

Topics Covered: External Evidence for the existence of a Creator

- A) External Evidence of God's Existence is Self-evident
- B) Mankind's Tendency to Suppress truth
- C) Some External Evidences -- Summary Table
- D) Some External Evidences Indicating a Creator
- E) The Two Airplane Test

A) The Bible says that the Evidence for God's Existence is <u>Self-evident</u>, and is the only logical explanation for all we see.

Note: One does not need to believe that the Bible is inspired to be confronted with the Bible's truth claims as being true, since truth claims can be self-evidently true (we will explore this in detail):

Some Bible Self-Evident Truth Claims:

1) Romans 1:20 – "For since the creation of the world His [God's] invisible attributes <u>are clearly seen</u>, being understood by the things that are



<u>made</u>, even His eternal power [His power] and Godhead [His nature], so that they [Mankind] are without excuse."

- 2) Hebrews 3:4 "For every house is built by someone, but He who built all things is God."
- 3) Acts 14:17 "Yet He [God] has not left Himself without testimony to His goodness: He gives you rain from heaven and fruitful seasons, filling your hearts with food and gladness."
- B) 3-Human Tendencies: 1) We can tend to Suppress truth, 2) we can tend to create ideological Rescuing Devices, and 3) if not diligent, we can live in Hypocrisy:

1) As we learned in the prior Lessons #7 & #8, the Bible states it is not for the lack of evidence pointing to the Creator's existence, but our conscious (or unconscious) resistance to that evidence that can rule our day:



- i. Roman 1:18b says: "... people [i.e., Mankind] who suppress the truth in unrighteousness."
- ii. Additionally, some Atheistic scientists are honest enough to admit they reject the idea of a Creator on purely personal philosophical grounds (they desire only a materialistic world, and so therefore cannot allow a Creator):

1. Quotes:

- a. "The reasonable [materialist's] view was to believe in spontaneous generation [i.e., evolution]; the only alternative [was] to believe in a single, primary act of supernatural creation. *There is no third position*. For this reason, many scientists a century ago <u>chose</u> to regard the belief in spontaneous generation as a "philosophical necessity" <u>unwilling</u> to accept the alternative belief in special creation [i.e., a Creator]." <u>Scientific American, Origin of Life</u>, George Wald, 1954-08-01, p48
- b. "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, <u>because we have a prior commitment, a</u> <u>commitment to materialism</u> Moreover, [our] materialism is absolute, for we cannot allow a Divine Foot in the door." *Billions and Billions of Demons, by Richard C. Lewontin (geneticist, Evolutionary*

Biology), The New York Review of Books (1997)

- iii. It is typical for human nature to attempt to create a rescuing device (that is, to construct a unsubstantiated wishful thinking story) to avoid a confrontation with an ideological and undesirable truth or statement.
- iv. A Question to Consider:
 - 1. Because of your personal philosophy, do you ever <u>accept</u> certain things as being "true" that are actually grounded on weaker evidence, than the things you <u>reject</u> as true that have a stronger ground of evidence?

[]Never []Always []I must re-evaluate



C) Some External Evidences Summary Table (examples):

#	Some External Evidences for a Creator	These Have Been recognizable to All Ages from Ancient Times	These Have Been recognizable to adults since the 20 th Century
1	Design & Designer Perceptibility	X	
2	Abundant Unnecessary Human Amenities	X	
3	The Universe's "Ultimate Cause"	X	
4	Complex Programmed Instincts in Animals	X	
5	Irreducible Complexity	X	X
6	The Anthropic Principle (Fine-Tuning)	X	X
7	Informational Language in the Genetic Code		X
8	The Human Immune System		X
9	The Cell's Complex Machinery		X
10	The Impossibility of the Simplest Living System		X
11	Which Airplane Do You Choose?		X



1) Design & Designer Perceptibility

In observational experience, Design is always the product of intelligence.

i. Can you tell which rocks were shaped by purely "naturalistic processes" and which were shaped as a result of "intelligent effort" for a purpose?



Hebrews 3:4 – "For every house is built by someone, but He who built all things is God." (Humans can recognize design and systems when seen.)

<u>Design</u>: to create, fashion, execute, or construct according to plan, to have as a purpose, to conceive and **plan out in the mind.**



System: A system is a group of parts that work together to carry out a particular **planned task** or function.

Intelligence: The ability to acquire, understand, and use knowledge. occurring or experienced in the mind.

