NOTE: Jesus illustrates by showing that a spiritual thing is not something you can see, likewise is the case for those that are born of the Holy Spirit.

John 3:9 Nicodemus said to Him, "How are these things able to come to pass?"

NOTE: Jesus is also speaking with a professor. Nicodemus is described by Jesus in verse 10 as a "teacher in Israel." The word "teacher" is the Greek noun, **διδάσκαλος (*didáskalos*)**. Nicodemus is an educated man in the Talmud and familiar with the Tanakh, especially the Mosaic Law and thus ignorant of spiritual concepts.

Nicodemus holds the title of "teacher," but he is not qualified to teach. Jesus is attempting to get the man's soul oriented to invisible things such as the differences between the visible and the invisible, the body and the spirit.

Nicodemus needs to refocus his attention on the things Jesus is saying, so the Lord makes the effort to help him gain clarity:

John 3:10 Jesus answered and said to him, "Are you a ***didáskalos*** of an Israeli seminary yet you did not learn these things?

v. 11 "I am telling you the truth, we communicate what we know and keep on testifying what we have seen, yet you have not accepted our message.

v. 12 "If **[first-class condition: it is true]** I communicate to you things on the earth, and you do not believe them, how shall you believe if **[third-class condition: maybe yes, maybe no]** I tell you about heavenly things?

v. 13 "No one has ascended into heaven, but He Who descended from heaven, the Son of Man."

NOTE: The Lord now presents an evangelistic message which Nicodemus ought to understand:

John 3:14 "As Moses lifted up the serpent in the wilderness, even so must the Son of Man be lifted up;

NOTE: Jesus does not have to go into great detail about the gospel because he is addressing a graduate student of the Law in the Pentateuch and the act of Moses who lifted up the brass serpent on a pole. The serpent's venom represented sin; those who looked up upon it lived while those who did not died the sin unto death. Those who look upon the crucified Jesus observe sin being judged and through faith in Him are saved. Jesus continues with the gospel message:

John 3:15 so that whoever believes in Him will have eternal life."

NOTE: Jesus then expands on this idea with the presentation of a prophetic event that He will accomplish on the cross:

John 3:16 "For God the Father so loved the world, with the result that He gave His uniquely born Son, for the purpose that whoever believes in Him, shall not perish at the last judgment but will keep on having everlasting life."

6. Jesus told Nicodemus the truth which he rejected in John 3. However, he did ultimately wise up and place his personal faith in Jesus for salvation. He assisted Joseph of Arimathea in the burial of Jesus, documented in John 20:38–42.

7. The truth Jesus expressed to Nicodemus had to do with the gospel of salvation. In John 8:30 and following, the Lord was engaged in a discussion with the Pharisees which was overheard by many.

8. The Pharisees did not understand the Lord's words, but some Jews did:

John 8:30 While He was speaking these things **[to the Pharisees]**, many came to believe **[ingressive aorist active indicative of πιστεύω (*pisteúō*): stresses the beginning of an action, the indicative mood indicates a statement of fact, i.e., absolute truth]** in Him.

v. 31 So Jesus was saying to those Jews who had believed in Him, "If **[3d-class condition]** you persist **[aorist active subjunctive of μένω (*ménō*): habitually]** in My word, then you will truly **[ἀληθῶς (*alēthṓs*): certainly]** be My disciples;

v. 32 and you will come to know **[future middle indicative of γινώσκω (*ginőskō*): "comprehend"[37]]** the truth **[ἀλήθεια (*alētheia*): "absolute truth"]** and the truth will make you free **[future active participle of ἐλευθερόω (*eleutheróō*): from the Law]** to serve God."

NOTE: The unbelieving Pharisees interrupt the Lord in:

John 8:33 They responded with their own rationales to Jesus, "We are **[present active indicative of εἰμί (*eimí*): indicates absolute status]** Abraham's descendants **[progeny of Jacob's 12 sons; racial arrogance]** and have never yet been enslaved **[πώποτε δουλεύω (*pőpote douleúō*)]** to anyone; how is it that You say, 'You will become free'?"

