universe was different by one part in a thousand, million, million, a second after the big bang, the universe would have collapsed back on itself or never developed galaxies.”

“Our willingness to accept scientific claims that are against common sense is the key to an understanding of the real struggle between science and the supernatural. We take the side of science in spite of the patent absurdity of some of its constructs, in spite of its failure to fulfill many of its extravagant promises of health and life, in spite of the tolerance of the scientific community for unsubstantiated just-so stories, because we have a prior commitment, a commitment to materialism. ..., for we cannot allow a Divine Foot in the door.”



Richard Charles Lewontin was an American evolutionary biologist, mathematician, geneticist, and social commentator

# **THE UNIVERSE WAS FINE-TUNED FOR HUMAN LIFE**

- 1. 21 % of oxygen in air is just right for human life.**
- 2. Gravitational force is perfect for life to exist.**
- 3. Distance from the sun provides the right heat for life.**
- 4. Expansion rate of universe is just right for life.**
- 5. Thickness of earth's crust is the correct amount for life.**
- 6. Tilt of the earth offers the best condition for life.**
- 7. The speed of light is proper amount for life.**
- 8. The strong nuclear force holds the atoms together.**
- 9. The distance between stars is necessary for life.**
- 10. The cosmological constant (energy density of space) is minutely right for matter to exist.**
- 11. The right amount of seismic activity is needed for life.**
- 12. The position of Jupiter protects life on earth.**

**There are more than 100 of these!**

## Teleological Argument

### **2) God is the best explanation of the fine-tuning of the universe for life**

P1: Science shows that the universe is fine tuned for life.

P2: its either due to chance, necessity or design.

P3 its not due to chance or necessity.

C: Therefore, its due to design.



## List of Arguments for God's existence

**The constants and quantities must fall into an extraordinary narrow range of values for the universe to be life permitting:**

**Weak force: one part in  $10,000^{39}$  would result in a nonlife universe**

**Cosmological constant: one part in  $200^{38}$**

**Odds of low entropy state: one part in  $10^{10^{23}}$**

**Dark matter tuned to  $1 \times 10^{120}$  or no life**



**If the strength of the strong nuclear force were decreased by about 5%, then hydrogen would be the only element in the universe.**

**If cosmic mass was slightly less than less hydrogen to helium future stars would not make anything else. Universe would have had only 2 elements(hydrogen and helium.**

**If more mass than elements are heavier than iron. All elements lighter than cobalt are gone.**

**We have perfect balance so we get carbon oxygen, nitrogen etc. for life**



Wiki:

In 1961, the physicist Robert H. Dicke claimed that certain forces in physics, such as gravity and electromagnetism, must be perfectly fine-tuned for life to exist anywhere in the Universe. Fred Hoyle also argued for a fine-tuned Universe in his 1984 book *Intelligent Universe*. He compares "the chance of obtaining even a single functioning protein by chance combination of amino acids to a star system full of blind men solving Rubik's Cube simultaneously".

# Gravity

Yet planets, stars and galaxies will not form unless gravity is dominant in the universe, so the universe must be set up in such a way that the other forces of physics cancel out and leave gravity, the weakest of the forces, dominant.

It's necessary for the universe to be electrically neutral. The numbers of the positively charged particles must be equivalent to the numbers of negatively charged particles or else electromagnetism will dominate gravity, and stars, galaxies and planets will never form. If they don't form, then clearly life is impossible.

The numbers of electrons must equal the numbers of protons to better than one part of 10,000,000,000,000,000,000,000,000,000,000,000,000 (10 to the 37th power).

Astrophysicist Hugh Ross says to imagine covering the entire North American continent in dimes and stacking them until they reached the moon. Now imagine stacking just as many dimes again on another billion continents the same size as North America. If you marked one of those dimes and hid it in the billions of piles you've assembled, the odds of a blindfolded friend picking out the correct dime is approximately 1 in  $10^{37}$ ; the same level of precision required in the strong nuclear force and the expansion rate of the universe.

[https://bcooper.ca/2017/07/02/the-inexplicable-fine-tuning-of-the-foundational-forces-in-our-universe/?utm\\_content=bufferc1986&utm\\_medium=social&utm\\_source=twitter.com&utm\\_campaign=buffer](https://bcooper.ca/2017/07/02/the-inexplicable-fine-tuning-of-the-foundational-forces-in-our-universe/?utm_content=bufferc1986&utm_medium=social&utm_source=twitter.com&utm_campaign=buffer)

Watch 6min.

# The Constants and Quantities

Scalar fluctuation amplitude  $Q$

$$2 \times 10^{-5}$$

Baryon, dark matter mass per photon

$$0.57 \text{ eV}, 3 \text{ eV}$$

Entropy of the Universe

$$4 \times 10^{81} \text{ J/K}$$

Number of spacetime dimensions

$$3 \text{ (space)} + 1 \text{ (time)}$$

## Group Activity

**Discuss the following in your group:**

- 1. Have you hear of this argument before?**
- 2. Do you have a non-believer you feel you could share this with?**
- 3. What questions or fears do you have with this argument?**
- 4. Do you think this is a good argument for theism?**

## Group Activity

**Discuss the following in your group continued:**

**5. What are some good conversation starters you could use to introduce this to a non-believer?**

**6. What would you tell them is a Christian perspective on this?**

## Example Conversation

Christian –Have you ever wondered if we are alone in the universe or why we haven't found any planets that have life? Do you think the universe is hostile to life?

Non-believer- It seems like the universe is so big we are bound to find it. I know some area do not seem like there could be life.

Christian – Scientists have studied the origin of the universe and found something very interesting. The chemistry required for life was almost prohibited.



## Example Conversation

Non-believer – What do you mean by prohibited?

Christian – There are constants that physicists found like the strong and weak nuclear force, gravity, and electromagnetism that are so precise that the slightest variation would have resulted in a universe that had no chemistry for life. Would you like to watch a 6min animated video?

Non-believer – Sure I'll watch it. I like science  
Christian – What did you think about the video?

Non-believer – This was interesting but I am not sure that this was something a god would be involved in. Why would God need to “fine tune” anything?

Christian – That is a great question! As a Christian we believe that God is the creator of everything and designed this universe (and our planet) exactly for his purposes. This way people are encouraged to look for his fingerprints

Non-believer – Why doesn't he make it more obvious?

Christian – We believe God loves us and wants a relationship with us. He wants us to seek him so we are not overwhelmed and compelled to believe in him. This is a great way to discover him.

Non-believer – That is an interesting theory. Are there more of these types of scientific evidence?

## Example Conversation

Christian – Yes there are a lot of these types of evidence. Many of the world's greatest scientists in history were Christians and studied the natural world because it brought them closer to their creator. I can provide you with some great resources we can discuss. Thank you for looking this over and sharing your feelings about it!

## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic? Why or why not?**
- 2. What problems do you think you would have in a conversation like this?**

Non-Believer: I don't see how you can look at the data and say that the universe therefore has a purpose. It seems you are begging the question.

Christian: Oh you are correct. I did not mean you can tell the Universe has a purpose. Fine tuning is not saying the purpose or goal. That seems to be a widespread misunderstanding of the argument from fine-tuning. There is no such presumption. The argument simply states: 1. The fine-tuning of the universe is due to physical necessity, chance, or design. 2. It is not due to physical necessity or chance. 3. Therefore, it is due to design. The argument says nothing about the ultimate goal or purpose for which the universe was created.

Non-Believer: It seems you are implying a goal if you use the term "fine tuned." What do you mean when you say that? Do scientists actually use that term?

Christian: That the universe is fine-tuned for the existence of intelligent life is a pretty solidly established fact and ought not to be a subject of controversy. By “fine-tuning” I do not mean “designed” but simply that the fundamental constants and quantities of nature fall into an exquisitely narrow range of values which render our universe life-permitting. Were these constants and quantities to be altered by even a hair’s breadth, the delicate balance would be upset and life could not exist.

Non Believer: Anywhere? Can’t life adapt to other places in a different way

Christian: If the constants were different, there would be no chemistry for life to even exist to adapt.

Non Believer: Ok I understand. that is a lot to think about.

## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic? Why or why not?**
- 2. What problems do you think you would have in a conversation like this?**



# Sample conversation

Christian: Have you read that life on our planet is in the perfect position for an observer to see the beginning of the Universe? If life occurred earlier, the brightness would prevent observations and if life occurred later, the distance would be too great to see the first moments of the universe.

Non-Believer: Interesting. What does that mean?

Christian: I was wondering if that means we were meant to see the origin of the universe so we could conclude it needed a beginner.

Non-Believer: couldn't this just be luck?

Christian: I suppose so but there is so much we can see because we are in the perfect cosmic window, it seems something wanted us to see it. What are your thoughts on that?

# Teleological Argument

Does the evidence point to God?

<https://www.youtube.com/watch?v=EE76nwimuT0&t=20s>

Thomas Aquinas developed five ways for the existence of God. His *Fifth Way* is called His teleological argument:

The *Fifth Way* is taken from the governance of the world. We see that things which lack intelligence, such as natural bodies, act for an end, and this is evident from their acting always, or nearly always, in the same way, so as to obtain the best result. Hence it is plain that not fortuitously, but designedly, do they achieve their end. Now whatever lacks intelligence cannot move towards an end, unless it be directed by some being endowed with knowledge and intelligence; as the arrow is shot to its mark by the archer. Therefore, some intelligent being exists by whom all natural things are directed to their end; and this being we call God.



Alister E. McGrath says that Aquinas,

“Notes that the world shows obvious traces of intelligent design. Natural processes and objects seem to be adapted with certain definite objectives in mind. They seem to have a purpose. They seem to have been designed. But things don’t design themselves; they are cause and designed by someone or something else. Arguing from this observation Aquinas concludes that the source of the natural ordering must be conceded to God.”

This final cause compliments the conclusion that the designer would be Pure Act or Being itself. Since the final cause is Pure Act, it would logical to conclude the Being to be personal and have a purpose to its orderly designs.

“When Stephen Hawking and Leonard Mlodinow claim that God's existence is no longer plausible because all things could have come forth from the quantum law of gravity, they fail to recognize, as Hart says, that the issue is ‘the very possibility of existence as such, not only of this universe but of all the laws and physical conditions that produced it.’ It is not necessary that any finite thing, let alone a quantum law, exist. Finite things exist, but they are merely limited modes of being; they are not being as such. A quantum law, insofar as it is, must derive its being from a source.”

Norman Geisler: “1) All designs imply a designer 2) there is great design in the Universe, 3) Therefore, there must have been a *Great Designer* of the universe.”

John F. Owens remarks that on Paley’s view “The basic paradigm here is the artefact, which precisely brings together the notions of parts that have no interests beyond themselves and a valuable higher purpose that they come together to achieve. The designing mind sees the higher purpose and arranges the parts so that they are put in relation to it.”

Norm L. Geisler, *Systematic Theology in One Book*, 26.

John F. Owens, “Creation and End-Directedness.” *Sophia; Parkville* 49, no. 4 (December 2010): 489–98.

<http://dx.doi.org/10.1007/s11841-010-0218-0>

"Something or Someone from beyond the physics and dimensions of the universe, who is not subject to them, placed life and humanity in the only location in the universe at the only time in cosmic history where and when such creatures could survive and thrive."

# Sample Conversation

Christian: Do you think the universe, our planet and all we see has a purpose?

Non-Believer: How could we tell?

Christian: So many parameters had to be perfect for there to be chemistry for life in the universe, other parameters perfect for a planet to support life, and then we have a single species that is intelligent and conscious. How do you think that all came together?



# Sample Conversation

Non-Believer: I suppose evolution

Christian: Do you really think random processes did that and we just got lucky?

Non-Believer: Can't life just adapt?

Christian: We are not talking about what life can adapt to, we are talking about how the universe served up the right chemicals to have life. Change the conditions and no life.

# Sample Conversation

Non-Believer: We only have one universe to compare.

Christian: Oh I am not talking about probabilities. I am saying what is likely or unlikely regarding what is possible. If the stars spelled “God” we couldn’t say “well we only have one universe.” The parameters are the way they are for life.

Non-Believer: Ok I see.

Christian: Do you think it is possible that you and I were put here on this earth for some kind of purpose? If so, what do you think that was? If not, why do you think so?

# Group Activity

**Discuss the following in your group:**

- 1. Are these arguments convincing? Why or why not?**
- 2. What problems do you think you would have in initiating a conversation with this information?**

For answers regarding our universe, read this:

<http://230nsc1.phy-astr.gsu.edu/Nave-html/Faithpathh/uniwhy.html>

# Part 4 -Science Basics Design in the Cell and Consciousness

Brendon Biggs

There are things in nature that point to intelligent that naturalist have to explain. The photos on the following slide are a look at the gearing mechanism in a grasshopper.

Notice how the following Washington Post headline personifies "Nature" as a personal causal agent. Shows the bias. Exactly how did nature "equip" this creature with the design?



## ITICS &amp; THE NATION

## Nature equips jumping insect with gears

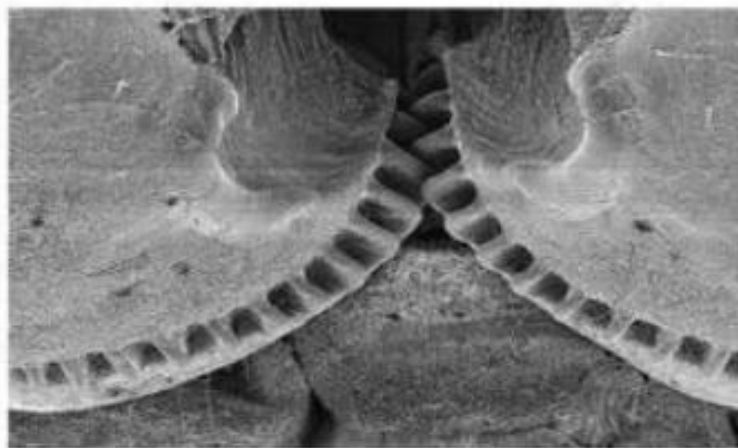
Mechanism enables  
planthopper nymphs  
to leap faster, farther

BY MEERI KIM

A jumping insect has gears, scientists discovered, a rare instance in which man and nature independently converged on the same idea.

It was not easy to verify. The planthopper (*Jesus coleopterus*) is tiny, just a bit larger than a flea. And it jumps extremely fast — with an acceleration of 200 Gs, a level close to the highest ever survived by a human.

But neurobiologist Malcolm Burrows and engineer Gregory P. Sutton, both of the University of Cambridge, used a high-speed cam-



MALCOLM BURROWS

ence in the movement of the legs is as short as 30 millionths of a second, allowing the insects to leap faster and farther.

Without synchronization, the body will rotate instead of going

were to throw it directly," he said.

The planthoppers have gear strips on the base of the hind legs, with about 10 teeth on each.

