Books of Moses
Fact or Fiction?

Session 2

Origin of Life

Origin of Life

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Introduction

In our last session, we looked at the two competing theories claiming to explain where the physical matter of Earth and our universe came from: Special Creation and the Big Bang. Today we will be examining the Origin of Life. In the Biblical Special Creation model, we will look at the origin of plants, aquatic animals and flying creatures. In the Atheistic/Natural Evolution model we will restrict our examination to their next huge hurdle: the origin of the first living cell.

Special Creation

The Bible teaches that physical life began with the direct creation of the basic kinds of plants.

Creation of Plants

> **Gen 1:11 And God said, "Let there spring forth *on* the earth grass, the plant yielding seed after its kind, and the fruit tree making fruit after its kind, in which is its seed, upon the earth." And it was so.**
> **Gen 1:12 And the earth brought forth grass, the plant yielding seed after its kind, and the tree yielding fruit in which is its seed after its kind, and God saw that *it was* good.**
> **Gen 1:13 And there was evening and there was morning: Third day.**

The creation of all the kinds of plants occurred on the Third Day. Kinds in the Biblical account needs to be made clear: A kind is a type of plant or animal which is distinct from other kinds, and the original created creatures contained complex genetics which would allow the kind to diversify into various families and species which can adapt to local conditions and environments. An example of a kind from the plant kingdom is the pea kind, which was able to diversify into field peas, garden peas, telegraph peas, snow peas and sugar snap peas. Evidence that these are derived from the same kind is the fact that they can interbreed and produce offspring which are usually fertile.

As the Bible claims that these original plants were created directly by God, we would also expect them to immediately have perfect genetics and be perfectly designed for their role in the completed biosphere. This is the opposite to the evolutionary model, in which the organisms are slowly shaped by mutations and natural selection until they become well enough adapted to survive in their niche.

As each kind is separately created, we would expect that there will usually be distinct differences, or gaps, between kinds. But as they are all made by the same Creator, we would also often expect that similar DNA, mechanisms and structures are used in the different kinds to perform similar functions. Often, very different organisms will exhibit some of these almost identical structures. These gaps and similarities indicate a common designer. In contrast, common descent, as taught in evolution, should only show smooth transitions, not the distinct gaps and unexpected similarities that are observed between kinds.

Note that these plants must have grown and matured rapidly and in significant numbers throughout the world as part of the preparation for the creation of animals, which was to happen only one day later. Some of these kinds are also created as complex vascular plants complete with the ability to flower and yield fruit and seeds.

Though not mentioned, it is reasonable to assume that at this time all photosynthesizers are meant, including cyanobacteria, algae and the aquatic plants that were also created as the food source for the aquatic animals which were soon to be created. Likewise for the microbes and fungus that both live symbiotically with the plants and also break down dead plant material so it can be recycled.

Figures 1 to 5 show us some of these plants, essentially in order of increasing complexity. The basis for this increasing complexity will be looked at in more detail in Session 3, where it is revealed as another major problem for evolution.

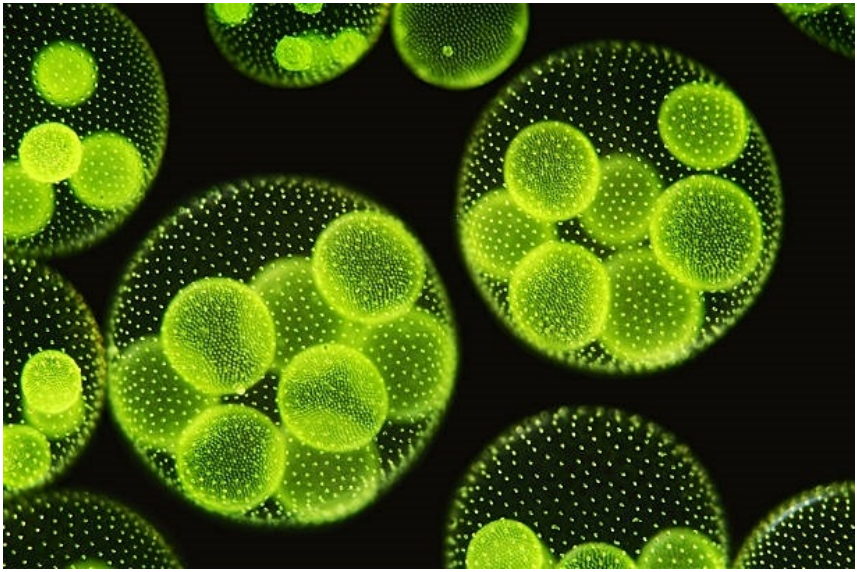

Figure 1: Algae, magnified view of a ‘simple’ unicellular plant.

Figure 2: Red, Brown and Green Multicellular Seaweeds

Figure 3: Wild Barley Grass (Israel)

Figure 4: Flowering Plants, Christchurch NZ

Figure 5: Tall Vascular Plants (Apple Trees, Mornington Peninsula)

Finally, note that the Bible does not describe plants as breathing organisms having souls and spirits. They are extremely complex self-reproducing machines designed to provide oxygen, food and shelter for the animals and humans. As they do not have souls, they cannot die in a Biblical sense.

The Bible shows that there is then a day's delay from new creation on the Earth while the Sun, Moon and stars are being created, which we looked at in our last session. I believe that the plants were also growing very rapidly during that day, so there would be food available when the animals were created.

Creation of Aquatic Animals and Flying Creatures
Gen 1:20 Then God said, "Let the waters swarm with swarms of live souls, and let flying creatures fly above the earth across the face of the expanse of the heavens."
Gen 1:21 God created great sea dragons and every living

soul that moves,[1] which the waters swarmed with, according to their kind, and every winged flying creature according to its kind. And God saw that *it was* good.
Gen 1:22 And God blessed them, saying, "Be fruitful and become many, and fill the waters in the seas, and let the flying creatures multiply on the earth."
Gen 1:23 And there was evening and there was morning: Fifth day.