NOTE: The Jews' racial arrogance produced this erroneous conclusion: "Being in the line of Abraham resulted in freedom before God, therefore we do not need to be freed by You or anyone."

To the contrary, politically they were in slavery to the Roman Empire while religiously they were in bondage to the Mosaic Law. The latter had been expanded to include the slavery of thousands of rules imposed by the Pharisees from the oral law, the Talmud.

The Jews then pose a question to Jesus, "How is it that You say, 'You will become free?'"

John 8:34 Jesus answered them, "Truly, truly **[Ἀμὴν ἀμὴν (*Amén amén*): "I am telling you the truth"]**, I say to you, everyone who commits sin is a slave to sin.

9. Now they have a literal sin of the flesh in the form of the genetically formed sin nature. Jesus continued:

John 8:35 "The slave does not remain in the house; the son does remain forever."

10. Here the Lord compares the slave with the son. The slave, the Pharisee, cannot live forever in his present physical house, but the son, the one born again does remain forever.

[37] Stresses comprehension from concentration in Bible study by consistent self-discipline under the teaching ministry of the Holy Spirit.

11. At salvation the believer is placed in union with Christ forever. If unbelievers want to get into the house of eternal life, they have to do so by believing in the Son, Jesus Christ.

> **John 8:36** "So if the Son shall make you free at salvation, being free, you shall be free indeed."

12. The Son in this verse is Jesus Christ. Faith alone in the Lord frees him from the dictatorship of the sin nature through confession alone to God alone. It provides freedom from *cosmos diabolicus* inside the bubble. This results in the environment of freedom to grow in grace by inculcation, retention, and application of the truth–the immutable absolutes of divine viewpoint.

VISUAL #10:
Divine Dynasphere: Inside the Bubble

13. The key is the person's volition which is free to choose from the environment of his soul indicated by the third-class conditional particle, "if."

14. The "if clause" here provides the person the freedom to express faith in Christ for salvation or to reject the idea.

15. If positive, the person enters into a system which includes the teaching ministry of the Holy Spirit and with access to the truths found in Scripture. Volition is then free to determine in which environment his soul resides, out of fellowship in the devil's world or in fellowship inside the evanescent[38] divine power system.

VISUAL #11:
Evanescent Divine Dynasphere

16. The former means that the believer functions as an unbeliever although saved. The latter is an environment in which he may choose to matriculate under the teaching ministry of the Holy Spirit.

17. In this situation, this believer is given access to a treasure trove of absolute, unassailable, and irrefutable information that is generally referred to by the Lord as **אֱמֶת (*'emeth*)** and **ἀλήθεια (*alḗtheia*)**: truth.

18. These two words give the believer confidence that divine guidance is available to him through Bible study, that this information is alive and powerful which God honors and defends whenever a believer relies on it in his daily walk.

19. Principle: God honors his Word wherever it is found including your soul and will honor its application by a believer in his daily walk.

20. The following passages expresses the Royal Law and the Integrity of God as the love of God:

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[38] "evanescent: to dissipate or disappear like vapor; to vanish" *The American Heritage Dictionary of the English Language*, 5 ed. (2016), s.v. evanescent."

> **Psalm 111:7** The works of His hands are truth **[אֱמֶת (*'emeth*)]** and justice **[מִשְׁפָּט (*mishphat*): love & faithfulness]**; all His precepts **[פִּקּוּד (*piqqeth*): commandments[39]]** are sure **[אָמַן (*'aman*): trustworthy]**.
>
> **v. 8** They are upheld **[Qal passive participle of סָמַךְ (*samach*): "firm, steadfast, secure"[40]]** forever and ever **[immutable]**; they are performed in truth **[אֱמֶת (*'emeth*)]** and uprightness.

21. These verses describe the veracity of the Word of God beginning with the word "truth" in verse 7 and ending with the word "truth" in verse 8 and supported in the middle by principles associated with integrity: justice, trustworthy, firm, steadfast, secure, and immutable.

22. The Lord prophesied the advent of the Holy Spirit in John 16 that this event would not occur until after His ascension into heaven, but afterward He would send the Holy Spirit to us."