But the gears are somewhat like training wheels on a bike. They

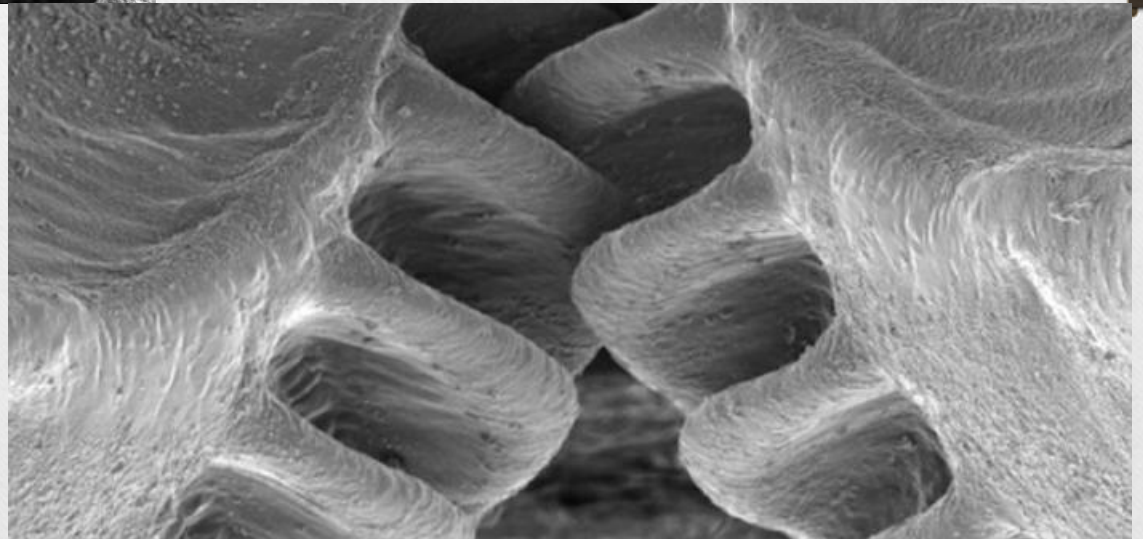
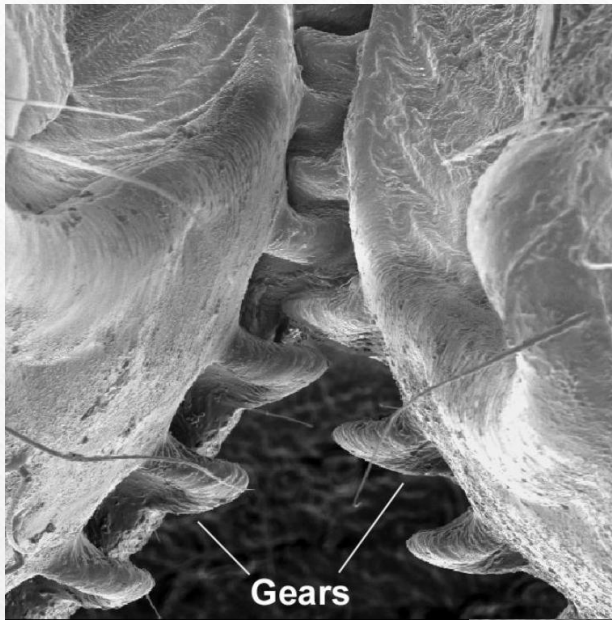


PHOTOGRAPH BY AN OLSZAK

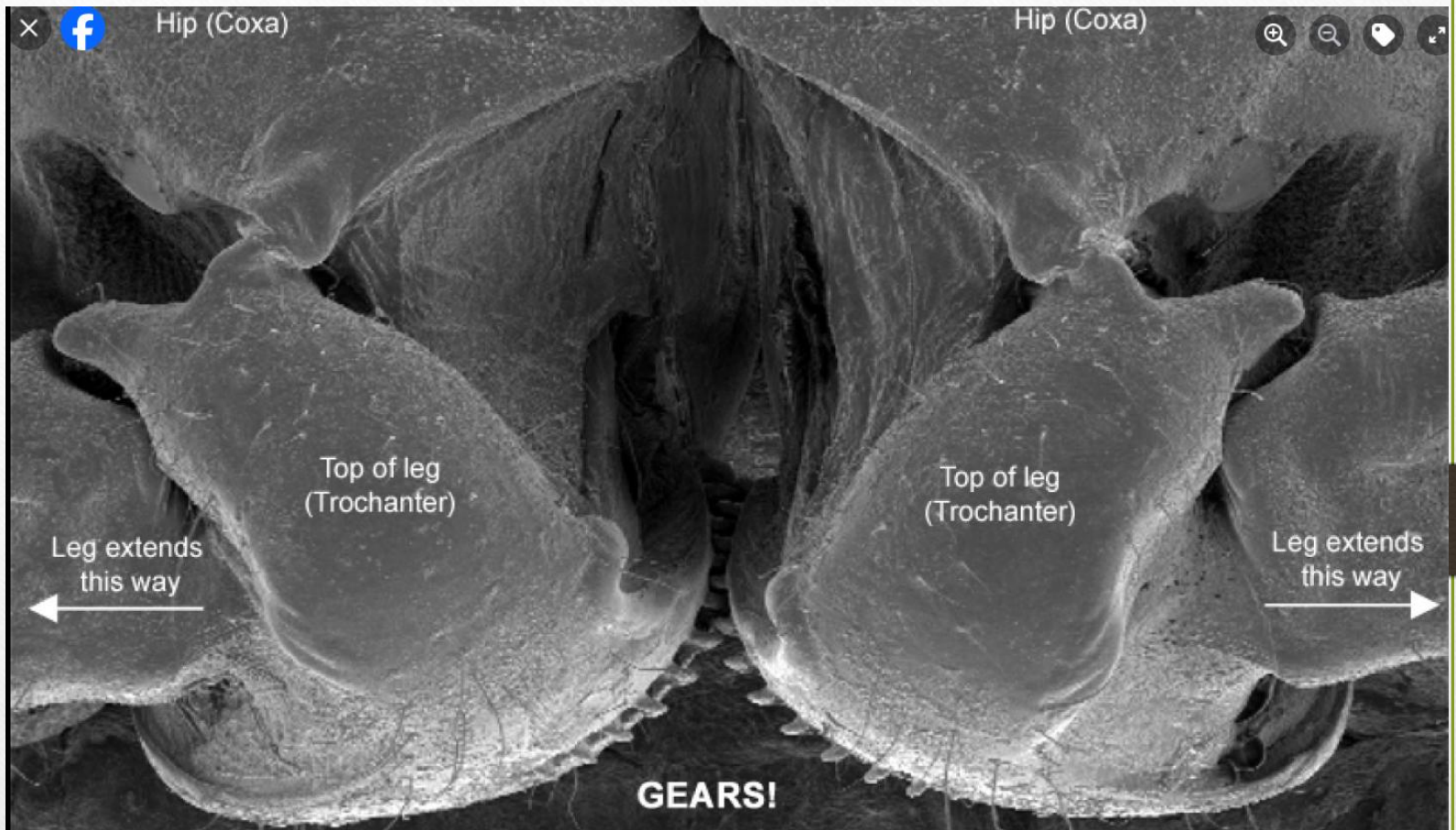
Two University of Cambridge researchers used a high-speed camera attached to a microscope to capture the insects in action during the nymphal stage.

design inspiration.

He discovered that geckos stick to walls using millions of tiny foot-hairs, and labs have been working on mimicking the lizard's extraordinary characteristics to create an









“Peering into life’s innermost workings serves only to deepen the mystery. The living cell is the most complex system of its size known to mankind. Its host of specialized material, are themselves already enormously complex. they execute a dance of exquisite fidelity orchestrated with breathtaking precision. Vastly more elaborate than the most complicated ballet, the dance of life encompasses countless molecular performers in synergetic coordination.”

Physicist Paul Davies , *The Fifth Miracles: The Search and Meaning of Life*. as quoted in Kenneth D. Keathley, *Faith and Science: a Primer for a Hypernatural world*, P.97.

How do we Detect Design in Nature?



## Demski's Filter for intelligence:

1. Be contingent
2. Be complex
3. Display an independently specified pattern

This avoids false positives but may get false negatives if God used a natural process. Features such as irreducible complexity assists with false negatives

## Detecting Intelligence

Demski shows that rational agents often detect the prior activity of other designing minds by the character of the effects they leave behind. Archaeologists assume that rational agents produced the inscriptions on the Rosetta Stone. Insurance fraud investigators detect certain “cheating patterns” that suggest intentional manipulation of circumstances rather than a natural disaster.





# Detecting Intelligence

Cryptographers distinguish between random signals and those carrying encoded messages, the latter indicating an intelligent source. Recognizing the activity of intelligent agents constitutes a common and fully rational mode of inference.



Work done in the burgeoning arena of nanoscience and nanotechnology not only highlights the machinelike character of these bio motors, it exposes the elegance and sophistication of their design. The cell's machinery is vastly superior that the best human designers can conceive or accomplish.

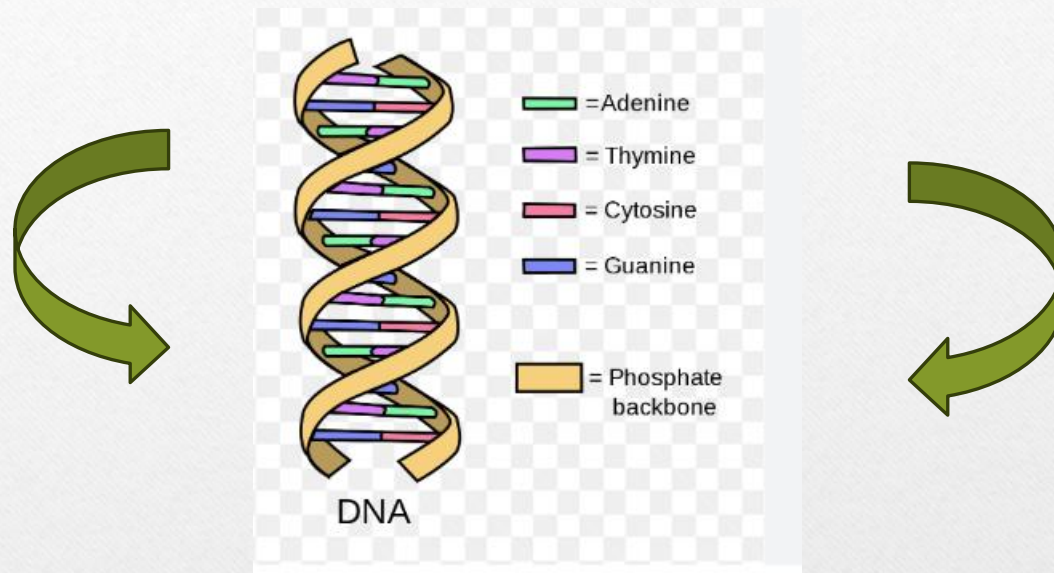
Bacteria Flagella- 100% efficiency

Electric motors – 65% efficiency

Combustion engines- 30% efficiency



# Which came first?



Proteins cannot be produced without DNA, and DNA cannot be produced without proteins. Both hands draw each other.

“And it turns out that it’s not just multi-part machines that are beyond the reach of Darwinian evolution. The protein-parts themselves which build these machines would also require multiple simultaneous mutations in order to arise.”

[https://evolutionnews.org/2025/01/why-evolutions-selection-mutation-mechanism-fails/?fbclid=IwY2xjawIcPQtIHRuA2FlbQIxMAABHR2o7\\_4yg0UuP-taAE2SDv4rQcrQEYPAXQAuqOKt0EwXOefxgQP5pyf3pQ\\_aem\\_qqtI5A5tXSJtZ4M7-N-a9Q](https://evolutionnews.org/2025/01/why-evolutions-selection-mutation-mechanism-fails/?fbclid=IwY2xjawIcPQtIHRuA2FlbQIxMAABHR2o7_4yg0UuP-taAE2SDv4rQcrQEYPAXQAuqOKt0EwXOefxgQP5pyf3pQ_aem_qqtI5A5tXSJtZ4M7-N-a9Q)

Also Dr. Jonathan Sarfati part 2 minute 15-17

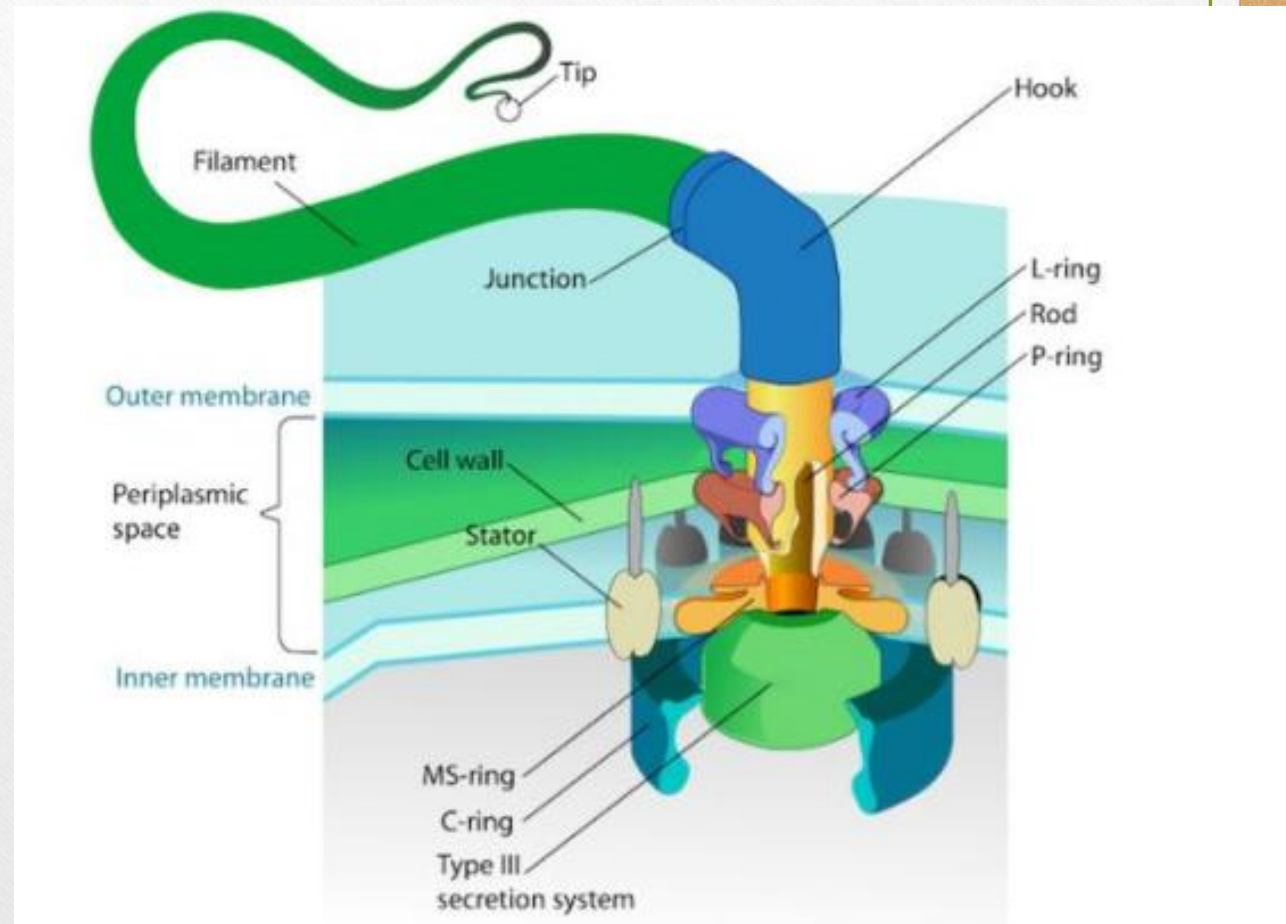
<https://vimeo.com/showcase/7236228?page=2&page=2&page=1>



“The molecular machines whirling inside you right now are such engineering marvels, that biologists can’t help but describe their parts with engineering names there are motors, switches, shuttles, tweezers, propellers, stators, bushings, rotors, drive-shafts, etc. And together they operate with unrivaled precision and efficiency. For example the bacterial flagellum is a rotary motor so small that 35,000 of them laid end to end would take up only 1 millimeter. Its motor runs at a sizzling 100,000 rpm in one direction, and it can stop in only a quarter-turn to run just as fast in the opposite direction. Our machines are crude by comparison.”