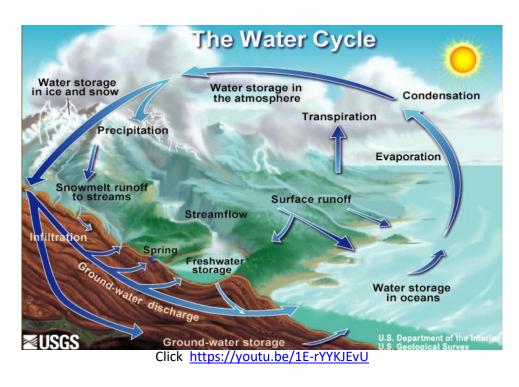
<u>Mental</u>: of, relating to, or being **intellectual** **relating to spirit or idea** as opposed to matter.

We see many systems in nature, but whenever we see a new system originate, it was always the result of an intelligent effort (intelligence requires a "mind," please see previous Session #8 for more on this topic).



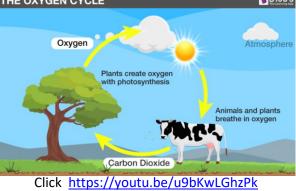
b. Examples of Systems on Earth:

ii. Earth's hydrologic Cycle (The distribution and recycling of water on Earth):

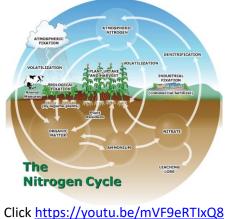




iii. The Oxygen Cycle: (The distribution and recycling of Oxygen on Earth):



iv. The Nitrogen Cycle: (The distribution and recycling of Nitrogen on Earth):





2) Abundant Unnecessary Human Amenities

In observational experience, pleasant and desirable (but completely unnecessary) human amenities are logically the result of an artistic or altruistic Mind.

i. **The visual beauty of flowers** (along with all beauty) is a totally unnecessary value in a materialistic origin. Why should there be any beauty at all?





ii. Varied and flavorful fruits and foods are unnecessary values in a strictly materialistic origin, since food would only need to be edible.



iii. Some people may say "these occurrences are some of the many random, improbable, and surprise events benefiting human existence." Yet, that does not make their existence reasonable or logical. A random, purely materialistic world, by definition, would not be seeking to provide any beneficial amenities to human life.



3) The Universe's "Ultimate Cause" (the Cosmological Argument):

In observational experience, every Effect is the result of an Adequate and Greater Cause.



Simply Put, the Cosmological Argument is as follows:

<u>Premise #1</u>: Whatever begins to exist requires an adequate cause.
<u>Premise #2</u>: The universe began to exist (the universe is not eternal*).
<u>Conclusion</u>: The universe has an adequate cause (a Causer).



Digging Deeper:

Premise #1: The 4-forces of physics, all the key laws of nature, the 1st law of Thermodynamics (conservation of energy), and all scientific observations confirm that every effect requires an adequate cause.

<u>Please Note</u>: Regarding the notion that something can come out of absolutely nothing, we will discuss this in upcoming session #11 (The Age of the Universe Models) and briefly discuss "quantum fluctuations," what it is, what it isn't, and what are the pre-existing requirements for even a micro-level "quantum fluctuation."

*Premise #2: The 2nd Law of Thermodynamics is called the "Law of Increasing Entropy." This law states that usable energy in the universe is becoming less and less available for use. If the Universe was truly eternal (of infinite time) all the usable energy would be completely wound down already into its heat death and no life would exist.

Conclusion: The universe had a cause, and that cause must be Ultimate and exist outside of and before the universe: The Ultimate Causer.



Click image to access PDF document "the Adequate Cause":



D) **Programmed Instincts in animals:**

In observational experience, every program or code of instructions is the product of a Mind and Intelligence.

<u>Programming defined</u>: the process of instructing or learning by means of an instructional program, the process of preparing an instructional program for a device (such as a computer). [Note: Programs require a programmer]



1) <u>The Continental Migrating Monarch Butterflies</u>

- i. This tiny, yet beautiful, insect can perform a migration flight of thousands of kilometers, navigating unerringly to reach a place it has never seen. For instance, some monarchs fly from Nova Scotia, Canada to the mountains west of Mexico City, some 5,000 kilometers (3,000 miles) in all. Not just to the very same place to which their forefathers migrated, but each one often to the very same tree!
- ii. The navigation equipment packed into the brain of the monarch butterfly shows, through the incredible feats of migration performed by that creature, that there is a far greater level of technology involved. And it is all packed into a brain no bigger than a pinhead!