Now God moves into filling the earth with living souls. Note carefully that the Hebrew word for soul in vs 20 and 21 is *nephesh*. Most translations incorrectly substitute creature for soul. Nephesh is soul and it is precisely the same word the Bible uses to describe human souls.

Also, pause and think carefully about vs 22: God blesses and speaks directly to these animals, telling them to fill the earth. God did not bless the plants, nor speak to them. There can be no doubt that God has a relationship with these animals and communicates with them.

Aquatic Animals Created

God tells us that He created all the many kinds of aquatic animals during this single day, and though not enough to completely fill the rivers, lakes and oceans, there was enough for them to make the waters swarm. The aquatic creatures included water bugs, corals, shellfish, trilobites, fish, dolphins, whales and even sea dragons, as a brief

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[1] This is an accurate translation of soul from the Hebrew "nephesh". God tells us that all creatures capable of moving have souls. Ecclesiastes 3:21 also tells us that all animals have spirits. But it also confirms that mankind's spirit is different to that of the animals, as our spirits go to God when we die, but the animals' spirits go into the earth.

sampling. In this context, it is worth remembering that there were many kinds created at this time that no longer live today. We live in a world of extinctions, where not only species but entire kinds of creatures have died out and are still dying out. This is not a world where new kinds are appearing, only minor variations of existing kinds. We will see why this is so in later sessions. Figures 6 to 12 illustrate a few of these creatures.

Figure 6: Coral and Fish (Great Barrier Reef, off Mackay)

Figure 7: Humpback Whales, mother and calf

Figure 8: Green Sea Turtles (Shutterstock)

Figure 9: Leafy Sea Dragon (Victorian Coast, Aus)

Figure 10: A Better Candidate for Sea Dragon?

Figure 11: Some Extinct “Devonian” Sea Creatures

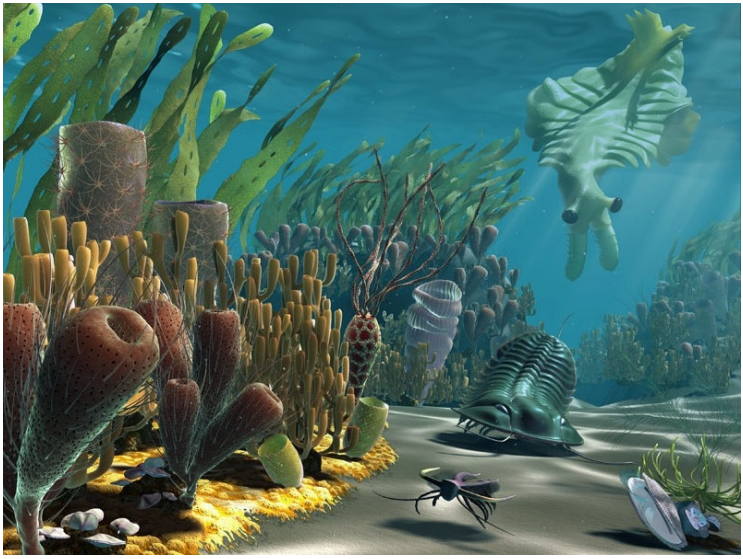


Figure 12: And More Extinct "Devonian" Sea Creatures

Flying Creatures Created

But God was not done yet. On this day he also created all of the flying creatures, including flying insects, butterflies, birds, bats, flying foxes and pterosaurs. Most of these flying creatures have very active metabolisms, such as hummingbirds, which can die after only four hours without food. This is why I believe that many plants were already flowering and some were producing fruit and seeds by Day Five of Creation Week. Figures 13 to 19 illustrate a few of these magnificent flying creatures.

Figure 13: A Dragonfly, though much smaller than some of its ancestors. (Pexels)

Figure 14: A Butterfly, in the last stage of its life. (Pexels)

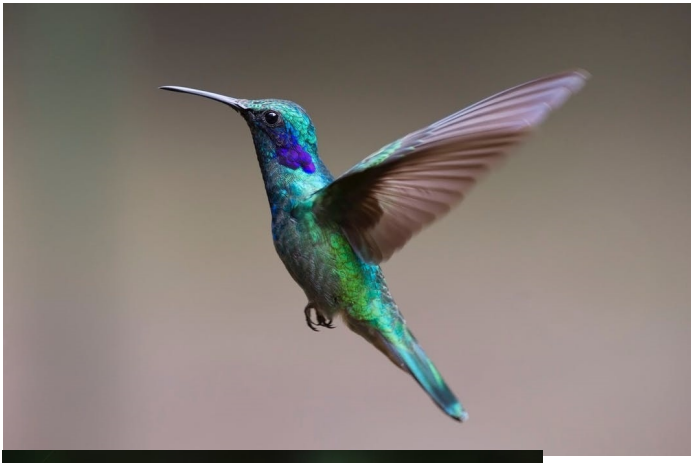


Figure 15: A Hummingbird hovering. (USA, Pexel)

Figure 16: Australian Parrots

Figure 17: An Owl in Silent Flight (Pexel)