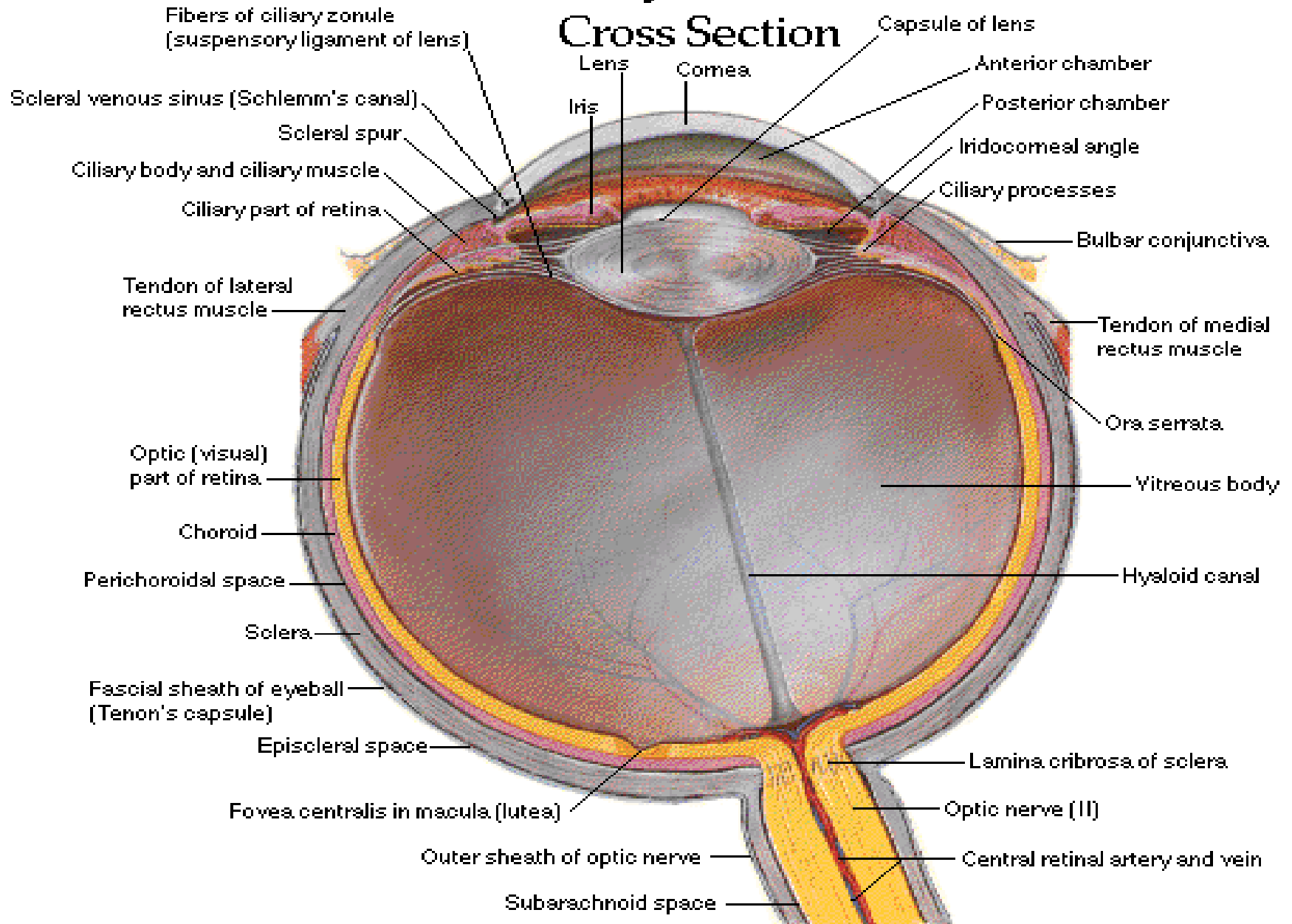
# bacterial flagellum

rotary engine, nano technology



# **Eyeball**

## **Cross Section**



## **Horizontal section**



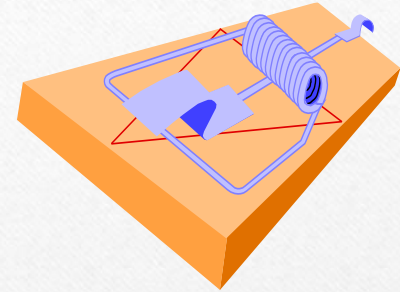
## The Eye:

The eye does not seem like it could evolve from a light sensitive cell – you are blind until it works.

In a survival of fittest paradigm, if your blind, your dead.

“This is nothing but storytelling” –Douglas Axe

# Irreducible Complexity



*Evolution assumes a series of minuscule changes over time, and each change has to give a survival advantage to the organism.*

*If it doesn't, and it causes a disadvantage the organism dies and evolution ends. None of the parts of an irreducible system would be functional or advantageous until the entire system is in place*

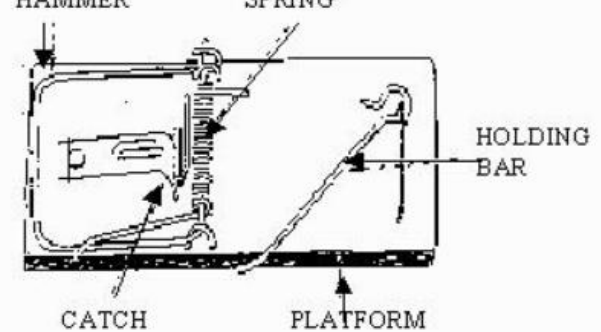


## Irreducible Complexity

*"If it could be demonstrated that any complex organ existed which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."*

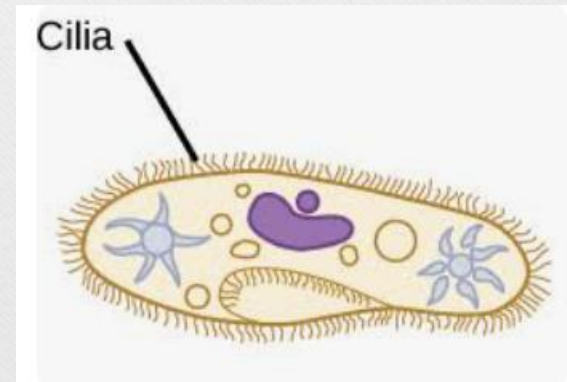
--Charles Darwin, Origin of Species

Like a mouse trap, all the components must be in place before it functions at all. A step-by-step approach to constructing such a system will result in a useless system until all the components have been added. The system requires all the components to be added at the same time, in the right configuration, before it works at all.

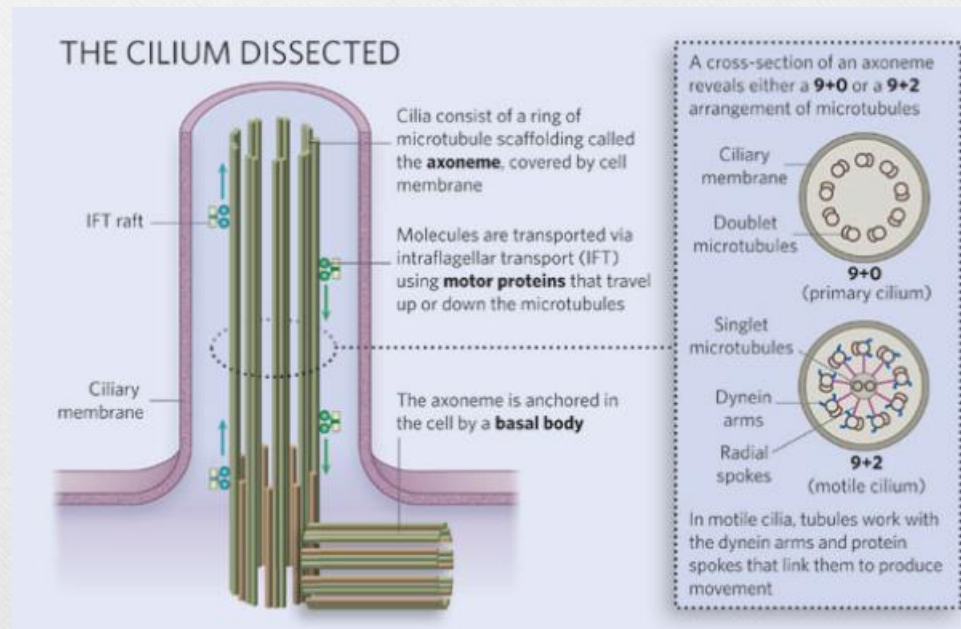




Cilia are hair-like structures, which are used by animals and plants to move fluid over various surfaces (for example, cilia in your respiratory tree sweep mucous towards the throat and thus promote elimination of contaminants) and by single-celled organisms to move through water. Cilia are like "oars" which contain their own mechanism for bending.



That mechanism involves tiny rod-like structures called microtubules that are arranged in a ring. Adjacent microtubules are connected to each other by two types of "bridges"-a flexible linker bridge and an arm that can "walk" up the neighboring microtubule. The cilia bends by activating the "walker" arms, and the sliding motion that this tends to generate is converted to a bending motion by the flexible linker bridges.





# Bad Designs?

“For decades, evolutionists have claimed that our bodies and genomes are full of useless parts and genetic material — “vestigial” organs — showing life is the result of eons of unguided evolution.”

“In 2008 the journal *New Scientist* reported that, since the days of Professor Newman, the list of vestigial organs “grew, then shrank again” to the point that today “biologists are extremely wary of talking about vestigial organs at all.”

# Bad Designs?

- *The tonsils*: At one time, they were routinely removed. Now it's known they serve a purpose in the lymph system to help fight infection.
- *The coccyx (tailbone)*: Many evolutionists still claim this is a hold-over from the tails of our supposed primate ancestors, but it's actually a vital part of our skeleton, used for attaching muscles, tendons, and ligaments that support the bones in our pelvis.
- *The thyroid*: This gland in the neck was once believed to have no purpose, and was ignored or even destroyed by medical doctors operating under false Darwinian assumptions. Now scientists know that it is vital for regulating metabolism.



# Bad Designs?

- The appendix: Darwinian scientists have claimed the appendix is a “vestige of our herbivorous ancestry,” and over eons of evolution its function in humans has been diminished, or lost. But it’s now known that the appendix performs important functions, such as providing a storehouse for beneficial bacteria, producing white blood cells, and playing important roles during fetal development. In light of this evidence, Duke University immunologist William Parker observed that “Many biology texts today still refer to the appendix as a ‘vestigial organ’” but “it’s time to correct the textbooks.”

# Sample Conversation

Christian: Have you ever looked into the design of a cell? They have micromachines inside. Some are like mini factories

Non-Believer: Like what?

Christian: Gears, motors, things that go to specific places, things that can only exist if they are fully assembled. Parts are created and fit together for a specific purpose

Non-Believer: Humans have had millions of years of evolution to get it right.



# Sample Conversation

Christian: There are some components I do not think could happen through a biological process. For example, the eye does not seem like it could evolve from a light sensitive cell – you are blind until it works.

Non-Believer: Can't life just adapt?

Christian: The systems are more complex than what humans can design and build with computers. We try and duplicate them but we cannot. Components have to cooperate with each other. Do you think that is evidence for design?



# Sample Conversation

Non-Believer: I am not sure of that

Christian: Everything must run perfect or it doesn't work at all. I wonder how an organism survived for millions of years while it was evolving. Seems like it would have died off

Non-Believer: interesting

Christian: I like science and learning about this. Can I have you look at some resources on this and get your feedback? You may find it interesting.

## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic?**
- 2. Do you have a non-believer you feel you could share this with?**
- 3. What questions or fears do you have with this topic?**
- 4. Do you think this is a good discussion for theism?**



# Brains and Minds

The brain is not same thing as mind. Brains can be measured but minds cannot. Memories can be remembered as well as the emotional experiences. You can measure that or find it with a device. Can't publicly access your thoughts like you can access a brain. Your thoughts are "about" something. A "something" is just a something. Physical entities are just what they are. Mental thoughts are personal, not impersonal.





# Mental States are not Brain States.

Measurable(brain)

Not measurable (mind)

Public (brain) vs

Private (mind)

Is-ness(brain) vs

About-ness(mind)

Impersonable(brain) vs

Personal (mind)



Piano (matter) and a piano player. If the piano is damaged it will affect how the player plays, but this doesn't disprove the player.

All science can do is show that X causes Y, or that Y depends on X.





Are there things we know are true of mental properties that are not true of physical properties, or vice versa? Yes.

Mental states/properties do not have size, shape, electrical charge, nor are they spatially located.

Physical states cannot be true or false, but thoughts can.

Some sensations are pleasurable, while this is not the case with physical properties. I can hallucinate a pink elephant (a mental state), but you cannot see that in the brain with a meter.

If you close your eyes and think of a car, you are not seeing the car with your eyes. You are beholding it with your mind.



# The Brain

3000 cell types,  
86 billion cells,  
7000 proteins,

Each neuron is equivalent to 100 transistors or  
a laptop.  $10^{15}$  connections. 400 billion  
connections in each cubic CM.

Any one of the brain systems is not right you have problems.

For evolution, if brain gets bigger, it doesn't mean you get smarter. Everything has to work together. 100,000 chemical reactions every second. These are supremely coordinated reactions. And never random. Random mutations during evolution cannot get right combination correct.



Functions of brain – organs, thoughts, senses, etc. the brain is always running until you die. A change in your gut has to correspond to a part in your brain. Generates more electrical impulses than whole telephone network on earth. 30 times more powerful than most powerful computers in the world.