2) Mallard Ducklings - The First 8 hours



- i. A Mallard Duck settled a nest in our yard a couple of years ago. The morning her eggs hatched was quite amazing, within 8 hours of hatching and climbing out of their shell, every duckling was able to:
 - 1. Open their eyes and have immediate visual capacity & visual understanding.
 - 2. Stand and walk around.
 - 3. Recognize and follow their mother.
 - 4. Follow behind their mother in a military straight line with all their siblings.



- 5. Stop and freeze, whenever mother froze, startup when mother started, and keep their position in line.
- ii. It would take a human baby over 12 months to do what a duckling can do in 8 hours. There is some amazing programming in these ducklings; observation experience of the phenomenon evidences a Programmer.

5) Irreducible Complexity

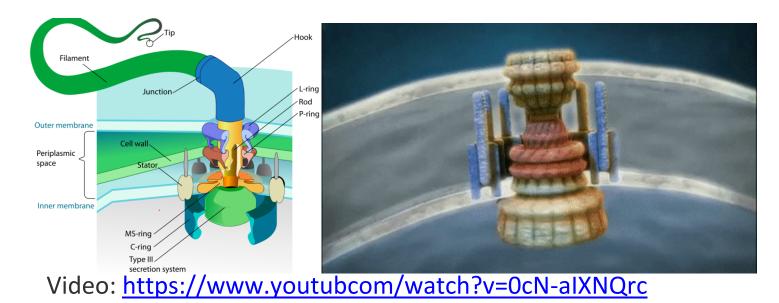
In observational experience, new systems never self-assemble by randomness, especially irreducibly complex systems. Irreducibly complex systems are evidence for both design and a Designer.

Irreducibly Complex: A characteristic of certain complex systems whereby they need all of their individual component parts in place in order to function.

Bacteria are the smallest known organisms to be able to self-replicate. Some Bacterium possess a Flagellum, a slender threadlike structure that enables that bacteria to swim. The flagellum is irreducibly complex – all parts are required to be



immediately present for any function. The bacterial flagellum is an example of design and evidence of a required Designer.



6) The Anthropic Principle (Fine-Tuning):

In observational experience, the required values for new working systems are always the product of a Mind and a plan.

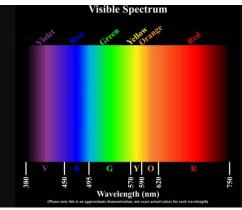


The Anthropic Principle defined: The Anthropic Principle is the Law of properties required for Human Existence. It is well known that our existence in this universe depends on numerous constants and parameters whose numerical values must fall within a very narrow range of values. If even a single variable were off, even slightly, we could not exist.

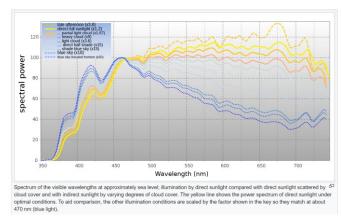
The <u>Anthropic Principle</u> (click) highlights not only the precise parameters for human life, but the Goldilocks Effect that gives Earth the "just right" values and effects for optimum human existence.

a. <u>Our sun</u> is just the <u>right color</u>. The <u>Visible Light</u> spectrum wavelength is 380nm to 750nm. If our Sun's color (wavelength) was redder or bluer, photosynthetic response would be weaker. The visible light spectrum and our Sun's wavelength at Earth's sea-level are both almost identical: 380nm to 750nm (please see below). This is an extremely small section of the total electromagnetic <u>wavelength range</u>, which ranges from 1 pico-meter (1/1000 the diameter of a proton) to 100 mega-meter (62,137 miles).





The Visible Light Spectrum (Frequency in nm)



The Sun's Light Spectrum at Sea-level (frequency in nm)



- b. Our sun is also <u>the right mass</u> (~2×10³⁰ kg). If it was larger, its brightness would change too quickly and there would be too much high energy radiation. If it was smaller, the range of planetary distances able to support life would be too narrow; the right distance would be so close to the star that tidal forces would disrupt the planet's rotational period. UV radiation would also be inadequate for photosynthesis.
- c. The <u>earth's distance from the sun</u> is crucial for a stable water cycle. Too far away, and most water would freeze; too close and most water would boil.
- d. <u>The right mass of a proton</u>: If the mass of the proton was increased by just 0.2%, then the proton would become an unstable particle and would quickly decay to a neutron, positron, and neutrino, but the mass of the proton is right to prevent the collapse of the universe.
- e. Ratio of electron to proton mass (1:1836): if this was larger or smaller, molecules could not form.