> **John 16:7** "I tell you the truth **[ἀλήθεια (*alḗtheia*)]**, it is to your advantage that I go away; for if I do not go away, the Helper will not come to you; but if I go, I will send Him to you."
>
> **John 16:13** "When He, the Spirit of truth **[*alḗtheia*]**, comes, He will guide you into all truth **[*pás alḗtheia*]**; for He will not speak on His own initiative, but whatever He hears, He will speak; and He will disclose to you what is to come."

The power is in the Word. The Word's power is based on its integrity. Its application by the believer is dependent upon his willingness to trust and obey its veracity without which it sadly remains dormant.

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[39] "Precept: Any commandment, instruction, or order intended as a rule of action or conduct; especially, a practical rule guiding behavior" (*Webster's New Collegiate Dictionary*, 2d ed. (1953), s.v. "precept.")

[40] "God's precepts (commandments) are constant, they are established forever, are performed in faithfulness, and are upright (Psalm 111:7–8)" (Heinz-Josef Fabry, "סָמַךְ" in *Theological Dictionary of the Old Testament*, 1999), 10:285.

The Mystery of Gravity Revealed

Many deep thinkers in history have discovered that the universe and all it contains, including planet earth, functions by means of formulas common to higher mathematics. Some have written books on the subject. One example is by Morris Kline, professor of Mathematics at New York University, titled, *Mathematics and the Search for Knowledge*. In his book, Kline traces the history of astrophysics from the viewpoint of mathematics. He traces famous discoveries by the ancients from the 500s B.C., all the way to the twentieth century: Pythagoras (c.580–500 B.C.), Aristarchus (c.270 B.C.), and Ptolemy (A.D. 2) up to the 1500s and beyond: scientists including Copernicus (Mikolaj Kopernek, 1473–1543), Johannes Kepler (1571–1630), Galileo Galilei (1564–1642), René Descartes (1596–1650), Isaac Newton (1642–1727), James Clerk Maxwell (1831–1879), Max Planck (1858–1947), and Albert Einstein (1879–1955).

After all this groundbreaking research that produced theories resulting in laws, we still have lightyears to go according to Gilbert Lewis in his *The Anatomy of Science* (1926):

> **The theory that there is an ultimate truth, although very generally held by mankind, does not seem useful to science except in the sense of a horizon toward which we may proceed, rather than a point which may be reached.**[41]

We appreciate what the scientists named above have discovered, but there is still much more research to be done, for example, "What is gravity?" Isaac Newton discovered the three laws of motion, each of which obey the foundational principle, gravity. But Sir Newton concluded after publishing his "Three Laws of Motion" that although he discovered and categorized the existence of gravity, he still did not understand its source. No one has done so since.

Therefore, the existence of gravity is confirmed and utilized by elite mathematicians to understand the structure of the universe, how all heavenly bodies possess gravity, but are simultaneously acted upon by the gravitation of other bodies. The earth is held in its orbit by the gravitational pull of the sun while the moon is held in its orbit by the gravitational pull of the earth. This dance among the luminaries continues unabated from time immemorial, Genesis 1:1, to the present day.

Here is Sir Newton's comment on the fact gravity exists but admits he does not know its cause or source.

[41] Morris Kline, *Mathematics and the Search for Knowledge* (New York: Oxford University Press, 1986), 223.

VISUAL #12:
Engraving of Sir Isaac Newton

So far I have explained the phenomena of the heavens and of the sea by the force of gravity. I have not yet been able to deduce from the phenomena the reasons for these properties of gravity and I invent no hypotheses. Everything which is not deduced from the phenomena should be called an hypothesis, and hypotheses, whether metaphysical or physical, whether occult qualities or mechanical, have no place in experimental philosophy.