Figure 18: Echo-locating Bat with Membrane Wings

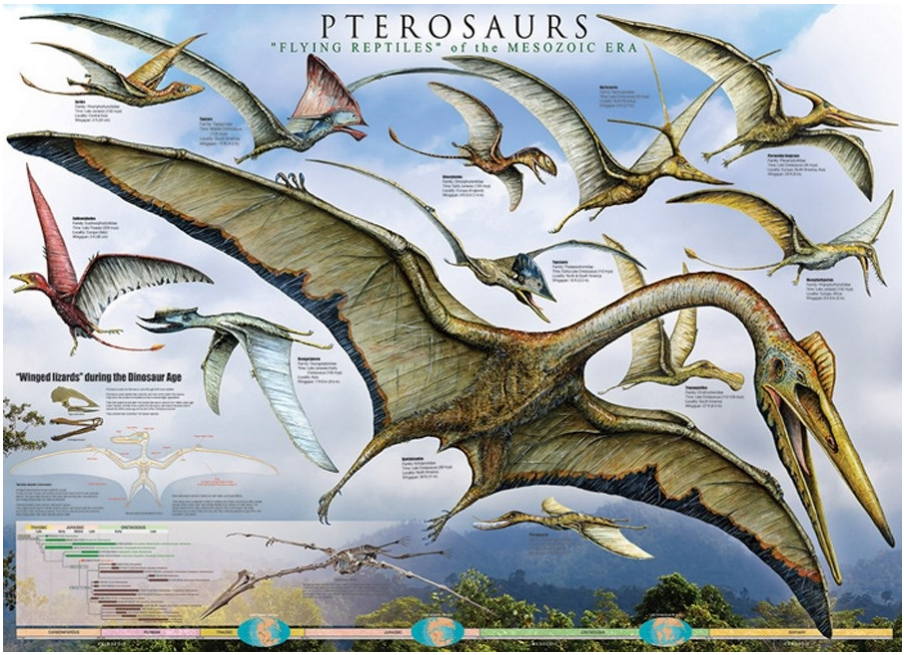


Figure 19: Some of the many Pterosaurs, now Extinct

The main criticisms of the Biblical Creation Account are the clearly miraculous nature of the entire account and its short time line. However, the miraculous nature of the account is constrained by the numerous details given in Genesis, which specify what the miracles are and the order they were performed in. And it is all underlain by the Bible's claim that Jehovah God is a self-existing being who is easily capable of doing such miracles. The only real issue here is acceptance that this God exists.

The short time line is really an aspect of the miraculous nature of God's Creation. If these creatures were formed miraculously, as the Bible claims, there is no reason why it had to take much time. The time problem is really an issue for evolution, where even their claimed billions of years is far, far too little time for any of their supposedly non-

miraculous and random transformations of nothing into complex life to have occurred.

But by now the Special Creation account is a long way ahead of Evolution's Origin of Life story. Let us look at how they get to a point where they have just one 'simple' living cell capable of reproducing itself.

Evolutionary Explanations and Issues

Origin of the First Cell

Evolutionist usually claim that all life on earth is descended from one cell. But how could a living cell arise from non-living chemicals?

This is a topic mostly avoided by evolutionists, including Darwin. But without their first cell, they can not evolve any other life. It is avoided because they cannot explain how a first cell could arise by random processes. And the more we learn about the complexity of even a 'simple' cell, the worse their situation becomes. And they are also under increasing time pressure, as they once thought they had one to two billion years to form the first cell. Now that supposed 'gap' is less than three hundred million years, and it keeps shrinking. So they need to have a far more complex first cell arise in much less time, making the process increasingly improbable.

Biogenesis

The evolutionists' problems intensified when Louis Pasteur, in 1864, demonstrated scientifically that spontaneous generation of life does not occur, which is what evolution is actually claiming. Pasteur's work led to effective sterilisation procedures and to the Law of Biogenesis, which states that **All life is from life**.

And why do they persist? This quote from Professor Richard Lewotin

explains it well:

> '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.
>
> It is not that the methods and institutions of science somehow compel us to accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by our *a priori* adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counter-intuitive, no matter how mystifying to the uninitiated. Moreover, that materialism is absolute, for we cannot allow a Divine Foot in the door.
> (Richard Lewontin, Billions and Billions of Demons, The New York Review, p. 31, 9 January 1997)

The struggle about the origin of life is really between rejecting or believing in Jehovah God, not science. Lewontin's quote makes this clear, for he openly admits that they believe in evolution even though science exposes it as absurd.

Chemical Evolution, Also Known As Abiogenesis

Evolution can't happen until we have a living cell capable of reproducing itself. So although some evolutionists call the origin of the first cell Chemical Evolution, it is more correctly called Abiogenesis: the origin of life from non-life. Until the first cell is able to self-replicate, there is nothing for natural selection to select between. So, how could that first cell arise by natural means?

This article from New Scientist, dated 14 October 2009 gives the current suggested route:

How Life Evolved: 10 Steps to the First Cells

By Nick Lane and Michael Le Page

We may never be able to prove beyond any doubt how life first evolved. But of the many explanations proposed, one stands out – the idea that life evolved in hydrothermal vents deep under the sea. Not in the superhot black smokers, but more placid affairs known as alkaline hydrothermal vents.

This theory can explain life's strangest feature, and there is growing evidence to support it.

Earlier this year, for instance, lab experiments confirmed that conditions in some of the numerous pores within the vents can lead to high concentrations of large molecules. This makes the vents an ideal setting for the "RNA world" widely thought to have preceded the first cells.

If life did evolve in alkaline hydrothermal vents, it might have happened something like this:

1. Water percolated down into newly formed rock under the seafloor, where it reacted with minerals such as olivine, producing a warm alkaline fluid rich in hydrogen, sulphides and other chemicals – a process called serpentinisation.

This hot fluid welled up at alkaline hydrothermal vents like those at the Lost City, a vent system discovered near the Mid-Atlantic Ridge in 2000.

2. Unlike today's seas, the early ocean was acidic and rich in dissolved iron. When upwelling hydrothermal fluids reacted

with this primordial seawater, they produced carbonate rocks riddled with tiny pores and a "foam" of iron-sulphur bubbles.