- f. The <u>electromagnetic coupling constant</u> (1/137): The <u>electromagnetic coupling constant</u> binds electrons to protons in atoms. If it was smaller, fewer electrons could be held. If it was larger, electrons would be held too tightly to bond with other atoms.
- 7) Language-Level Information -- The Genetic Code requires an intelligent Sender: Dr. Werner Gitt, "In the Beginning was Information" - (web-book)

Evidence: Language-level information always requires an intelligent sender. Extremely dense information, requires an extremely intelligent Sender.

- a. Because information is required for all life processes, it can be stated unequivocally that information is an essential characteristic of all life. All efforts to explain life processes in terms of physics and chemistry alone will always be unsuccessful.
 - i. **Property 1 of Information:** Information is not the thing itself, neither is it a condition, but it is an abstract representation of material realities or conceptual relationships, such as problem formulations, ideas, programs, or algorithms.
 - ii. **Property 2 of Information:** Information always plays a substitutionary role. The encoding of reality is a mental process.



Definition of language-level Information: includes only systems which encode and represent an abstract description of some object or idea. This definition is valid in the case of the examples of a book, newspaper, computer program, DNA molecule, or hieroglyphics. When an object of reality is observed directly, examples like a star, a house, a tree, or a snowflake, these do not belong to our definition of language-level information, but statistics-level only.

There are two levels of information:

- **1) Statistics-only (Shannon-type):** Possesses only numerical values, possibly unique symbols, but possesses No code-set, No rules, No meanings, No definitions). Example the <u>number</u> of grains of sand in a cup.
- **2) Language-Level**: Possesses 1) statistics, 2) syntax, 3) semantics, 4) pragmatics, <u>and</u> 5) Apobetics.
 - 1. **Statistics**: Any random sequence of symbols (entities of unique shapes), can be described numerically by count or frequency, can be measured in bits (binary digits).
 - 2. **Syntax**: The structural properties of the defined set of symbols (codes) which have rules governing the way they can be assembled into sequences (grammar and vocabulary), independent of any meaning. Results in words and sentences.
 - 3. **Semantics**: The message being conveyed and its meanings, by use of the code and its syntax. It is the message's meaning that changes the sequence of symbols into information.

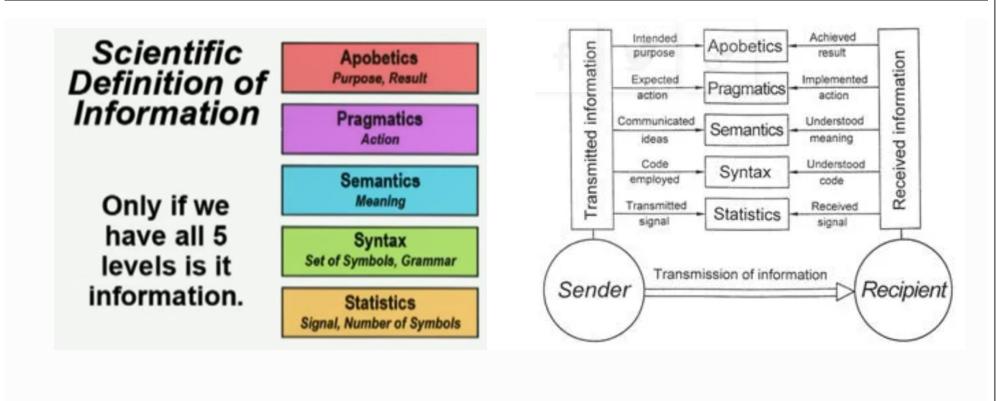


- 4. **Pragmatics**: Information leads to some action or thought, although it is immaterial whether the recipient knows or acts according to the sender's communication.
- 5. **Apobetics**: The purpose or goal of the information that is involved.