Communication and language – hand/brain link is amazing. Function of hands is like another brain. For evolutionist, even if hands mutated, you still need corresponding brain changes simultaneously. Any major change in body needs simultaneous change in brain. How can evolution change dynamic changes with links between multiple muscles firing at once for walking etc.? If mutations, this should be across all animals.





# Emergence?

One H<sub>2</sub>O molecule may not feel wet but a bunch of H<sub>2</sub>O molecules wetness. However, the water doesn't really become something different.

When we take billions of water molecules and put them on our fingertip, it just feels different from what we would have expected.



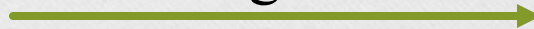
Emerges?



Emergence- as applied to the brain and mind- unlike to water and wetness, asserts an ontological difference. Emergentists assert that brain tissue becomes a completely different kind of thing — a thinking thing — when the mind magically emerges from matter.



Emerges?





# Minds from Matter or Matter from a Mind?



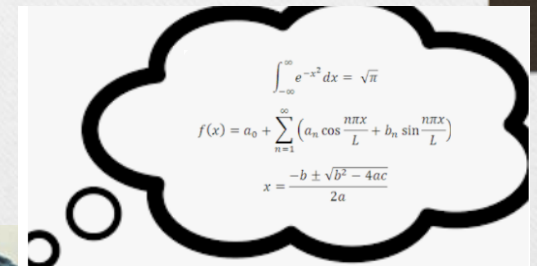
Immaterial  
carbon



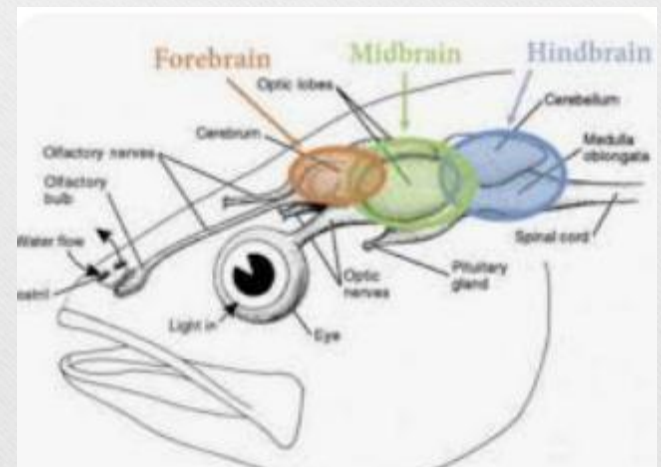
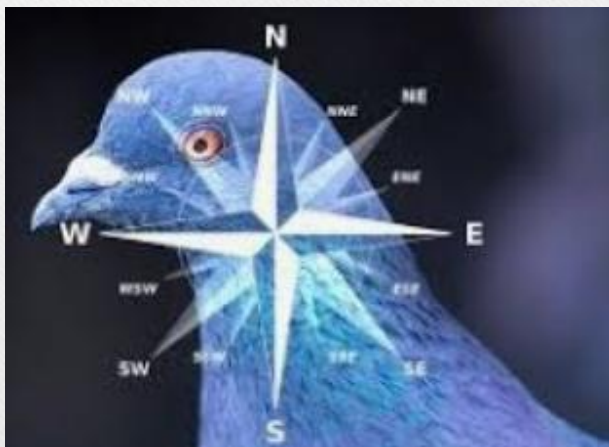
Becomes



Conscious  
thinking  
carbon



Animals have very complex brains as well. Birds have navigation power. Salmon return to same streams. Never random. Specific purpose. Some animals have pre-wired functions like follow the herd. Some have to flee immediately after birth. Humans learn through life experiences.





God is relational and rational. What is some information about the brain we can use to show a connection between human's ability to relate and reason with God?

Do you think our advanced sophistication is why we are moral creatures who can discover objective right and wrong?

## Example Conversation

Christian: Have you looked into how fascinating the brain is and how we can use it to reason? It is amazing how it appears to be designed to work with all of our bodies systems simultaneously. There is a delicate balance to keep it operating as design vs having a disorder.

Non-Believer: yes I like that kind of stuff



## Example Conversation

Christian: Do you think there is a difference between the mind and the brain?

Non-Believer: I think they are the same. I know electrodes can pickup signals when people think different thoughts.

Christian: I know there is a correlation. But they cannot read your thoughts. Those are first person private.

Non-Believer: But we can't see a mind. We must just be chemicals.

## Example Conversation

Christian- How are we conscious? Why are we unconscious when we are dead if brain chemicals are the same?

Non-believer: I don't know

Christian: I think it's like a piano player and piano. The mind is correlated to the Brain but the mind is a thinking thing. Have you heard of near death experiences?

Non-believer: You mean the people that die and say they looked down on themselves.



## Example Conversation

Christian: Yes! It is well documented. I think that shows they are different. Laptops are designed and brain is far more advanced, couldn't it be designed? I mean even hardware needs the software programming.

Non-Believer- I always thought brains just evolved

Christian: Everything had to come together perfect or brain won't work. Human brain is far different than any other animal. We can relate to each other and our creator and reason.

## Group Activity

**Discuss the following in your group:**

**1. Was this conversation realistic?**

**Why or why not?**

**2. What problems do you think you would have in a conversation like this?**



# Part 5 -Science Basics -Information in the cell

Brendon Biggs



## Levels of Information

1. A N R 6 \* \$ 1 3 3 #)4kdres – Random
2. ABABABABABA or 01010101 –pattern
3. Cat – a thing
4. Brown cat – a description of the thing
5. “Do you see the brown cat?” – providing information and requesting a response.

DNA is Level 5 Information

Storage capacity of DNA is so dense that if you transcribed all the books in all the worlds libraries into the language of DNA, their content would fit within the volume equivalent to one percent of the head of a pin

-DNA has information storing, processing, replicating, sending, receiving, interpreting, regulating. Who or What is “selecting” in natural selection?

-Nature can produce order but not information





Information in 1000  
sets of encyclopedias



Inside DNA of simple  
Amoeba



There is no  
simple life

Living cells depend on the functions of thousands of proteins, and that these proteins have a great variety of distinct structural forms. These distinct forms are referred to as *folds*, and there are well over a thousand of them known today, with more being discovered all the time. The big question is: *Does the Darwinian mechanism explain the origin of these folds?*

One way to approach this question is to reframe it slightly by viewing the Darwinian mechanism as a simple search algorithm

- Odds that a random interactions would find a functional protein among the possible 150 amino-acid compounds is  $1 \times 10^{164}$  .
- EDAV P Ixxi



Wiki:

Fred Hoyle also argued for a fine-tuned Universe in his 1984 book Intelligent Universe. He compares "the chance of obtaining even a single functioning protein by chance combination of amino acids to a star system full of blind men solving Rubik's Cube simultaneously".



Evolution is like saying you start with a random letter on a page that makes sense then add another random letter and those two make sense together then keep adding random letters so the words and paragraphs all make sense. Natural looks like someone was “editing” the paragraph to make it make sense.

## Paley's Argument Restated - Continued

1. Living cells are characterized by their specified complexity.
  - a. Crystals are specified but not complex
  - b. Random Polymers are complex but not specified
  - c. Living cells are both specified and complex
2. A written language has specified complexity
  - a. a Single word repeated over and over is specified

Continued



## Paley's Argument Restated - Continued

b. A long series of random letters has complexity

c. A sentence has specified complexity

3. Uniform experience informs us that only intelligence is capable of regularly producing specified complexity.

4. Therefore, it is reasonable to assume that living organisms were produced by intelligence.

Darwinian is random. Gene's do not search. To get a gene that happens to encode a protein that folds up into a 3d structure that does something. Sweet spot for an evolutionary process to get a working protein for a needed function is 1 in trillion, trillion, trillion, trillion, trillion. This cannot produce something like instructions. Messages comes from minds. Cant get new life forms by mutating DNA if info isn't in DNA.



Dna is like software. Epigenetic is like hardware. iphone 6 can go to an iphone 7 with software but phone can change without hardware. You cannot get new life forms by mutating DNA. DNA is not enough. We cannot reduce man to just physical. We wouldn't have free will or even consciousness(they go together). Why are we aware if we are just machines? Concepts are not just chemicals. Brain is interface between physical and conceptual world. There is a non physical world of thought.



“As my colleague Casey Luskin has established, no serious biologist post-Watson and Crick has denied that DNA and RNA contain functional information expressed in a digital form — information that directs the construction of functional proteins (and editing of RNA molecules). Thus, *contra* Bishop and O’Connor, my characterization of DNA and RNA as molecules that store functional or specified information is not even remotely controversial within mainstream biology.”

## Can DNA Information be measured?

Shannon is a mathematical theory of information that does not distinguish the presence of meaningful or functional sequences from merely improbable, though meaningless ones. It only provides a mathematical measure of the improbability-or information-carrying capacity-of a sequence of characters. In a sense, it provides measure of a sequence's capacity to carry functional or meaningful information. It does not or cannot determine whether the sequence in question does convey meaning or generate a functionally significant effect. Strands of DNA carry information carrying capacity that Shannon theory can measure.



Dna is like natural language and computer language codes that contain functional information. In English specified arranged characters convey functional information to conscious agents. In computer code, specifically arranged characters (zeros and ones) produce functionally significant outcomes within a computational environment without a conscious agent receiving the meaning of the code inside the machine. In the same way, DNA stores and conveys functional information for building proteins or RNA molecules even if it is not received by a conscious agent.

Stephen Meyers, <https://evolutionnews.org/2018/04/yes-intelligent-design-is-detectable-by-science/>

As in computer code the precise arraignment of characters( or chemicals functioning as characters) allows the sequence to “produce specified effect.” For this reason we use specified information as a synonym for functional information because the function of a sequence of characters depends upon the specified arrangement of those characters.



Francis Crick (1958) “by information I mean the specification of the amino acid sequence in protein... Information means here the precise determination of sequence either of bases in the nucleic acid or amino acid residues of the protein.”  
Can natural selection working on random mutations in DNA produce the highly specific arrangements of bases necessary to generate the protein building blocks of new cell types and novel form of life?”

Stephen Meyers, <https://evolutionnews.org/2018/04/yes-intelligent-design-is-detectable-by-science/>



The claim that evolution did invent proteins, cell types, organs, and life forms is scientifically legitimate only if we know evolution can invent these things. If nothing can evolve its way into existence, then nothing did. Doug points out that the current stance is that evolution was so successful that it perfected life to the point where modern forms no longer evolve, making the whole process even further removed from the category of observable phenomena.

Doug Axe Undeniable –P. 226.

Materialism places things as primary. Theists hold thinkers as primary. Materialism cannot explain thinkers or their thoughts. That which is constrained by physical laws cannot give rise to something that takes precedence over those laws. Therefore mind did not evolve from the physical. The mind is above the physical.

Properties of matter make all mere things behave the way they do, but we stand above that. We are not mere things. We do what we want. How can something that lacks personhood know the path to personhood? How can anything intend to produce person without first understanding what this means? Can an iPhone 5 make itself into an iPhone 6?



P 68-Knowledge to do something has to be acquired. You learn how to do simple tasks like button your shirt. More rain just makes bigger puddles. No intent. Activity of a spider or robot is intentional and leads to a whole project. There is discernment –the ability to distinguish between right and wrong way. That requires knowledge so you can infer a “knower” that was behind the work. To evolve from one things to another requires functional changes. You have to have coordinated steps helped along by nicely arranged stepping stones.

Intelligence is choosing, not brute force. This and not that. Goal directed.

Natural selection doesn't have the power to invent.

Systems that solve major logistics problems, control access, and maintain structures speak of intelligent causes that have a purpose (a function) and organize parts to achieve that function. There's hardly a better example in the world of that than what goes on in the nucleus of every cell.



Meyers

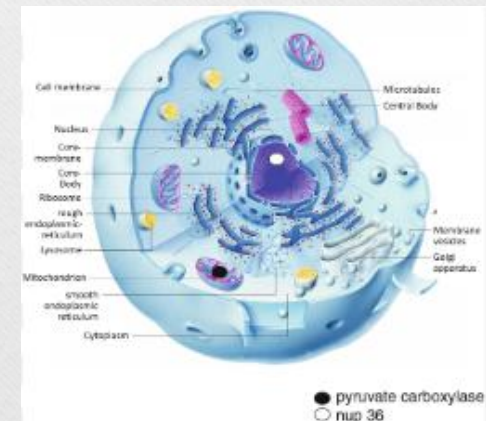
<https://www.youtube.com/watch?v=TayCiCr dKHE&index=10&list=PL7Wwl5TzliiGKJ-eM11CXY2uuds0x8fzR>

If you want to build a new body plan from pre-existing you need information. DNA has digital code with instructions.

High tech in low life



Inside the cell are multiple layers of complex systems that required a series of steps including assembly of boundary membranes, forming energy capturing capabilities by the membrane, encapsulation of macromolecules, pores to funnel raw materials, catalysts to speed growth, replication systems, introduction of information, etc.



“It is super astronomically improbable for the essential gene set to emerge simultaneously through natural means alone. If left up to an evolutionary process, not enough resources or time exists throughout the universe's history to generate life in its simplest form.”

-Fuzale Rana, Biochemist



Here is a simple illustration:

1. Living cells are characterized by their specified complexity.
  - a. Crystals are specified but not complex
  - b. Random Polymers are complex but not specified
  - c. Living cells are both specified and complex
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Continued

Here is a simple illustration:

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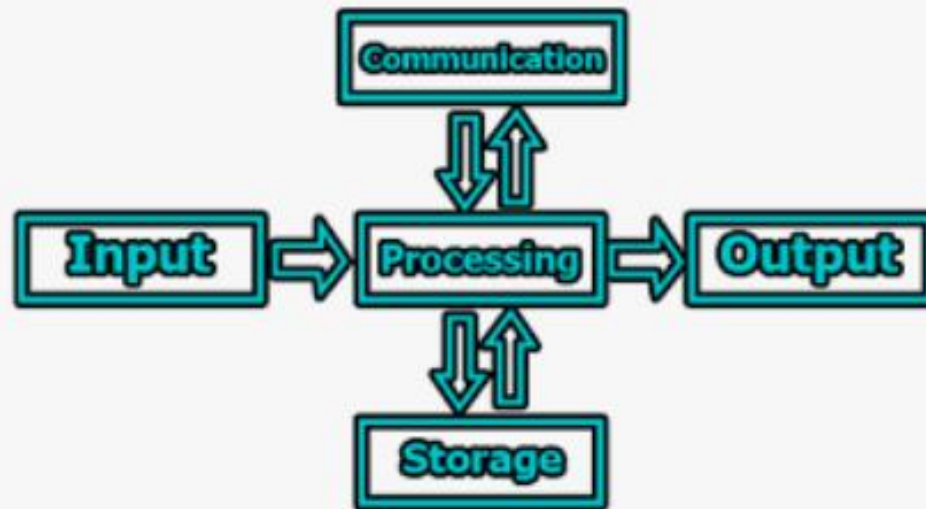


The message found in the nucleus of a tiny single cell of nucleus of an amoeba is more than a 1000 volumes of the encyclopedia Britannica (high tech in low life). Storage capacity of DNA is so dense that if you transcribed all the books in all the worlds libraries into the language of DNA, their content would fit within the volume equivalent to one percent of the head of a pin.