3. Inside the iron-sulphur bubbles, hydrogen reacted with carbon dioxide, forming simple organic molecules such as methane, formate and acetate. Some of these reactions were catalysed by the iron-sulphur minerals. Similar iron-sulphur catalysts are still found at the heart of many proteins today.

4. The electrochemical gradient between the alkaline vent fluid and the acidic seawater leads to the spontaneous formation of acetyl phosphate and pyrophospate, which act just like adenosine triphosphate or ATP, the chemical that powers living cells.

These molecules drove the formation of amino acids – the building blocks of proteins – and nucleotides, the building blocks for RNA and DNA.

5. Thermal currents and diffusion within the vent pores concentrated larger molecules like nucleotides, driving the formation of RNA and DNA – and providing an ideal setting for their evolution into the world of DNA and proteins. Evolution got under way, with sets of molecules capable of producing more of themselves starting to dominate.

6. Fatty molecules coated the iron-sulphur froth and spontaneously formed cell-like bubbles. Some of these bubbles would have enclosed self-replicating sets of molecules – the first organic cells. The earliest protocells may have been elusive entities, though, often dissolving and reforming as they circulated within the vents.

7. The evolution of an enzyme called pyrophosphatase, which

catalyses the production of pyrophosphate, allowed the protocells to extract more energy from the gradient between the alkaline vent fluid and the acidic ocean. This ancient enzyme is still found in many bacteria and archaea, the first two branches on the tree of life.

8. Some protocells started using ATP as well as acetyl phosphate and pyrophosphate. The production of ATP using energy from the electrochemical gradient is perfected with the evolution of the enzyme ATP synthase, found within all life today.

9. Protocells further from the main vent axis, where the natural electrochemical gradient is weaker, started to generate their own gradient by pumping protons across their membranes, using the energy released when carbon dioxide reacts with hydrogen.

This reaction yields only a small amount of energy, not enough to make ATP. By repeating the reaction and storing the energy in the form of an electrochemical gradient, however, protocells "saved up" enough energy for ATP production.

10. Once protocells could generate their own electrochemical gradient, they were no longer tied to the vents. Cells left the vents on two separate occasions, with one exodus giving rise to bacteria and the other to archaea.

This is a creative story, and more interesting than their earlier versions. But it is absurdly simplistic and contravenes almost every known law of biochemistry. Let us compare the above speculations with what is actually necessary to have even the simplest living cell:

The simplest natural organism may be *Mycoplasma pneumoniae*, a bacteria that can cause walking pneumonia in

people. It has just 525 genes. In comparison the bacterium *E. coli*, a widely studied organism, has 4,288 genes. Humans have roughly 20,000 genes.
(https://www.quora.com/What-is-the-simplest-life-form).
Figures 20 to 22 give us a glimpse into its complexity.