Axioms regarding Information:

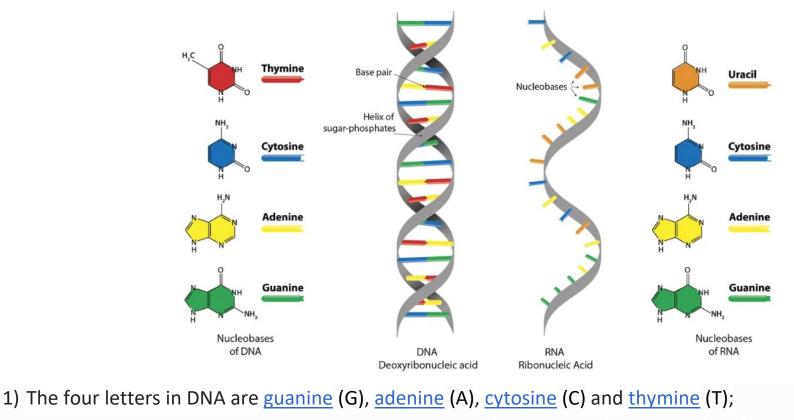
- AXIOM 1: Anything material, such as physical or chemical processes cannot create something non-material.
- AXIOM 2: Information is a non-material fundamental entity, not a property of matter.
- AXIOM 3: Information requires matter (including energy) as a medium for storage and transmission.
- AXIOM 4: Information cannot originate in a statistical process (random and arbitrary symbols alone).
- AXIOM 5: There can be no information without a code.
- AXIOM 6: All codes results from an intentional choice and agreement between sender and receiver.
- AXIOM 7: The determination of meaning FOR a set of symbols, and FROM a set of symbols, is a mental process that requires Intelligence.
- AXIOM 8: There can be no new information without an intelligent, purposeful sender.
- AXIOM 9: Any given chain of information can be traced back to an intelligent source.
- AXIOM 10: Information comprises the non-material foundation for all 1) technological systems, 2) works of art, 3) and biological systems.







The Genetic Code (DNA & RNA) is an extremely high-density language:



2) The four letters in RNA in are guanine (G), adenine (A), cytosine (C) RNA, uracil (U)

pg. 26



- 3) The storage medium is the DNA molecule (deoxyribonucleic acid), which resembles a double helix. A DNA fiber is only about two millionths of a millimeter thick, so that it is barely visible with an electron microscope.
- 4) DNA's information packing density is so inconceivably great that we need an illustrative comparison. If a photographic slide of 1.3"x 1.3" contained <u>3,566,480 letters</u> (all the contents of the Bible) on its surface, a DNA molecule would have the storage density <u>7.7 Trillion</u> times as greater.
- 5) DNA carries the instructions to make the 50,000 to 200,000 human proteins by use of 20 amino acids.

	2nd position of codon																
		U			С			A				G					
	υυυ	Phe	F	Phenylalanine	UCU	Ser	S	Serine	UAU	Tyr	Y	Tyrosine	UGU	Cys	С	Cysteine	ι
L	UUC	Phe	F	Phenylalanine	UCC	Ser	S	Serine	UAC	Tyr	Y	Tyrosine	UGC	Cys	С	Cysteine	c
	UUA	Leu	L	Leucine	UCA	Ser	S	Serine	UAA		*	stop	UGA		*	stop	A
	UUG	Leu	L	Leucine	UCG	Ser	S	Serine	UAG		*	stop	UGG	Trp	W	Tryptophan	9
-	CUU	Leu	L	Leucine	CCU	Pro	Ρ	Proline	CAU	His	н	Histidine	CGU	Arg	R	Arginine	lu
2	CUC	Leu	L	Leucine	ccc	Pro	Ρ	Proline	CAC	His	н	Histidine	CGC	Arg	R	Arginine	c
8	CUA	Leu	L	Leucine	CCA	Pro	Ρ	Proline	CAA	Gln	Q	Glutamine	CGA	Arg	R	Arginine	A
<u> </u>	CUG	Leu	L	Leucine	CCG	Pro	Ρ	Proline	CAG	Gln	Q	Glutamine	CGG	Arg	R	Arginine	Ģ
	AUU	lle	L	Isoleucine	ACU	Thr	т	Threonine	AAU	Asn	Ν	Asparagine	AGU	Ser	S	Serine	ι
	AUC	lle	L	Isoleucine	ACC	Thr	т	Threonine	AAC	Asn	Ν	Asparagine	AGC	Ser	S	Serine	0
i "	AUA	lle	L	Isoleucine	ACA	Thr	т	Threonine	AAA	Lys	Κ	Lysine	AGA	Arg	R	Arginine	A
`_	AUG	Met	М	Methionine	ACG	Thr	т	Threonine	AAG	Lys	К	Lysine	AGG	Arg	R	Arginine	Ģ
	GUU	Val	۷	Valine	GCU	Ala	А	Alanine	GAU	Asp	D	Aspartate	GGU	Gly	G	Glycine	l
G	GUC	Val	۷	Valine	GCC	Ala	A	Alanine	GAC	Asp	D	Aspartate	GGC	Gly	G	Glycine	c
C	GUA	Val	۷	Valine	GCA	Ala	А	Alanine	GAA	Glu	Е	Glutamate	GGA	Gly	G	Glycine	A
	GUG	Val	v	Valine	GCG	Ala	А	Alanine	GAG	Glu	Е	Glutamate	GGG	Gly	G	Glycine	6