DNA has information storing, processing, replicating, sending, receiving, interpreting, regulating. Chemicals just react. Nature can produce order but not information. Our uniform and repeated experience is that only intelligence is capable of producing digital information.



5 lines of evidence which show natural selection could not have produced new life forms are:

- 1) Genetic limits,
- 2) Cyclical change,
- 3) Irreducible complexity,
- 4) Non viability of transitional forms,
- 5) Molecular isolation.

When life appeared it was more complex than natural process could account for. To assert that life came suddenly from zillions of inorganic molecules takes a lot of faith.



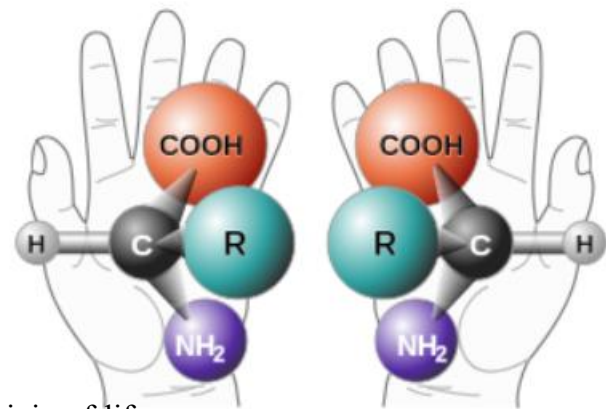
As far as the sun: you can see the sun and take measurements so no need to try a sustained fusion reaction on earth. They would definitely need to show how complex life occurred suddenly with hostile conditions out of inorganic matter without intelligent intervention. The amount of DNA complexity in just a single cell alone is astronomical and cannot be explained by natural process

Synthetic biology – time and time again people who work in this area show you need a designer. They use a carefully controlled environment, controlled processes, etc just to build a simple synthetic enzyme with many PhD scientists, 100's of hours on computers.

That is not natural.



In the past RNA theories the issue that arises is Chirality Problem. Carbon molecules can be called as right handed or left handed. All 20 amino acids that comprise the proteins that make up our life are all left-handed. The ribo sugars that are the rna/dna backbone are all right handed.



<https://reasons.org/explore/publications/articles/homochirality-and-the-origin-of-life>

and Dr. Fuzale Rana, part 1, minutes 30-32.

<https://vimeo.com/showcase/7236228?page=2&page=2&page=1&page=2&page=1>

If all amino acids weren't left and all nucleic acids weren't right handed there would not be life. Pharmacists have to go to great lengths to try and get one sided or the other separated when they make certain drugs. The problem has always been how did nature do it so perfect to get anything to start.



Organic chemist William Bonner once declared:

”I spent 25 years looking for terrestrial mechanisms for homochirality and trying to investigate them and didn’t find any supporting evidence. Terrestrial explanations are impotent or nonviable.”

Which came first, proteins or DNA? For evolutionists, the chicken or egg dilemma goes even deeper. Chickens consist of proteins. The code for each protein is contained in the DNA/RNA system. However, proteins are required in order to manufacture DNA. So which came first: proteins or DNA? The ONLY explanation is that they were created together.



## Summary

Genesis 1 – God made everything “according to their kinds”

DNA has intelligence(design). Intelligence comes from minds not materials. Materials and chemicals react. Information in DNA tells creature to stay the same not mutate into different creature. Cells don't have information to mutate and transform into a new creature. Natural selection by mutations kills the creature.

Nobel prize winner – they tried different changes in genome chromosomes and got sick and dead flies. Will not change into something that isn't a fly.





# How do you make a cookie?

First you have to know what you are trying to make

Have all the ingredients (Sugar, Flour, chocolate chips, etc.)

Mix it in exact quantities

Form the cookies

Heat oven and cook for precise time. Too little or too late and the cookie is ruined.



How do you make organic material from inorganic material?

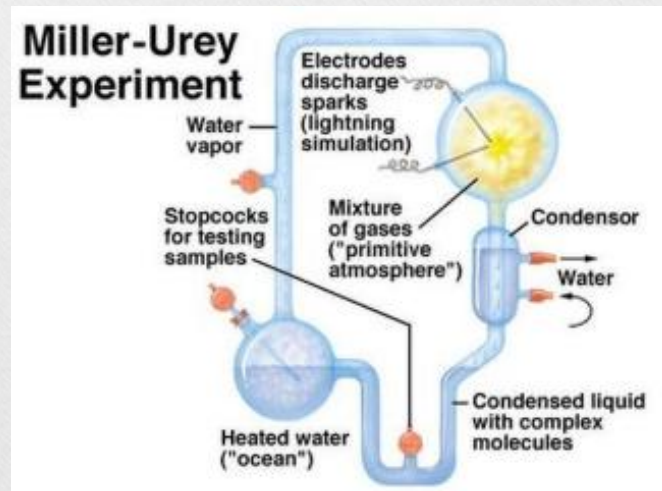
First you have to know what you are trying to make

Have all the ingredients (carbon, water, etc

Mix it in exact quantities

Design the molecule

Heat with exact temperatures, start and stop reactions for exactly the precise time. Too little or too late and no organic compounds.





# Cookies and Life from Non-Life Needs Intelligence



# Sample Conversation

Christian: Have you heard that our DNA has information inside of it?

Non-Believer: Like what?

Christian: The highest form of information. A single cell has the equivalent thousands of volumes of an encyclopedia. Doesn't that strike you as miraculous?

Non-Believer: they are probably not talking about the same kind of information. Its all chemicals reacting.



# Sample Conversation

Christian: DNA has information that is storing, processing, replicating, sending, receiving, interpreting, regulating. Even people like Bill Gates has said it is the same kind of information

Non-Believer: Like software?

Christian: Exactly! And it appeared in the very first simple bacterial life. Where do you think it comes from? If you need DNA to make a creature but the first creature had it already, doesn't that seem strange?

# Sample Conversation

Non-Believer: Aliens?

Christian: Well many biologists have noted it sure seems like it came from intelligence, but then aliens are material and need DNA as well.

Non-Believer: What about God? Does he need DNA?

Christian: God is immaterial like a mind so he wouldn't have to. I like the intelligent design concept. Would you like some good material on it?



## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic?**
- 2. Do you have a non-believer you feel you could share this with?**
- 3. What questions or fears do you have with this topic?**
- 4. Do you think this is a good discussion for theism?**

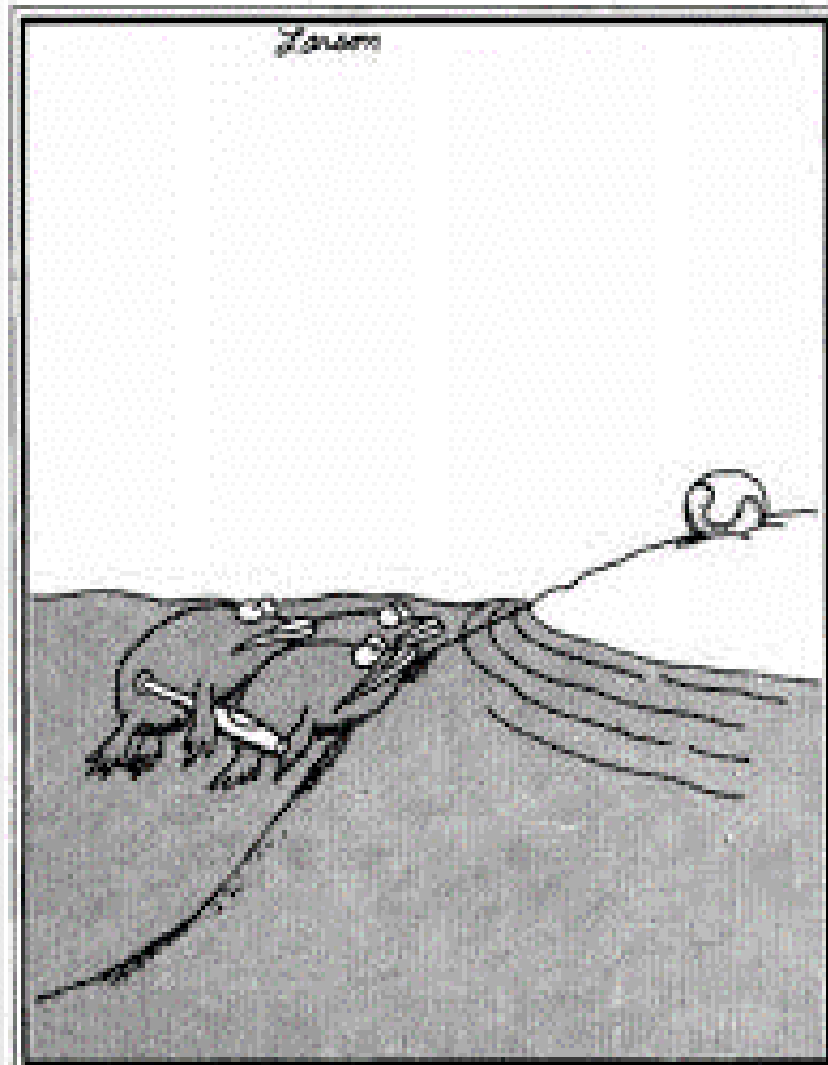
# Part 6 -Science Basics

## Critical issues in the Origin of Life and Evolution



Hugo De Vries in 1904: "Natural selection may explain the survival of the fittest, but it cannot explain the arrival of the fittest."

Who or what is “selecting?”



Great Moments in Evolution



Chemical evolution refers to the processes that presumably generated the initial life-forms. According to this model, chemical selection transformed a complex chemical mixture of simple compounds into proto-cellular entities that evolved to yield the first true cells. For the evolutionary paradigm to be true, macroevolution and chemical evolution must be unequivocally established.

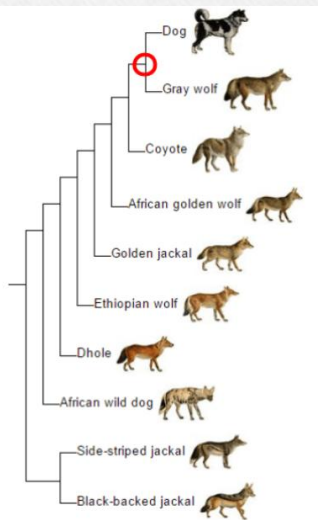
*Macroevolution* includes putative changes that require that evolutionary processes have genuine creative potential. Examples would include humans evolving from a primate ancestor, whales evolving from a terrestrial wolf-like mammal, and birds evolving from theropods. Whether or not macroevolution has occurred defines the creation-evolution controversy.



*Microevolution* refers to changes happening within a species

*Speciation* describes the scenario in which one species can give rise to a closely related sister species. A classic example is the evolution of the finches on the Galapagos Islands from an ancestral finch species that arrived to this archipelago from South America. Upon arrival, the ancestral finch evolved into a variety of species that vary primarily in body size and beak size and shape.

Micro and Speciation are two of evolutionary changes have been observed repeatedly and, in my opinion, are noncontroversial. The change in the green anoles falls between the categories of microevolution and speciation.





Microbial evolution refers to transformations in viruses, bacteria, archaea, and single-celled eukaryotes—such as the acquisition of antibiotic resistance in bacteria, the ability of viruses to hop from one host to another (e.g., SARS and HIV), and the emergence of drug-resistant strains of the malaria parasites.

Microbial evolution would also include horizontal gene transfer between microbes that accounts for the evolution of pathogenic bacteria from nonpathogenic strains (e.g., *E. coli* O157:H7). Microbial evolution is not particularly controversial.



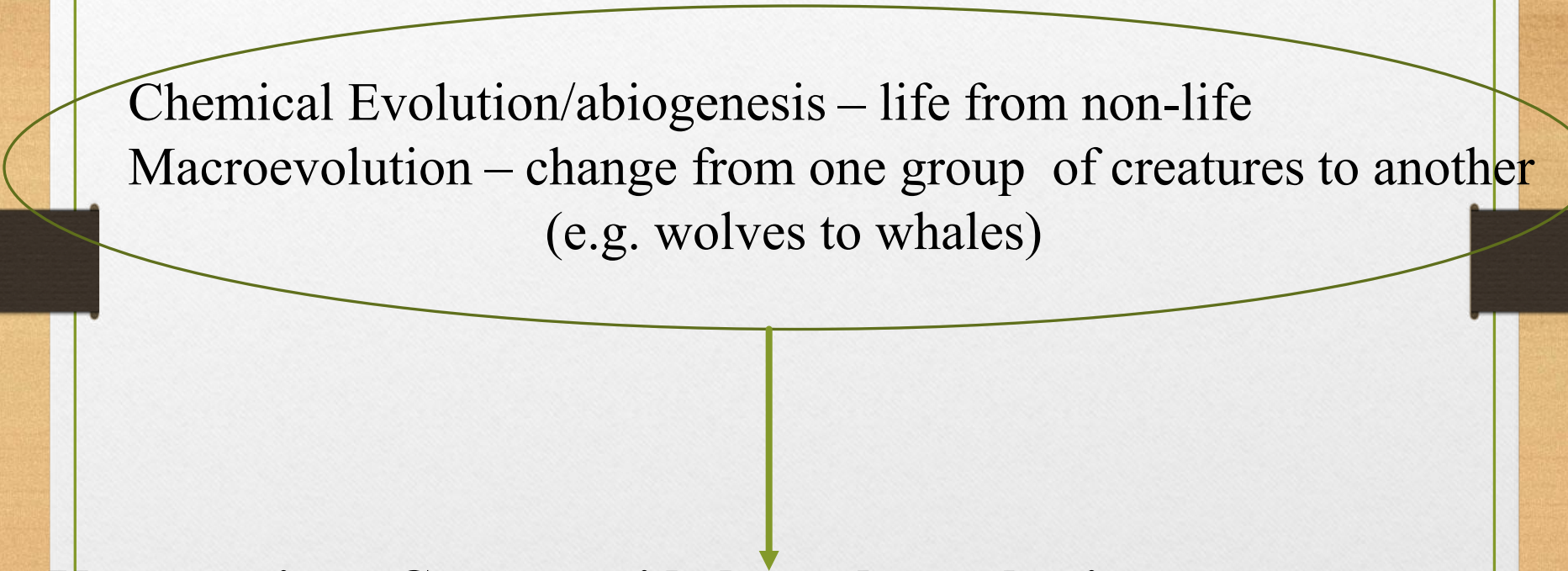
Microevolution - adapting to environment(wolves to dogs)

Speciation (e.g variety of cats and dogs)

Microbial – bacteria, viruses (anti-bacteria resistant antibiotics)

Chemical Evolution/abiogenesis – life from non-life

Macroevolution – change from one group of creatures to another  
(e.g. wolves to whales)



**Key question: Can un-guided, random selection type process using random mutations explain origin of life from non-life, origin of consciousness, origin of information, create new body plans? (and explain morality?)**

Can nature build a living thing from  
non-life?