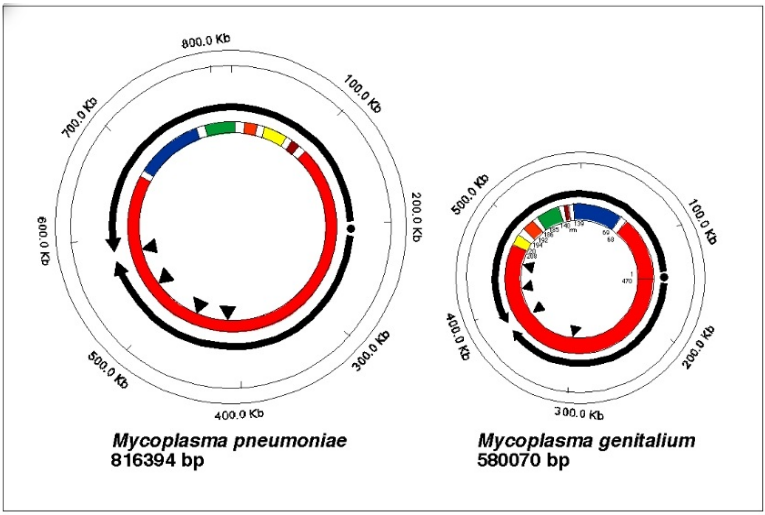


Figure 20: Summary of the Genomes of Two Mycoplasmas

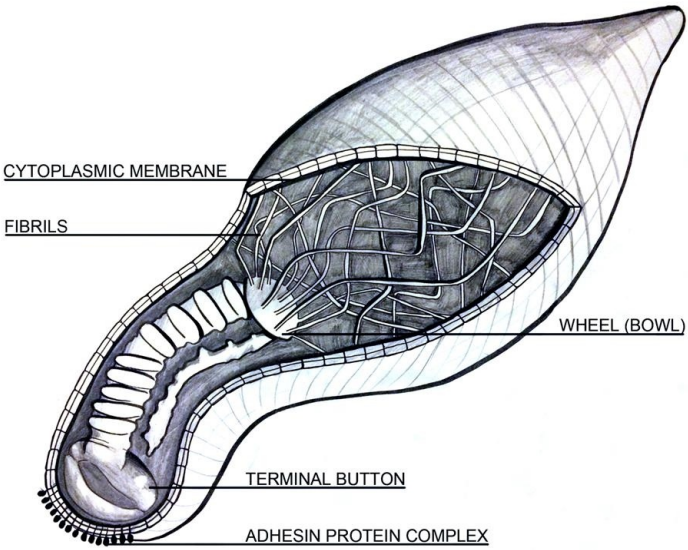


Figure 21: Structure of *Mycoplasma Pneumoniae*

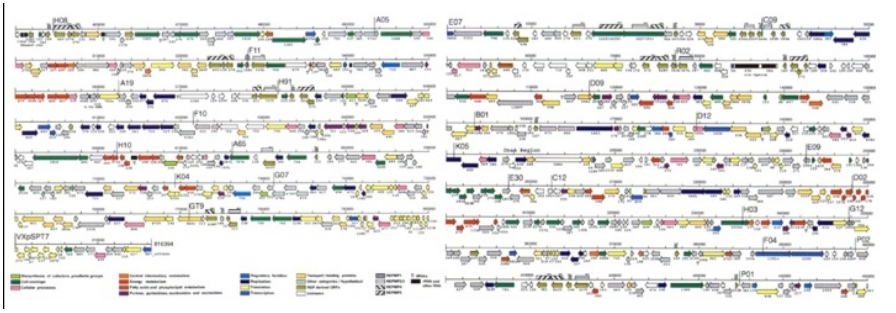


Figure 22: Complete Sequence Analysis of the Genome of the Bacterium *Mycoplasma Pneumoniae*

But that's not the simplest possible organism.

> In 2008, Craig Venter announced that a team of scientists had successfully constructed a synthetic DNA, based on the genome of *Mycoplasma genitalium*. They then used it to create a synthetic version of that organism. The DNA strand of this organism had 381 genes and 582,970 base pairs. They named this organism *Mycoplasma genitalium JCVI-1.0* (the name of the strain indicating J. Craig Venter Institute with its specimen number).
>
> This organism has interesting implications for any theory about the origin of life. The first living thing must have had hundreds of genes and a strand of DNA possibly having hundreds of thousands of base pairs. It's hard to imagine that natural, non-living, processes produced anything that complex but it must have happened.
>
> By Israel Ramirez, Nov 8, 2017

You get the "but it must have happened." conclusion a lot when you start lifting the lid on these topics. Many evolutionists are so anti-God that they can not accept any other explanation than their own speculations, even when they can clearly see that it is impossible. Let us explore how complex their first simple cell really must be.

Synthetic Life?

But first an interesting sidetrack. Is it perhaps actually simple to create a living cell? Have Venter and his scientists already created synthetic life as the above report and this US ABC video claim?

https://www.youtube.com/watch?v=aRzrYNVXF28 ABC news -3 min

Let's get some more detail on what they actually did:
https://www.youtube.com/watch?v=MlAlOZIkm2M Sci Show 5 min.

So, in summary, the US ABC report that they "created life" with "just four bottles of chemicals" is blatantly dishonest. Their 'synthetic life' was built by copying the DNA code from a 'simple' microbe and then reconstructing it, using extremely complex DNA splicing technology plus help from living bacteria and yeast. They then removed the DNA from a living microbe of the same type and inserted their reconstructed DNA into it. Their new copy of the organism's DNA was sufficiently accurate for the cell to survive and even replicate. Though it was an incredible achievement, this process does not even begin to address the question of how a first cell could arise. Nor is theirs a realistic simplest cell, as it can only survive in a protected and pampered lab environment.

Note that even the more complex *Mycoplasma pneumoniae* shown earlier cannot reproduce on its own. It is a parasite that needs to be embedded in a mammal, usually its lungs, before it can get enough nutrients to multiply. So even it is an inadequate first cell.

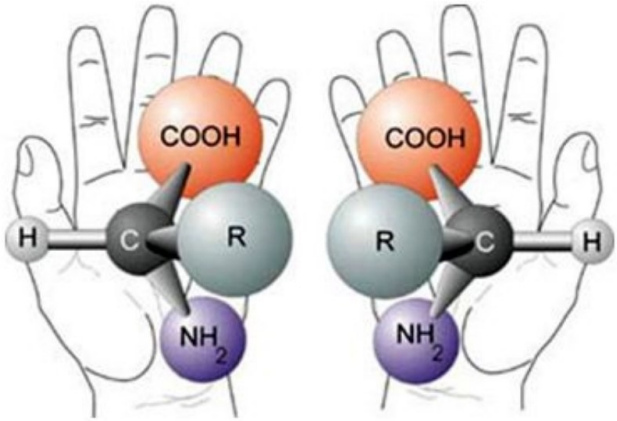
Basic Biochemicals

So, how could Abiogenesis really happen?

Stanley Miller and Harold Urey's 1953 experiment, in which they made 5 amino acids, was also once claimed as the beginning of creating life from non-living chemicals. But time has proven many of their experimental conditions were unrealistic and their amino acids were a racemic mix of left and right handed amino acids. But living organisms only function with purely left-handed amino acids. Right handed amino acids would corrupt any proteins they went into and would soon kill the organism (Figure 23). Miller's experiment also produced many other compounds, and most of them were highly toxic to life.

Though later experiments by Miller and others produced other amino acids, including some containing sulfur, they came to realise that a few amino acids are nowhere close to explaining the origin of life. It is like

making a simple iron ball that might fit into a bearing and then claiming you are now able to make an Airbus A380.



The chirality of typical amino acids. 'R' represents the carbon-hydrogen side-chain of the amino acid, which varies in length. R=CH_3 makes alanine, for example.

Figure 23: Left and Right Handed Amino Acids. A perfect mixture of the two, which always happens when they are made in a lab, is called a racemic mixture.

Just as living organisms require left-handed amino acids to make proteins, we also require exclusively right-handed sugars to fuel life and make the sugar backbones of DNA and RNA. Even a single left-handed sugar in a DNA molecule would put a kink in its precise double helix, stopping its nanomachines from reading and repairing the DNA. And again, disability would soon result and likely even death. Are you seeing a comparison here to the Big Bang's problems with matter and antimatter? They can not explain how either of these exclusive requirements for life arose.