The 20 Amino Acids



DNA's 7 Axiom's:

DNA Axiom-1: Since the DNA code of all Life forms is clearly within the definition of the domain of information, we conclude there must be a Sender.

DNA Axiom-2: Since the density and complexity of the DNA coded information is billions of times greater than man's present technology, we conclude <u>the Sender must be supremely intelligent</u>.

DNA Axiom-3: Since the Sender must have 1) encoded [stored] the information into the DNA molecules, 2) designed the molecules bio-machines required for the encoding, decoding, & synthesizing processes, 3) designed all the features for original life forms, the Sender must be purposeful and supremely powerful.

DNA Axiom-4: Since information is a non-material fundamental entity and cannot originate from material quantities, we conclude that <u>the Sender must have a non-material component (spirit)</u>.

DNA Axiom-5: Since information is a non-material fundamental entity and cannot originate from material quantities, and since information also originated from mankind, we conclude that <u>mankind's</u> <u>nature must have a non-material component (spirit)</u>.



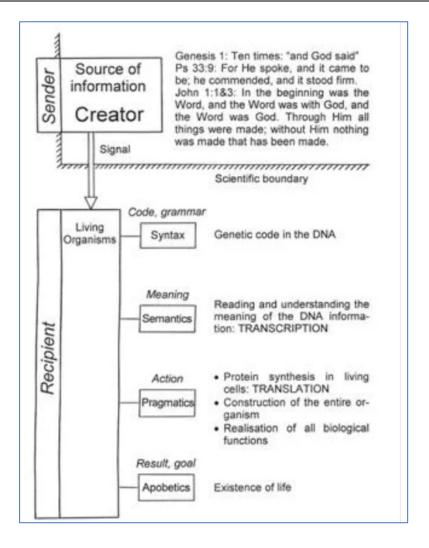
DNA Axiom-6: Since information is a non-material entity, we conclude that the assumption that "the universe is composed of only mass and energy" <u>is false</u>.

DNA Axiom-7: Since biological information originated only from an intelligent Sender, and since all theories of chemical and biological evolution must require that information must originate solely from mass and energy alone (no sender), we conclude that all theories or concepts of chemical and biological abiogenesis and macro-evolution <u>are false</u>.



Five conclusions about the sender:

- 1. There must be a sender.
- 2. The sender must be omniscient (infinite in intelligence and information).
- The sender must be omnipotent (almighty).
- The sender must be eternal.
- 5. The sender must have, at least, a non-material component.





Conclusions from the laws of Information and Natural Laws: Informational languages and DNA can only come from a Mind.

VIDEO: In the Beginning was Information (Dr. Gitt 51min) - click image:

In the Beginning Was Information. Dr. Werner Gitt Ph.D Creation Evidence.

Click <u>https://youtu.be/kcHex54Vu8c</u>



8) The Human Immune System

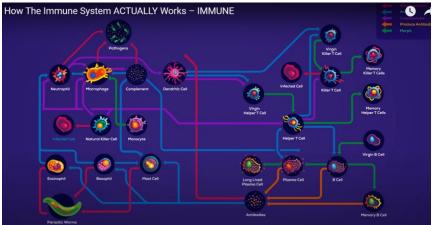
In observational experience, systems (especially extremely specialized, complex, and communicating ones) are always the product of a Mind and Intelligence.

The Human Immune system is an integrated, specialized, extremely robust organization of symphonic biological systems and weapons to protect us against biological intruders (click image below) for an amazing video.

Your Immune System Summary:

1) Skin Barrier, 2) Macrophages, 3) Neutrophils, 4) Inflammation agents, 5) Compliment Proteins & Antibodies, 6) Helper, Killer, and Memory T Cells, 7) Heavy weapons, suicide bombers, and much, much more.