All forms of life have hundreds and hundreds of proteins and they do all kinds of things and a lot of them are enzymes. Enzymes are proteins that promote certain chemical reactions cause them to proceed at a reasonable rate in life and anything that happens in life requires enzymes. Even the simplest form of life that we know of now has close to 400 functional proteins



Dr Robert D sylvestro, professor Meritus of nutrition at the Ohio State University, Stars, Cells, and God podcast  
<https://www.youtube.com/watch?v=IMyj3tcIXns&t=437s>

Charles Coker and Ken Dill-Papper published inn 2024 in the proceedings of the National Academy of Sciences <https://www.pnas.org/doi/10.1073/pnas.2315000121>

Functional proteins are made of building blocks we call amino acids and most proteins are commonly made of 20 amino acids and they have to be arranged in a certain order to give it a function or to give it any function

Amino acids a little bit like letters. They are arranged in a certain order and that gives us words and sentences and books right but if you just start arranging letters at random you get gobbledygook.

How do you go from billions of potential sequences that do not produce function to a few hundred that do?

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The paper proposed that the one that did not fold broke down and the ones that folded remained so you end up with good sequence.

Issues in paper- assumptions in model are not realistic. To get a minimum of 400 functional proteins they all must have specific functions and work collaboratively to get life. Chemical reactions are not life. If these functional proteins somehow works together that would also be a design argument. Way more than a coincidence.

The paper starts with “No one knows how life originated”

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The paper also assumes as you build something it gets better. We have examples like placing blocks on top of each other, that actually shows it can collapse so building does not always mean it gets better. As they fold you could get to a point that it collapses.

If protein collapses, nature does not “remember” how to get it. You have to start all over with randomness. Proteins can also get in the way of each other.

The paper assumes a “founding rock” which helped start the process without defining what that was.

Dr Robert D sylvestro, professor Meritus of nutrition at the Ohio State University, Stars, Cells, and God podcast  
<https://www.youtube.com/watch?v=IMyj3tcIXns&t=437s>

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This is not a “God of the gaps” argument. It is based on what we know and we know this could not come about with natural processes. To say we will figure it out is just as much of a faith statement as saying we will find more evidence it cannot happen.

This is part of a cumulative case that points to an intelligent agent.

Dr Robert D sylvestro, professor Meritus of nutrition at the Ohio State University, Stars, Cells, and God podcast  
<https://www.youtube.com/watch?v=IMyj3tcIXns&t=437s>

Charles Coker and Ken Dill-Papper published inn 2024 in the proceedings of the National Academy of Sciences

## Sidebar – God of the Gaps?

- 1.If you have no data, you fill a gap with God
2. If you have data, there is no gap. Seeing a writing in the sand is data and saying it was made by a person is not filling a gap.
3. Saying DNA has information and information comes from intelligence is not filling a gap.
4. Assuming everything has a natural explanation and asserting “we just haven’t figured it out yet but I know we will find a natural explanation” is arguing in a circle and filling the gap with unknown science.

Rain in the sky- ancients said it was from God. They had no data and filled the gap.

Coding in DNA – we have data and can infer intelligence since we are using the data so there is no gap.



Evolution isn't about similarity its about transformation- Going from one basic architecture to another.

The theory has not been able to explain changing one type of creature into another type.

Modules can be swapped out (eye to an eye).  
We cannot change a fly into something else.

# If it can't happen, then it didn't happen

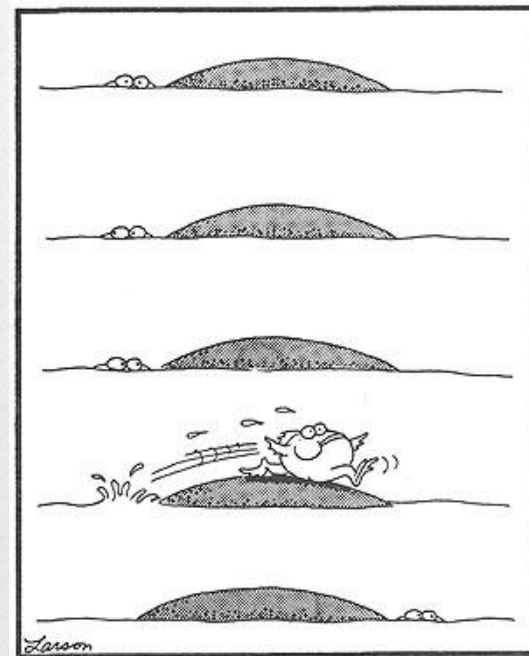
Which car won the race?



Car on right has no engine so it could not have won. Lets lift up the hood on evolution and see if it has an engine.



A fish who "decides" to start living on land would have to slowly develop air breathing lungs. That requires new information which it doesn't have. The new air lungs wouldn't work until fully developed so you have millions of years of gills and nonfunctioning air lungs until one day they work enough to go on land. All by unguided processes?



Another great moment in evolution

“Purely on a scientific basis I strongly feel evolution doesn't work and should be rejected outright. This is with regards to macroevolution, which is needed for one species to evolve to another. We all know microevolution occurs but no evidence of macroevolution, as for such to happen, it is likely that between the species all or if 2-stage most systems need to change. Most evolution 'evidence' is based on fossils. But totality of life is well beyond bones. If any one suggests that one species has evolved to another, they need to demonstrate how a largely a 2 stage process namely random mutations and natural selection can bring about changes in anatomy, biochemistry, ...”



“Physiology, cardiovascular, gut, genito-urinary system, reproduction system, brain and nervous system, hematology, immunology, skin, eyes, hearing, muscular system, vestibular system and behavioral changes. Hence, anyone showing few fossils should be challenged to show how evolutionary mechanisms can plug all such gaps. Further, such changes need to happen simultaneously as biology is dynamic and interactive - no system can develop in isolation without cascading changes. In short macroevolution means multisystem simultaneous changes, for which evolution has no answers.”

Dr. Uditha Jayatunga, BMBS; FRCP-- Email to RTB scholar community -December 13, 2024

Continued

“Human brain is the most complex structure in the universe. What does it actually mean? It means that it is more complex than the most complex man made systems- Apollo mission to the moon, Hadron collider, International space station etc - each would have needed at least 10,000 steps meticulously experimented by scientists/ engineers to get there. But, evolutionists want us to believe that our brain which is more complex than all above is a product of largely 2 steps, out of which first is random.”

Dr. Uditha Jayatunga, BMBS; FRCP-- Email to RTB scholar community -December 13, 2024

Continued



“This is simply not logical. Our brain is 30 times more powerful and 5 times faster than the most powerful computer made by all humanity. It is at least 500,000 times more efficient than a lap top. It has got the same capacity as the internet -2.5 petabytes. When we take one step it coordinates over 200 muscles effortlessly. European brain project- 10 yrs, 500 scientists, over 3000 papers, 19 countries, over 600 euros- one of the conclusions- we don't even understand the basics of our brain. That is the mind boggling complexity we are talking about. How can it be a product of randomness ??? “

Dr. Uditha Jayatunga, BMBS; FRCP-- Email to RTB scholar community -December 13, 2024

Continued

“Hence at all levels, macroevolution evolution fails miserably and should be rejected outright. The complexity of life from cells to the brain and trillions in between can not be products of 'randomness' but all complexities, purpose, fine tuning points only to Intelligent Design.”



Dr. Uditha Jayatunga, BMBS; FRCP-- Email to RTB scholar community -December 13, 2024

Also- Dr. Uditha Jayatunga, 'Stars, Cells and God' with Fuz Rana <https://www.youtube.com/watch?v=-EgwonzkNgg>



Naturalism has a built-in defeater or a thing that undermines our cognitive facilities. If Naturalism is true then our beliefs are selected by survival not truth, so if naturalism is true then we have no idea what is true. Its possible that our beliefs could be false but contusive to our survival.

It is self-defeating because truth can't be rationally affirmed.

## Circularity – Survival of the fittest



Evolution is not goal directed.  
Survival of the fittest is a tautology.  
Who survives? The fittest. Who is  
the fittest? Those that survive.





Micheal Behe

Helpful mutations are not a DNA upgrade. Getting a new cell phone is an upgrade because it has new features. Mutations don't install new features in DNA. They just change existing features. This is like turning off the gps app on our phone-saves battery but doesn't add a new function.

New species are caused by breaking chains-de-evolution not upgrade. How do you get higher and higher forms?

Douglas Axe and Anne Gauger's- bacteria mutation:

“It would take 1000 x trillion x trillion (or  $10^{27}$ ) years for one of human enzymes to evolve the other's function: “... for one of our enzymes to evolve the other's function, it would take at least seven and probably many more mutations. The waiting time for seven coordinated neutral mutations to arise in a bacterial population is on the order of  $10^{27}$  years. To put that in some sort of perspective, remember that the universe is only about  $10^{10}$  years old. It can't have happened”

(Gauger & Axe, 21, 34).” Reference: Gauger, Ann, and Douglas Axe, and Casey Luskin. Science & Human Origins. Seattle, WA: Discovery Institute Press, 2012.-<https://www.discovery.org/m/2019/01/Science-and-Human-Origins.pdf>



“When evolutionary biologist say “random” they mean irrespective of their usefulness to the host organism. They are not making the philosophical claim the mutations are by chance and hence the evolutionary process is undirected or purposeless. It means it doesn’t occur for the benefit of the host organism. Random is not incompatible with purpose and direction. Mutation means no correlation between new genotypes and adaptational needs of an organism in a given environment”

Why would we be special if we are just products of evolution? Evolution doesn't see the end. We can "rewind" the tape and get different outcome. Theism sees end of the line (i.e. humans) so we can conclude the process is guided.





Ford F-150's change slightly each year to get to a modern F-150. Is it decent with modification or design? In this very example the reason is common design by the engineers (intelligence). Designers are free to re-use things as they want.



Evolutionists remove the question by “baking” their theory into the definition instead of saying similarity they define homology as “similarity due to similar ancestor.” Its circular reasoning. The more similar dna, the more related usually and for common ancestors you need gradual branching path from species to species to show ancestors.

**Discovery Science: Is Homology Evidence for Evolution? (Long Story Short, Ep. 1)**

[https://www.youtube.com/watch?v=lk1gDk1wGhQ&feature=youtu.be&fbclid=IwAR04nPnODGPtWGfmzsbAPeqvD82rVcDp0em7ns87Z5EA9q2tL\\_FwzOIB-FE](https://www.youtube.com/watch?v=lk1gDk1wGhQ&feature=youtu.be&fbclid=IwAR04nPnODGPtWGfmzsbAPeqvD82rVcDp0em7ns87Z5EA9q2tL_FwzOIB-FE)



However, some DNA (e.g cytochrome “C”) can be found in humans, chimps, dogs, moths etc. Very common test case and used for common ancestors but many are not related. For evolution to be true, more gene similarities should be similar, but they are not.

**Discovery Science: Is Homology Evidence for Evolution? (Long Story Short, Ep. 1)**

[https://www.youtube.com/watch?v=lk1gDk1wGhQ&feature=youtu.be&fbclid=IwAR04nPnODGPtWGfmzsbAPeqvD82rVcDp0em7ns87Z5EA9q2tL\\_FwzOIB-FE](https://www.youtube.com/watch?v=lk1gDk1wGhQ&feature=youtu.be&fbclid=IwAR04nPnODGPtWGfmzsbAPeqvD82rVcDp0em7ns87Z5EA9q2tL_FwzOIB-FE)

Evolutionist cherry pick and, depending on which genes they use, end up with wildly different trees and ancestry. Conclusion, homology is circular.

Are humans really 98% similar to apes. True in sub-units of DNA. DNA only has 4 sub units then everything is at least 25% similar (i.e. daffodils are similar). Doesn't get us anything

**Discovery Science: Is Homology Evidence for Evolution? (Long Story Short, Ep. 1)**

[https://www.youtube.com/watch?v=lk1gDk1wGhQ&feature=youtu.be&fbclid=IwAR04nPnODGPtWGfmzsbAPeqvD82rVcDp0em7ns87Z5EA9q2tL\\_FwzOIB-FE](https://www.youtube.com/watch?v=lk1gDk1wGhQ&feature=youtu.be&fbclid=IwAR04nPnODGPtWGfmzsbAPeqvD82rVcDp0em7ns87Z5EA9q2tL_FwzOIB-FE)



I think I achieved  
95% resemblance  
of you

How does  
my portrait look?



Are chimps 95% similar to humans?



Both have:  
Rubber tires  
Metal  
Plastic  
electronics  
glass  
engine  
gas and oil  
etc

If we melt them down, the chemicals look the same.  
Can we conclude therefore they are the same?





In one sense they are the same (chemically). But their function and operation is different so we cannot say they are the same in other senses. They are both created by the same designer (i.e. Honda), using similar design features but they are two different vehicles. The motorcycle did not evolve into the car.

Humans and ape may have some of the same chemistry and features but they are obviously more than 5% different. We cannot mix one type of similarity and make applications to another category. Similar designer can also explain similarities.



Design vs descent – to look at similarities we can use math. Sophisticated models and plug in various parameters to show evolution doesn't work.

35million single letter differences in genome between humans and chimps but they only have 6million years. Evolution is measured in generations. Humans and chimps have a 27-30year generation.  $6\text{million}/30 = 200\text{k}$  generations to produce the 35mill letter differences. The amount per generation is so large, and it takes time to spread the mutations out to a population. Math doesn't work.





“98% similarity with chimps is for the protein coding part, When you look at the regulatory part we're very different, so science is always changing...”

James tour, Origin of Life Crisis: Rice's Dr. James Tour Calls Out Bad Science at Harvard, ]  
<https://www.youtube.com/watch?v=JljpWgEDH8>, minute 1:18:44 to 1:18:51

Now 12% difference claim!

## Urey Miller 1950's

A bunch of Phd scientists carefully setup the experiments, carefully add the materials in specific quantities and the right time under controlled lab conditions and stop the reactions at just the right time and got some basic building blocks.

Problem 1- the chemicals may not have existed on earth at that time

Problem 2- That just proved intelligence is required





DNA is transcribed to RNA,  
The RNA translated into protein.  
RNA in proteins that originate in nucleus have to go somewhere in the cell to do their job.

Where they go isn't haphazard. They go to very specific places. Like a postal system with zip codes. RNA has zip code attached. It has to have its zip code in advance to know where to go.

The special coordinates in the cell has been specified before the DNA starts do its work

Junk DNA – Watson/Crick discovered structure of DNA in 1953 – central idea is that DNA makes RNA which makes protein which makes us.

“...this claim is false...most drastically.”\*

\* Jonathan Well, *Zombie Science* . 91.



1970's -1990 we found function in that DNA so much of the 98% now isn't junk. If you were convinced its junk, then you stopped doing research for awhile.

Benefit of an intelligent design worldview-Some ignored the junk theory and continued to study junk DNA and found function.