Complex Biopolymers

Basic biomolecules do not spontaneously grow into more complex biopolymers like proteins, carbohydrates and DNA (Figure 24). Instead, biopolymers spontaneously decompose to simpler molecules and gases, as we know from observing any living organism that has died. And millions, even billions, of years would not alter or improve this situation. Contrary to evolutionists' claims, time is not the hero of the plot.

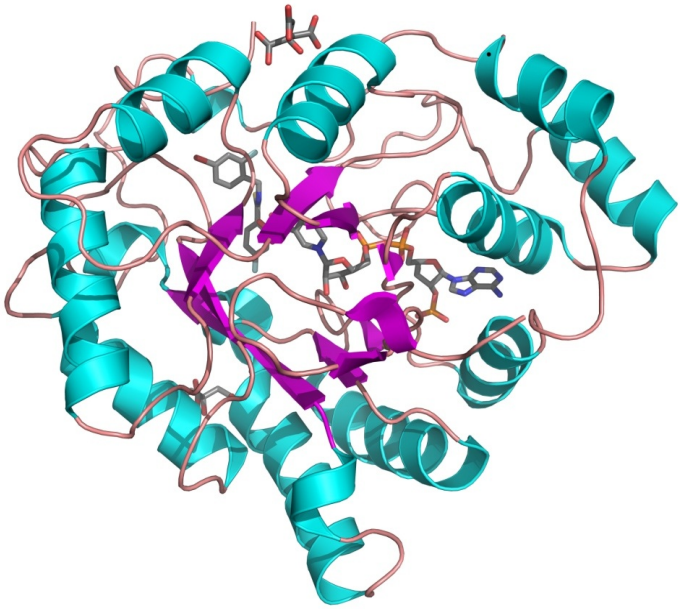


Figure 24: Aldo-keto Reductase Example of a complex biopolymer enzyme made from amino acids. Wikipedia

Even if you could discover some natural way to force amino acids to form a protein chain, how difficult is it for random events to create a functional protein enzyme? Doug Axe investigated this experimentally, and published his results in *Estimating the prevalence of protein sequences adopting functional enzyme folds,* J Mol Biol. 2004 Aug 27;341(5):1295-315.
(https://www.researchgate.net/publication/8389796_Estimating_the_

Prevalence_of_Protein_Sequences_Adopting_Functional_Enzyme_Folds) He found that only 1 in 10^{64} randomly made proteins would be potentially functional, and only 1 in 10^{77} would produce a protein useful for a needed function. This is what the ratio looks like:
1 chance out of 10000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000000 trys. Stated another way, even if every atom in the universe that could be involved in making that protein was involved, it would still be impossible to get even one useful average-sized enzyme produced by chance in billions of years.

Yet even the simplest living cell has over 380 genes making essential protein enzymes. How likely are we to get 380 impossible flukes all happening at the same time and place?

Complexity of Living Cells

So, how complex is the simplest living cell?

Incredibly complex.

Requires: Cell Membrane.

DNA, RNA and carbohydrates made exclusively from right-handed (chiral) sugars.

Proteins and enzymes made exclusively from left handed amino acids.

DNA programmed with at least 380 fully functional genes plus supporting DNA sequences which control and stabilise the cell's processes. This requires about 850,000 base pairs of genetic instructions saved in the organism's DNA. No natural process can generate the complex information encoded on DNA. To say it can is like claiming that merely stirring paper and ink together would create a prize-winning series of brilliantly composed novels.

Life requires nanomachines which are able to find the right position on the DNA, be able to separate the strands and produce RNA templates from it. Living cells require other

nanomachines to read the codes on the RNA and assemble an amino acid chain (protein) from it. Other nanomachines are required to fold the new protein into a functional form. Yet other nanomachines are used to transport the new protein to where it is needed. Portals and pumps in cell walls are needed to capture and transport food into the cell. Enzymes are needed to digest incoming food and others to capture and remove waste products through different specialised ports in cell walls. Factories are needed to break down excess and worn-out enzymes into amino acids ready for reuse.

DNA code, which was once called "Junk' by evolutionists before they learned what it did, is needed to produce other RNA molecules to fine tune production and silencing of various gene products. DNA even needs its own repair nanomachines. DNA contains the instructions to make all of these biomachines, but also requires them already made to be able to function. This is an extreme version of the chicken and egg problem, as both the chicken and the egg must arise simultaneously.

Let's look at some of these essential cell components:

Cell Walls and Membranes. As the video and Figure 25 below show, these items are far more complex and essential to life than many people think.
https://www.youtube.com/watch?v=GaIPFs52cUU (6 min)

Mitochondria and ATP Motor: This amazing high-speed ATP motor is required in every living cell to convert food into usable energy. Mitochondria enhance their effectiveness. See Figure 26 and this video: https://www.youtube.com/watch?v=b_cp8MsnZFA (4 min)

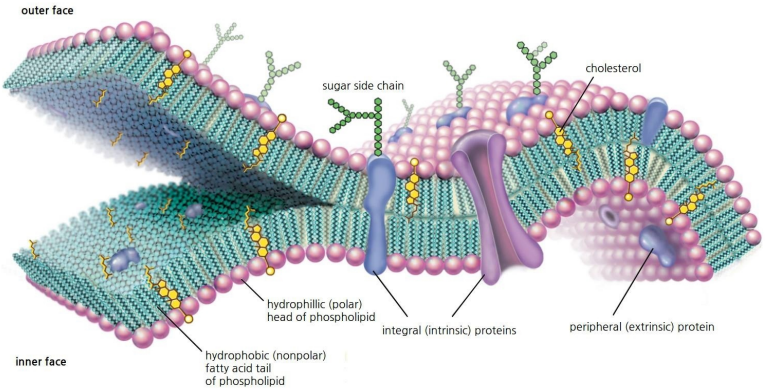


Figure 25: Cell Membrane, showing some of the common embedded functional structures necessary for life.