Video: The Amazing Human Immune System (click image, 11minutes):



Click https://youtu.be/MYhizR5IRZ0



9) The <u>Cell's Complex Machinery</u>:

In observational experience, systems and machines are always the product of a Mind and intelligence.

Some of the most startling discoveries in the last few decades have improved our understanding of the amazing complexity of the cell. This includes the world's tiniest machines. But not only are there machines, but also their blueprint — the message molecule DNA. DNA's function is to store and transmit genetic information, but it can't work without molecular machines.

However, as the noted philosopher of science, Sir Karl Popper (1902–1992),

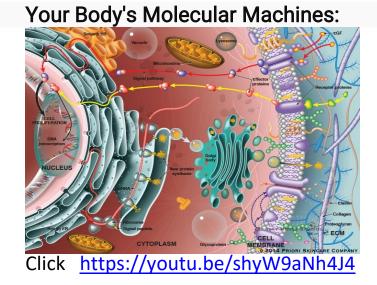
commented: (Lamarck and Panspermia, section 4.2)

'What makes the origin of life and of the genetic code a disturbing riddle is this: the genetic code is without any biological function unless it is translated; that is, unless it leads to the synthesis of the proteins whose structure is laid down by the code. But ... the machinery by which the cell (at least the non-primitive cell, which is the only one we know) translates the code consist[ing] of at least fifty macromolecular components which are themselves coded in the DNA.



Thus the code cannot be translated except by using certain products of its translation. This constitutes a baffling circle; a really vicious circle, it seems, for any attempt to form a model or theory of the genesis of the genetic code. 'Thus we may be faced with the possibility that the origin of life (like the origin of physics) becomes an impenetrable barrier to science, and a residue to all attempts to reduce biology to chemistry and physics.'

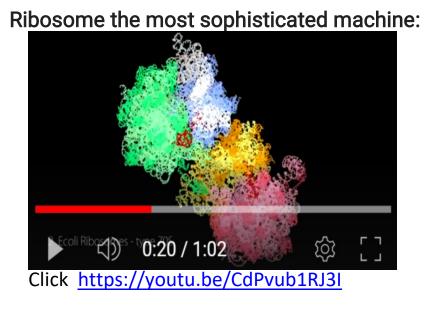
Videos of the Cell's Amazing Micro-Machines – Click on Images to view videos:



DNA Replication:







ATP Synthase Enzyme:

Protein Synthesis:



Our four-dimensional Genome:







10) **The Impossibility of Abiogenesis** (that is, no life comes from non-life)



Two prominent materialistic scientists tried to calculate the probability of life occurring by random chance, and both calculations produced a probability result that was <u>statistically equivalent to Zero</u>, even when giving them huge amounts of time for their models:

Their Probabilities of Impossibility:

- According to Dr. Marcel Golay: Probability of the chance origin of simplest large protein molecule was 1 out 10²⁸³
- According to Dr. Fred Hoyle: Probability of the chance origin higher-organism in 1 out 10⁴⁰⁰⁰⁰
 - Any probability less than 1 out 10¹⁷⁰ is a statistically Zero chance, therefore both of these calculations have a Zero probability for life originating by chance, regardless of the time, the space, and the number of interactions allowed.
 - Conclusion: Life only comes from life, and life requires language-level information, and Language-level information only comes from a Mind and Intelligence
 - NOTE: Please see the details below for a fuller understanding of their methodology.



Foundationally Strong & Liberal Premises:

- 1. Even if the universe were indeed as much as 30 billion years old, as evolutionists have alleged, life even in its simplest form could never have evolved by chance. A few simple probability calculations will demonstrate this fact.
- To investigate this situation, We shall assume that the known universe is 5 billion (5 x 10⁹) light-years in radius (with a light-year equal to the distance light would travel in a year while moving at a speed of over 186,000 miles per second).
- 3. Also, let's assume that it is crammed with tiny particles of the size of an electron, the smallest known particle in existence. It has been estimated that 10⁸⁰ such particles exist in the universe, but if there were no empty space, approximately 10¹³⁰ particles conceivably could exist there. Every structure, every process, every system, every "event" in the universe must consist of these particles, in various combinations and interchanges.
- 4. To be extremely liberal, we assume that each particle can take part in 10²⁰ (that is a hundred billion billion) events each second, and then allow 10²⁰ seconds of cosmic



history (this would correspond to 3,000 billion years, or 200 times the current maximum estimate of the age of the universe), then the greatest conceivable number of separate events that could ever take place in all of space and time would be:

 $10^{130} \times 10^{20} \times 10^{20} = 10^{170}$ events.