Non-coding regions of DNA may turn on/off functions in DNA may help with cancer.

Intelligent design is not a science stopper. It can help advance science.

“In September, 2012, the journal Nature reported the results of a years-long research project, involving over 400 international scientists studying the functions of non-coding DNA in humans. Called the ENCODE Project, its set of 30 groundbreaking papers reported that the “vast majority” of the genome has function”

Ewan Birney, ENCODE’s lead analysis coordinator commented in Discover Magazine that since ENCODE looked at only 147 types of cells, and the human body has a few thousand, “It’s likely that 80 percent will go to 100 percent.”



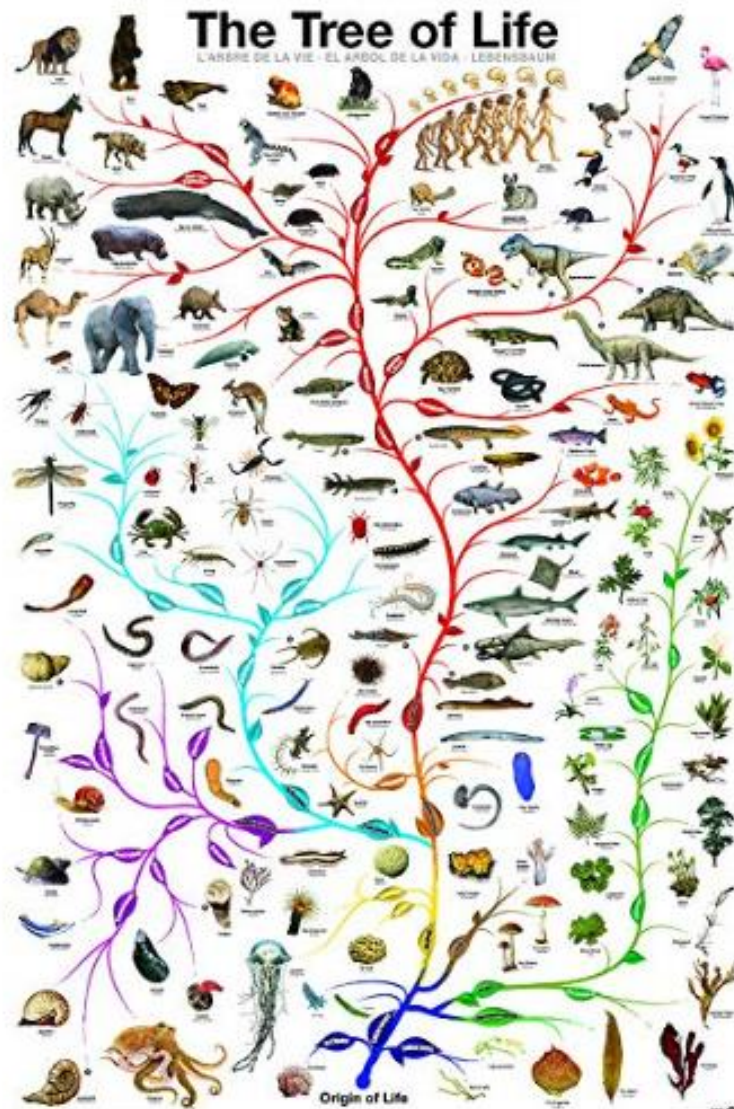
Some evolutionist said the human eye was a bad design.

They didn't look at evidence. Light sensors in eye need nourishment which is in the back so that's why has to be oriented the way it is.

Conclusion: If its not designed according to their standards that does not mean its not designed according to God.

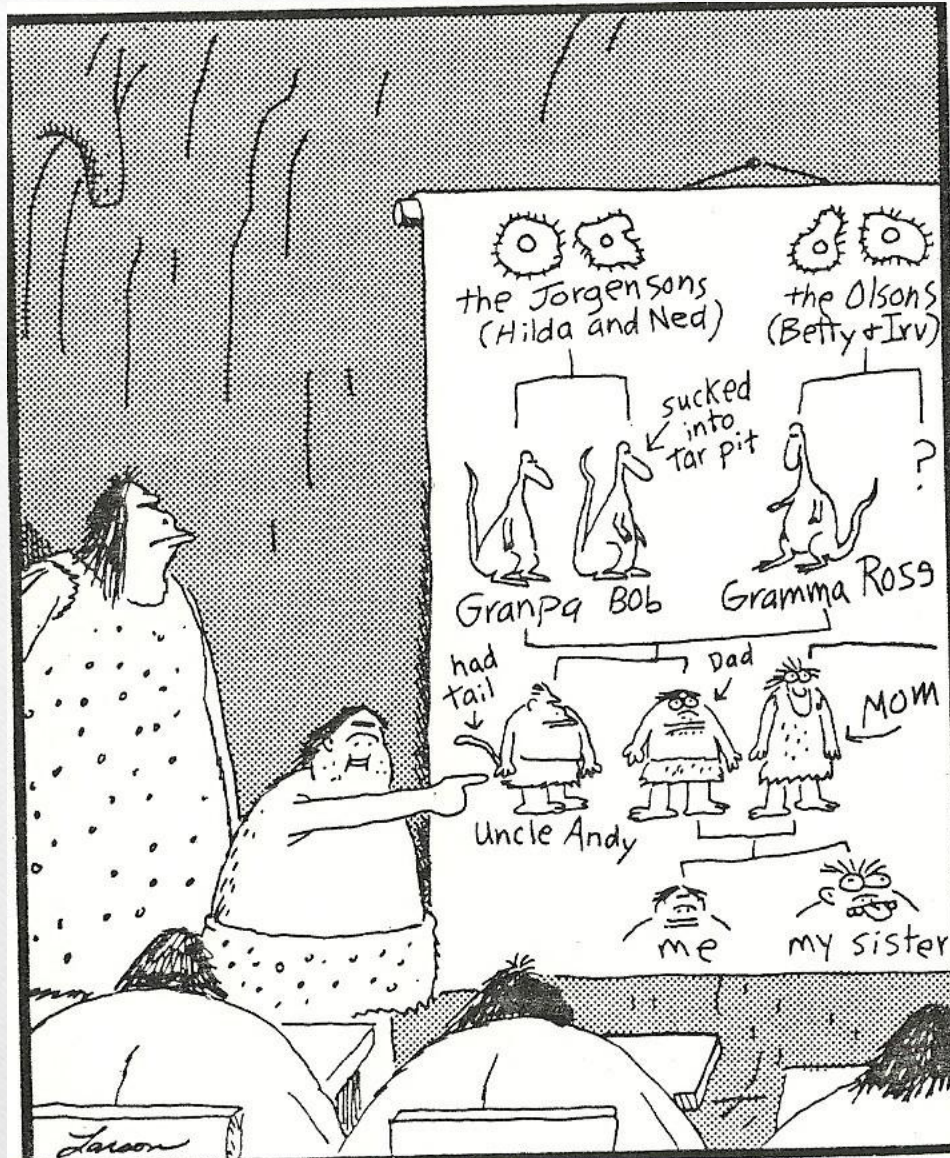
# The Tree of Life

L'ARBRE DE LA VIE - EL ARBOL DE LA VIDA - LEBENSBAUM





# Tree of Life





Tree of life – There is no tree of life.

Darwin said everything came from 1 or 2 ancestors and all branched from it. Fossil record is a problem for the tree theory.

Cambrian explosion contradicts tree. Species appears suddenly. The tree theory still presented to public.\*

A better illustration is to use a forest, not a tree. Not from a single trunk.\*\*

\*Jonathan Well, Zombie Science

\*\*Dr. Robert Carter , Genetics part 2 minute 27:40 -27:55

<https://vimeo.com/showcase/7236228?page=2&page=2&page=1&page=2>



The claim that evolution did invent proteins, cell types, organs, and life forms is scientifically legitimate only if we know evolution can invent these things.

If nothing can evolve its way into existence, then nothing did.

Doug points out that the current stance is that evolution was so successful that it perfected life to the point where modern forms no longer evolve, making the whole process even further removed from the category of observable phenomena.



Do electronic parts start thinking on their own? No. An intelligent agent designs them, programs the code, then they follow the code. They are not conscious. They are fancy robots. You need intelligence to provide the code for the thing to do what the code says.



Mutations in the code damage it. That's why computer viruses destroy the code. In cells, mutations damage it, so the code protects it and try to preserve it. It doesn't know to become a different type of being.

Some alleged mutations would make a thing breath water and then air. That's a different kind of system. Halfway between the thing couldn't breathe.

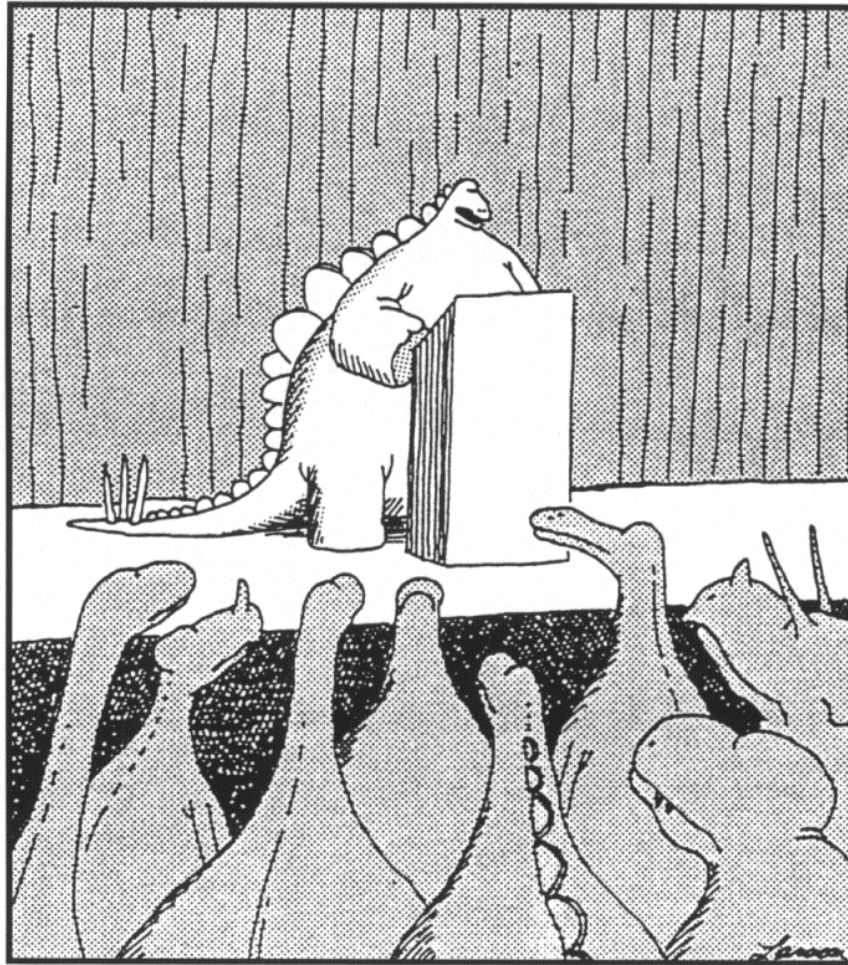
# Transitional species?

Reptile have sac lungs.

Birds have tubes.

A transitional species wouldn't breath  
Mutations don't add genetic code they  
garble what's there. How did first cell  
get teeth or backbone?





"The picture's pretty bleak, gentlemen. ...  
The world's climates are changing, the mammals  
are taking over, and we all have a brain  
about the size of a walnut."

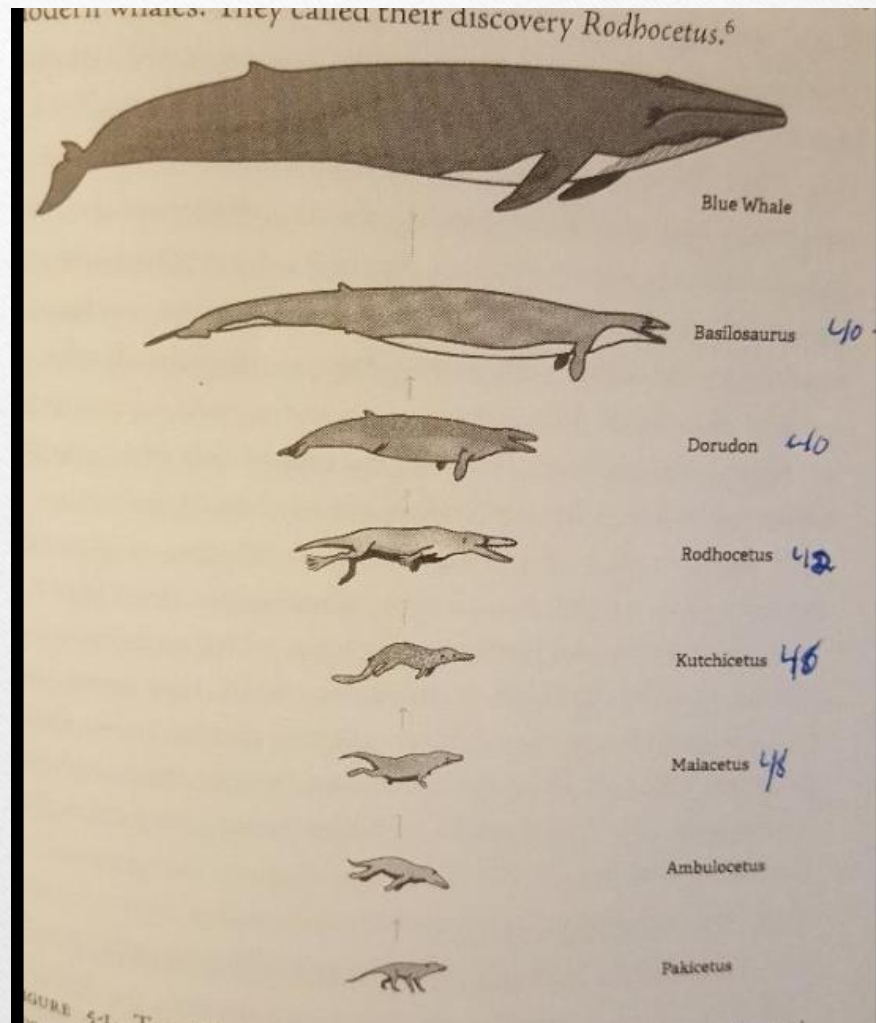
Which came first, the chicken or the egg?



Chicken or egg dilemma solved (Genesis 1:20-22). Which came first, the chicken or the egg? This question has plagued philosophers for centuries. The Bible states that God created birds with the ability to reproduce after their kind. Therefore, the chicken was created first with the ability to make eggs.

Yet, evolution has no solution for this dilemma.