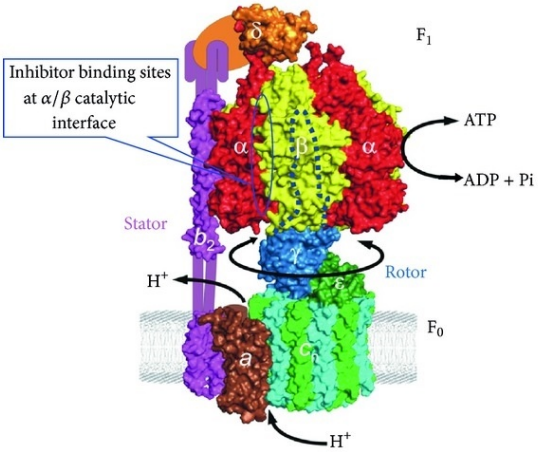


Figure 26: ATP Synthase is a rotary electric motor driven by hydrogen ions that converts ADP into ATP, the molecule that fuels virtually everything in the cells of all living things. It is a masterpiece of molecular nanotechnology design.

Video of prokaryote **DNA replication** and Figure 27:
https://www.youtube.com/watch?v=qdxVOQverE4 (5 min)

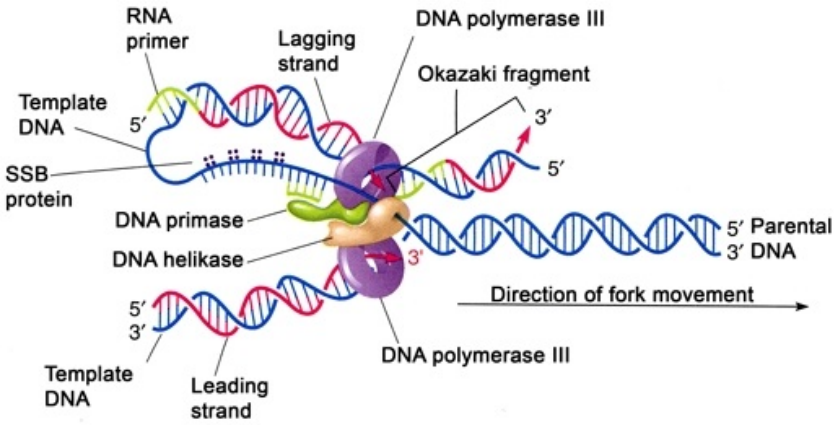


Figure 27:Overview of the major elements involved in DNA Replication. No cell could reproduce until every one of these complex protein machines were designed, manufactured and correctly located on the DNA so it can be copied.

Bacterial Flagellum and Irreducible Complexity:
This video explains how irreducible complexity means that the exquisite nanomachines in our cells cannot have arisen tiny step by tiny step, as the machines are useless until they are complete. A simple comparison would be how a car is useless for its intended function if it does not have a gearbox, even if all the other parts are there. Figure 28 illustrates the bacterial flagellum as an example of this. The flagellum is a high-speed, reversible inboard electric motor and propeller built at the molecular level and present in many bacteria, where they use it to help them find food and avoid danger. The DNA instructions even specify how many of each part to make, the order to make them in and how to assemble them. -There is nothing simple about it.
https://www.youtube.com/watch?v=NaVoGfSSSV8 (15 min)

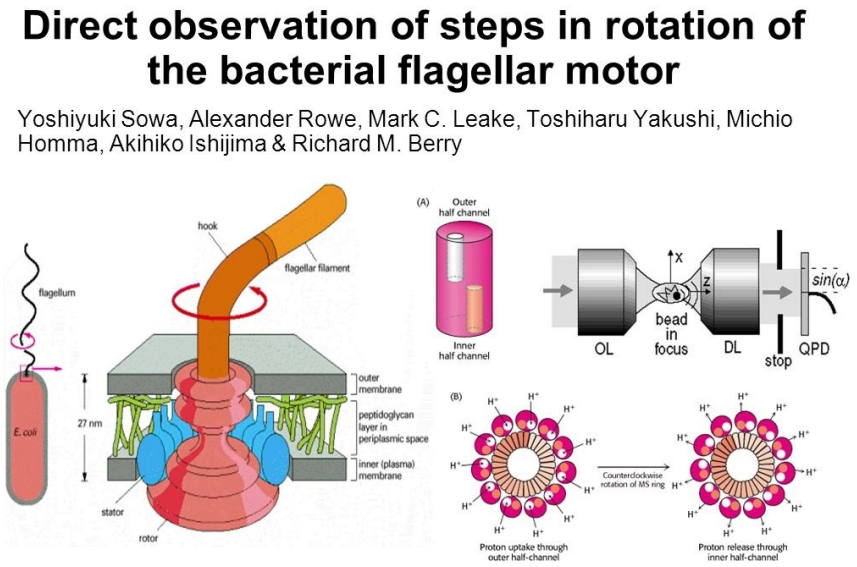


Figure 28: Simplified Illustration of an E. Coli Flagellum embedded n the cell membrane.