Now, in order for life to appear, one of these events (or some combination of them) must bring a number of these particles together in a system containing enough order (or stored information) to enable it to make a copy of itself. This system must be produced by chance, of course, since presumably no Creator is available to plan and direct the assemblage of all this information. The problem is, however, that any living cell or any new organ to be added to an existing animal — even the simplest imaginable replicating system — would have to contain far more stored information than represented even by such a gigantic number as 10^{170} .

 Marcel E. Golay (1961), A leading Materialistic Information Scientist, calculated the odds of a simple protein self-organizing itself randomly as 10⁴⁵⁰ to 1. (this is statistically Zero)



If we take Golay's figure, giving the evolution model all possible benefit of the doubt, the odds against any accidental ordering of particles into a replicating system is at least 10^{450} to 1. This is so even if it is spread out over a span of time and a series of connected events. As a matter of fact, Golay calculated the figure on the assumption that it was accomplished by a series of 1,500 successive events, each with the generously high probability of ½ (note that $2^{1500} = 10^{450}$). The probability would be much lower if it had to be accomplished in a single chance event. It is very generous, therefore, to conclude that the probability of the simplest conceivable replicating system arising by chance just once in all the universe, in all time is: **1 out of 10^{280}**:

10170	= 1
10^{450}	10^{280}

These calculations are summarized in figures 52, 53, and 54 (below).

When the probability of occurrence of any event is smaller than one out of the number of events that could ever possibly occur — that is, as discussed above, less than 1 in 10^{170} — then the probability of its occurrence is considered by mathematicians to be zero.



NUMBER OF POSSIBLE EVENTS IN SPACE AND TIME

Available Time: Assume 3 trillion years=10²⁰ seconds

Available Space: Assume 5 billion light-years radius

Number of particles possible in universe=10¹³⁰ electrons Assume each particle can act in 10²⁰ events/second

Therefore: $10^{130} (10^{20}) (10^{20}) = 10^{170}$ events possible

Figure 52. Maximum number of possible events

PRODUCTION OF SIMPLEST LIVING SYSTEM BY CHANCE

Minimum requirement (Golay): 1,500 successive events, each with ½ chance of success

Probability = $(1/2)^{1500} = (1/10)^{450}$

That is, there is one chance out of $(10)^{450}$ that any series of 1,500 successive chance events will generate a replicating system.

Figure 53. Probability of chance origin of life

PROBABILITY OF CHANCE ORIGIN OF LIFE ANYWHERE ANYTIME IN UNIVERSE

 $(10)^{170}$ = Number of possible events

- $(10)^{167}$ = Number of possible sequences of 1500 events
- $(10)^{-450}$ = Probability of any one such sequence producing life

Therefore, probability of chance origin of life =

$$\frac{(10)^{167}}{2} = \frac{1}{2} = 0$$

$$(10)^{450}$$
 $(10)^{283}$

since number of possible events = (only) $(10)^{170}$

Figure 54. Impossibility of naturalistic origin of life

Source: Morris, Henry; Parker, Gary. What Is Creation Science? (p. 308). Master Books. Kindle Edition.



2) Sir Fred Hoyle (Astro-physicist) calculated the odds of higher life occurring by random chance as 1 in 10^{40,000}. Anything less than 1 in 10¹⁷⁰ is a statistical impossibility. 1 in 10^{40,000} is an absolute statistical Zero. This chance event is a true impossibility regardless of the amount of time and matter in the universe we give it.

a. <u>Hoyle's calculation</u> is as follows:

- i. Higher forms of life require 2000 different enzymes for life.
- ii. The probability of one enzyme occurring by random chance is 10²⁰
- iii. The probability of the required 2000 enzymes occurring by chance is $10^{20^{2000}}$, that is $10^{40,000}$.
- iv. The occurance probability of 1 in $10^{40,000}$ event is the same as 1 in Infinity, that is, Zero.

Conclusion: The complexity and language of genetics evidence that only a pre-existing Mind and Intelligence can be the source of life that we see.



E) The Two Airplane Test:

Based on Scientist <u>George Wald</u>'s previous article, he states that there are **only two possible options** for the origin of life: either life arose by 1) Spontaneous Generation [evolution] or by 2) Special Creation [a Creator]. Additonally, the probability of the occurence of one option must be the reciprocal of the other option.

Optional Exercise: "Now Boarding. Please select and board your airplane to truth":