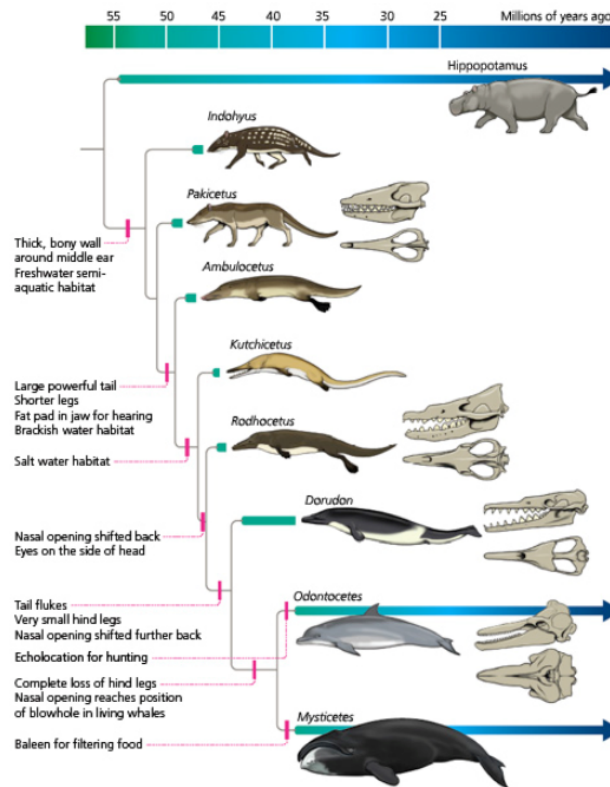
# Old Evolution of whales tree



READ

## The evolution of whales

The first thing to notice on this evogram is that hippos are the closest living relatives of whales, but they are not the ancestors of whales. In fact, none of the individual animals on the evogram is the direct ancestor of any other, as far as we know. That's why each of them gets its own branch on the family tree.



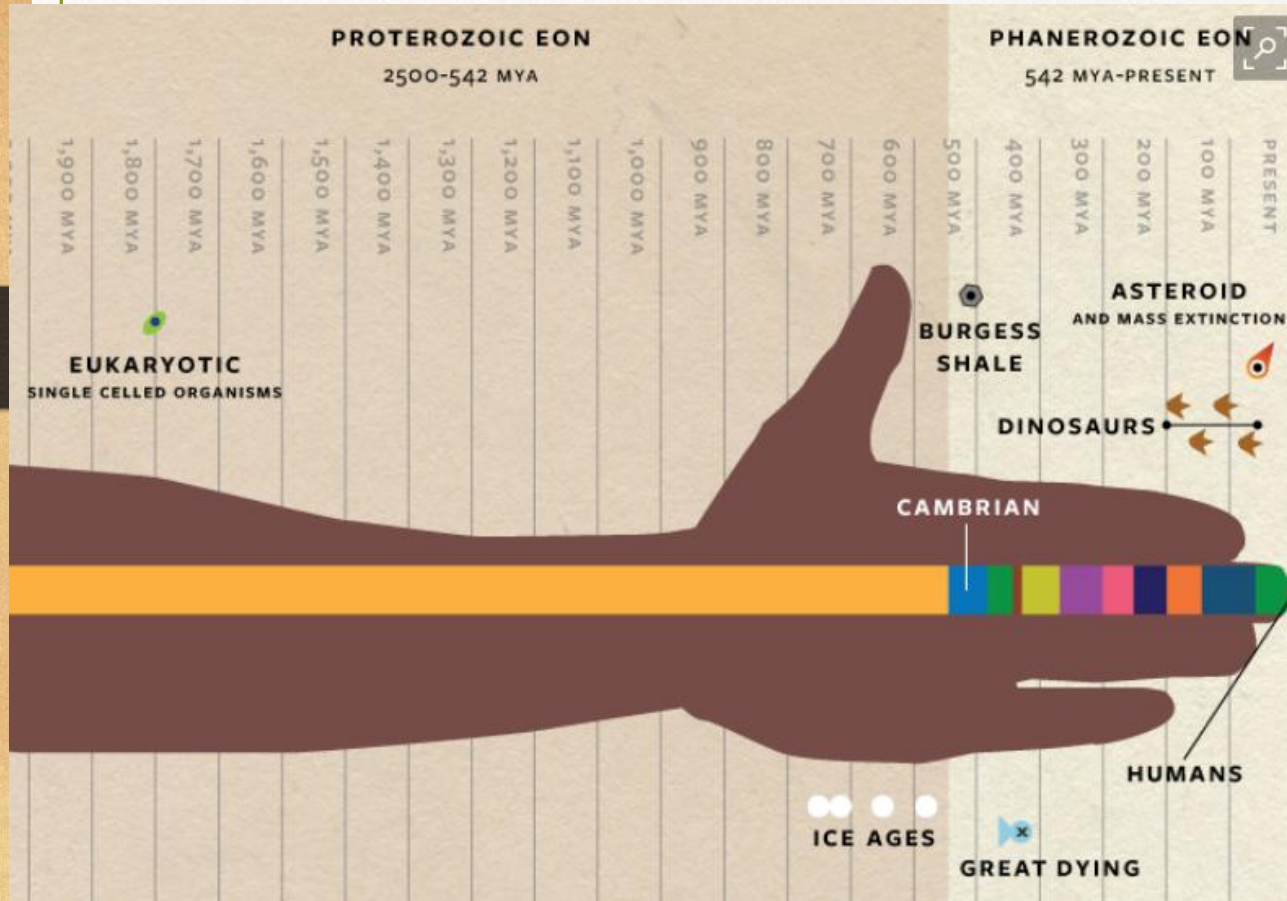
New “evolution of whales tree

How many things seem odd with the sentence above?



**Cambrian explosion – nearly all major groups of animals known to exist appear in fossil record abruptly and fully formed in strata from the Cambrian period(500 to 600mya) in a geologic instant. Evidence for a designer introducing new animals. -way to fast for mutations**

**Record shows sudden disappearance and appearance of animals with no transitions**



# Sea Horse males carry the pregnancy



From an evolutionary angle, both male and female sea horses have to undergo unique physical, anatomical, physiological and hormonal changes different than millions of other fish.

“From an anatomical basis, for males to embrace this change, they needed an elongated body which molds into a unique shape a tail to grasp onto things, a new muscle structure to enable to release the babies with contractions and a novel blood supply to the pouch to support developing embryos.”



“At the same time, females who are generally “hard wired” to give birth will have to have reversal of anatomical and physiological characteristics... there are 3000 genes involved this change to prepare the father for the pregnancy as well for the labor, which is simply beyond random mutation evolution capabilities.”



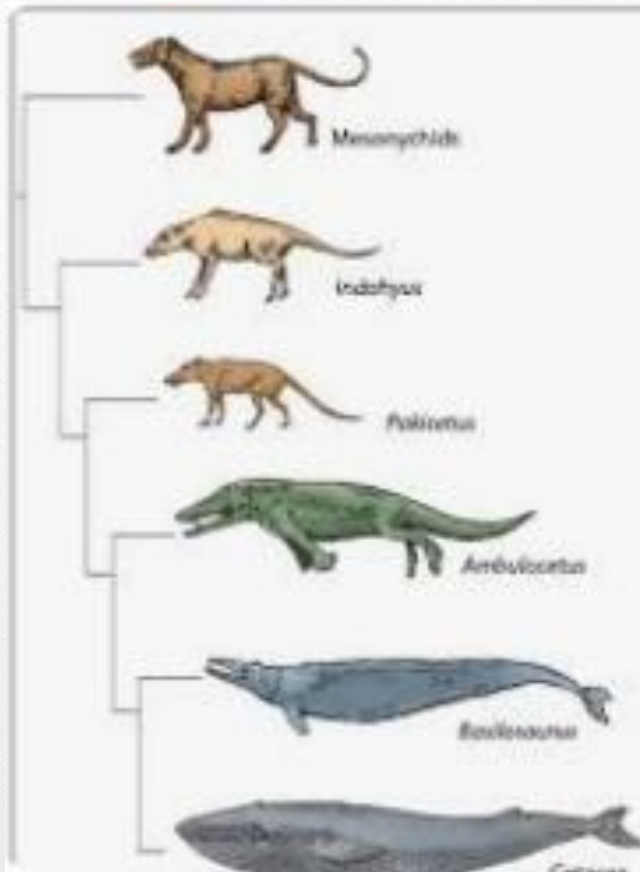


Despite having multibillions of fossils, so far there has not been any evidence of complete sequence of intermediary fossils to support the emergence of a new species from a preexisting one...only 5% of intermediary fossils have been found and all other are computer models.

Evolved?



Similar DNA: rubber tires, metal, wheels, glass, engine, seat, lights, etc.



Where are the ones in-between?

Different lungs. Intermediate  
couldn't breath

Similar DNA could mean common designer



## Half-dinosaur/half-bird?

One issue is they found bird-like dinosaurs AFTER fully developed bird fossils were found so they cannot be intermediate transitional fossils. These types of inferences have assumptions built in and in some cases the "feathers" are frayed skin due to fossilization. There is also theories that they were just flightless birds.

<https://reasons.org/explore/blogs/the-cells-design/science-news-flash-an-old-earth-perspective-on-dinosaur-feathers-preserved-in-amber>



If there are transitional species that went from a runner to a flyer, evolution says that it must be gradual so at some point you would have some creature that probably could do neither. Their legs keep shrinking until they go away and the wings keep getting bigger until they could fly. In between they would be eaten by predators.

What is telling them to change?



The new dinosaur species *Serikornis sungei* looks for its next meal in an artist's re-creation.  
ILLUSTRATION BY EMILY WILLOUGHBY

**New Feathered Dinosaur Had Four Wings  
but Couldn't Fly**

## Darwin is broken = Joe Rogan podcast

*[In my opinion,] the mainstream Darwinists are telling a kind of lie about how much we know and what remains to be understood. So by reporting that yes, Darwinism is true, and we know how it works, and people who aren't compelled by the story are illiterate or ignorant or whatever, they are pretending to know more than they do. So all that being said, let me say, I think modern Darwinism is broken. Yes, I do think I know more or less how to fix it.*

*There are several different things that are wrong with [Darwinism]. The key one that I think is causing folks in intelligent design circles to begin to catch up is that the story we tell, about how it is that mutation results in morphological change, is incorrect.*

[https://evolutionnews.org/2025/02/bret-weinstein-on-the-joe-rogan-podcast-darwinism-is-broken-intelligent-design-is-catching-up/?fbclid=IwY2xjawIY1ktleHRuA2FlbQIxMQABHQj6\\_OyMzFlZXcfNL98uNzgNRr4YcPhGWJxb-Rafk3jEydnRzOHfTPy7yg\\_aem\\_Gu7dBmek5FnRZG\\_tRTd2SA](https://evolutionnews.org/2025/02/bret-weinstein-on-the-joe-rogan-podcast-darwinism-is-broken-intelligent-design-is-catching-up/?fbclid=IwY2xjawIY1ktleHRuA2FlbQIxMQABHQj6_OyMzFlZXcfNL98uNzgNRr4YcPhGWJxb-Rafk3jEydnRzOHfTPy7yg_aem_Gu7dBmek5FnRZG_tRTd2SA)



“

*You've had Stephen Meyer on. **He's a scientist who's quite good, and he's spotted that the mechanism in question [the standard Darwinian one] isn't powerful enough to explain the phenomena that we swear it explains.** And so he's catching up, but that's really on the Darwinists for not admitting what they can't yet explain and pursuing it, which is what they should be doing.*

[https://evolutionnews.org/2025/02/bret-weinstein-on-the-joe-rogan-podcast-darwinism-is-broken-intelligent-design-is-catching-up/?fbclid=IwY2xjawIY1ktleHRuA2FlbQIxMQABHQj6\\_OyMzFlZXcfNL98uNzgNRr4YcPhGWJxb-Rafk3jEydnRzOHfTPy7yg\\_aem\\_Gu7dBmek5FnRZG\\_tRTd2SA](https://evolutionnews.org/2025/02/bret-weinstein-on-the-joe-rogan-podcast-darwinism-is-broken-intelligent-design-is-catching-up/?fbclid=IwY2xjawIY1ktleHRuA2FlbQIxMQABHQj6_OyMzFlZXcfNL98uNzgNRr4YcPhGWJxb-Rafk3jEydnRzOHfTPy7yg_aem_Gu7dBmek5FnRZG_tRTd2SA)



Also, you don't have billions of years for billions of chances. We have fossil evidence 3.8 billions ago so you only have a billion or so years and much of that was cooling down so we have a narrow time frame. Some estimate 25 million years only. Far to short by chance.

Chance you can get a functional protein are astronomically low. Some seculars feel they will never figure it out

## Summary

Common design not common decent by natural selection explains how we have different types of creatures with similarities all coming from a common designer that is intervening and renewing life throughout earths history

(Psalm 104:29-30) “When you hide your face, they are terrified; when you take away their breath, they die and return to the dust. <sup>30</sup>When you send your Spirit, they are created, and you renew the face of the ground”



# Sample Conversation

Christian: What is your definition of evolution

Non-Believer: Over billions of years life evolved from simple life to all the variety we see today.

Christian: Have you ever wondered if there was another way life could have come about and some of the things that had to happen for this theory to work?

Non-Believer: Like what?



# Sample Conversation

Christian: Like a fish who has gills had to evolve into a creature with lungs. What kind of creature is in-between? How did it breath?

Non-Believer: I don't know but I am sure scientists have figured it out. Evolution is an accepted fact.

Christian: Its example like that or the fact that to change into something else requires specific changes in the DNA that have to guide it to become something that is different or even better.

# Sample Conversation

Non-Believer: So?

Christian: Well many biologists have noted changes in DNA kill or harm a creature. Sort of like cancer. How can a chemical process guide anything? How does it know to make the change?

Non-Believer: What is the alternative? Just because we haven't figured it out we do not have to fill the gap in our knowledge with a god.



# Sample Conversation

Christian: Well I do want to propose God to fill a gap, but I am wondering, based on the issues that the theory is running up against, some kind of intelligent designer who is guiding it is a better conclusion based on what we know.

Non-Believer: What other kinds of issues?

Christian: Life had to originate from non-life which they have not had success in a lab plus the first simple life already had to have DNA which is information equivalent to thousands...



# Sample Conversation

Christian: ...of volumes of encyclopedias, then the organism has to mutate in a way that does not harm it and create entirely different body plans

which requires complete overhaul of organs like the brain, breathing system, digestive systems etc. all simultaneously and in between not get eaten by preitors. If this is even possible, they calculate this would need far more time than the planet has existed. plus the Cambrian explosion shows most of the plans happened very quickly. They have also never found much...

# Sample Conversation

Christian: ...fossils of transitional species. At best what we see is changes within a species like wolves to dogs. But they are still canine. Also we can breed different dogs but they remain dogs.

Non Christian: well I would have to look into this more but I am sure someone has figured it out.

Christian: Sounds great. I can give you some resources to point out some problems then you can check if someone has figured it out and provided detailed evidence. I look forward to discussing this more to help me understand it.



## Group Activity

**Discuss the following in your group:**

- 1. Was this conversation realistic?**
- 2. Do you have a non-believer you feel you could share this with?**
- 3. What questions or fears do you have with this topic?**
- 4. Do you think this is a good discussion for theism?**