Video of **Eukaryotic DNA Replication and Transcription** and protein production, centromeres and cell division process. The protein production process is essentially the same in 'simple' prokaryotes, but the centromeres are a more complex system that is required in eukaryotes:
https://www.youtube.com/watch?v=fpHaxzroYxg (20 min)

Photosynthesis (but no chlorophyll), even in 'simple' cyanobacteria, as shown in this video and Figure 29:
http://www.dailymotion.com/video/x2fkksu (7.5 min)

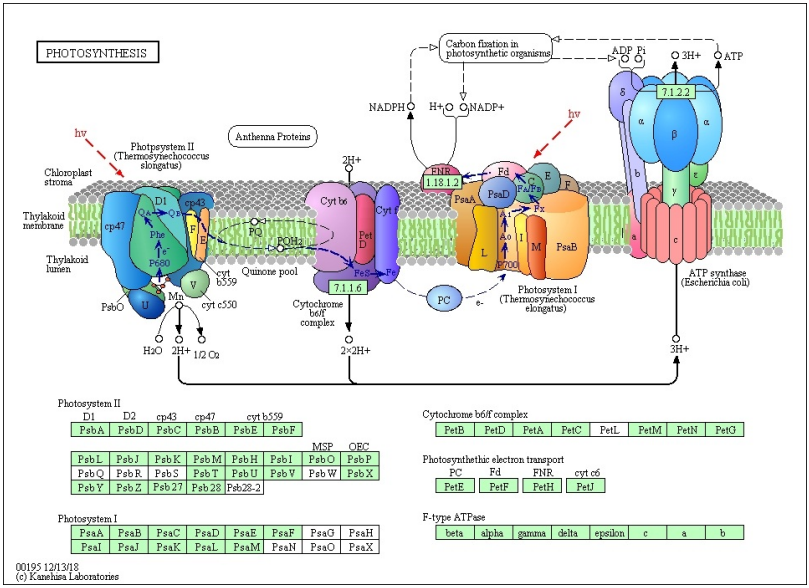


Figure 29: Schematic Representation of Photosynthesis protein machinery in Cyanobacteria. Notice the large number of complex parts required for this process to work.

[Gorgeous animations of cell functions:
https://vimeo.com/115969068 (8 Min)]
Well worth watching, but it was not part of the presentation, and some of these enzymes are from the more complex eukaryotic cells.]

Most of these things are required just for a 'simple' single cell organism. The underlying issue here is information. Where has all the precisely coded information on the DNA molecules required to make all of these complex machines come from? There is no known physical process that can randomly produce complex, coherent information. And I have presented only a small sampling of what is going on inside these cells. What do the more honest evolutionist origin of life researchers say about this?

The Wheel and Magnet

The famous British evolutionist J.B.S. Haldane stated in 1949 that evolution could never produce 'various mechanisms, such as the wheel and magnet, which would be useless till fairly perfect.' Therefore such machines in organisms would, in his opinion, prove evolution false. We have learned a great deal since then. The wheel-like molecular motors seen above (ATP synthase and flagellum) have more than fulfilled one of Haldane's criteria. Also, turtles and monarch butterflies use magnetic sensors for navigation that fulfil Haldane's other criterion. So on both counts, evolution has been proven false. The more we know about the complexity of living organisms, the more absurd belief in the undirected evolution of life becomes.

> "The biggest gap in evolutionary theory remains the origin of life itself… the gap between such a collection of molecules [amino acids and RNA] and even the most primitive cell remains enormous."—Chris Wills, professor of biology at the University of California, USA.

> "Anyone who tells you that he or she knows how life started on earth some 3.4 billion years ago is a fool or a knave. Nobody knows."—Professor Stuart Kauffman, origin of life researcher, University of Calgary, Canada.

The impossibility of life originating here has lead to some evolutionists suggesting that life on earth was seeded here by extraterrestrials. But all that does is alter the location where something impossible must happen. And then it adds the additional improbability of extraterrestrials being able to come here at the right time to seed life. It is far easier to believe in God's ability to start life on earth than an extraterrestrial's, for which there is no evidence, as SETI has demonstrated.

As Sir Fred Hoyle stated it:

> "The likelihood of the formation of life from inanimate matter is one to a number with 40,000 naughts after it … It is big enough to bury Darwin and the whole theory of evolution. There was no primeval soup, neither on this planet nor any other, and if the beginnings of life were not random, they must therefore have been the product of purposeful intelligence."

Conclusion

Abiogenesis, the origin of life due to random chemical reactions, is utterly impossible.

As there is life on Earth, the only viable alternative is that it must have been deliberately created. The Bible contains an account of such a Creation of Life. It says these living organisms were made by a remarkable being who also claims to be Eternal.

Next Session

Special Creation: God creates land animals and the First Humans.

Evolution: Progressing from a single cell to complex organisms.

And how complex is an organism like a human?

Appendix

Stanley Miller and Harold Urey's Amino Acids
This experiment is still in many textbooks because they have made no significant progress on chemical evolution since 1953.

https://www.youtube.com/watch?v=2G3Gbr0eem8 (2 min)

Isolated five of the simplest amino acids.

Used an ammonia-nitrogen-hydrogen-methane carbon dioxide and water vapour gas mix which was never Earth's atmosphere and

never could be. The ammonia would remain dissolved in the seas, and the evidence shows that the earth's atmosphere always contained free oxygen, which would destroy his amino acids.

Had a cold trap to isolate his compounds as they were made. - The real world has no such protective traps.

His amino acids were a racemic (1 to 1) mix of left and right handed amino acids. But living organisms only work with purely left-handed amino acids. Right handed amino acids would corrupt any proteins they went into and would soon kill the organism.

Most of what Miller produced was tars which are highly toxic to life. It is now known that his work demonstrates that creating life from simple chemicals is NOT possible.

Update on Miller's work:
http://blogs.discovermagazine.com/notrocketscience/2011/03/21/scientists-finish-a-53-year-old-classic-experiment-on-the-origins-of-life/#.WvPas39x1EY

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Published by
CENTRAL HIGHLANDS CHRISTIAN PUBLICATIONS
PO Box 236, Creswick, Vic 3363 Australia
Email info@chcpublications.net
Web Page http://www.chcpublications.net
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