Newton saw clearly that his universal law of gravitation is a description, not an explanation. He wrote in a letter to Richard Bentley:

> **You sometimes speak of gravity as essential and inherent in matter. Pray, do not ascribe that notion to me; for the cause of gravity is what I do not pretend to know.**[42]

Both he and mathematicians who followed have remained flummoxed about the "cause of gravity." Therefore, we boldly go where no mathematician has gone before by appealing to the "source of truth" for the answer. We find it in:

> **Colossians 1:16** For by means of Him **[Jesus Christ, v. 15]** all things were created **[κτίζω (*ktízō*): to produce from nothing, Gen. 1:1]**, both in the heavens and on earth, the visible things **[the universe]** and invisible things **[mathematics]**, whether human governments or constituted authorities, or angelic rulers and authorities: all things through Him and for His purpose have been created.
>
> **v. 17** He eternally existed before all things, and by means of Him all things hold together **[intensive perfect active indicative of συνίστημι (*sunístēmi*): emphasizes the results of a past action, i.e., gravity]**. (EXT)

Isaac Newton "discovered" gravity which Jesus Christ "created and sustains." The former is true while the latter is truth. Know the difference between the two.

(End SBC19-01: 2019 Shreveport Bible Conference)

[42] Ibid., 121.

Suggested Reading

Proponents of the hypothesis that both the universe and species Homo sapiens came into being through an evolutionary process continue their search for proof.

Hypothesis implies insufficient evidence to provide more than a tentative explanation. **Theory** implies a greater range of evidence and greater likelihood of truth. **Law** implies a statement of order that has been found to be invariable under the same conditions. Evolution, regardless of its proponents' claims, remains unresolved due to lack of evidence and thus remains a hypothesis.

The article below takes a mathematical approach to the question. Its writer, Caleb Scharf, an astrophysicist at Columbia University, proposes that the formulas that control the universe are actually an alien who permeates the cosmos. Regardless of his use of the word "alien," he is so very, very close while remaining so "verily, verily" far away.

Is Physical Law an Alien Intelligence?

Alien life could be so advanced it becomes indistinguishable from physics.

Caleb Scharf

Perhaps Arthur C. Clarke was being uncharacteristically unambitious. He once pointed out that any sufficiently advanced technology is going to be indistinguishable from magic. If you dropped in on a bunch of Paleolithic farmers with your iPhone and a pair of sneakers, you'd undoubtedly seem pretty magical. But the contrast is only middling: The farmers would still recognize you as basically like them, and before long they'd be taking selfies. But what if life has moved so far on that it doesn't just appear magical, but appears like physics?

After all, if the cosmos holds other life, and if some of that life has evolved beyond our own waypoints of complexity and technology, we should be considering some very extreme possibilities. Today's futurists and believers in a machine "singularity" predict that life and its technological baggage might end up so beyond our ken that we wouldn't even realize we were staring at it. That's quite a claim, yet it would neatly explain why we have yet to see advanced intelligence in the cosmos around us, despite the sheer number of planets it could have arisen on—the so-called Fermi Paradox.

For example, if machines continue to grow exponentially in speed and sophistication, they will one day be able to decode the staggering complexity of the living world, from its atoms and molecules all the way up to entire planetary biomes. Presumably life doesn't have to be made of atoms and molecules but could be assembled from any set of building blocks with the requisite complexity. If so, a civilization could then transcribe itself and its entire physical realm into new forms. Indeed, perhaps our universe is one of the new forms into which some other civilization transcribed its world.

These possibilities might seem wholly untestable, because part of the conceit is that sufficiently advanced life will not just be unrecognizable as such, but will blend completely into the fabric of what we've thought of as nature. But viewed through the warped bottom of a beer glass, we can pick out a few cosmic phenomena that—as crazy as it sounds—might fit the requirements.

For example, only about 5 percent of the mass-energy of the universe consists of ordinary matter: the protons, neutrons, and electrons that we're composed of. A much larger 27 percent is thought to be unseen, still mysterious stuff. Astronomical evidence for this dark, gravitating matter is convincing, albeit still not without question. Vast halos of dark matter seem to lurk around galaxies, providing mass that helps hold things together via gravity. On even larger scales, the web-like topography traced by luminous gas and stars also hints at unseen mass.

Cosmologists usually assume that dark matter has no microstructure. They think it consists of subatomic particles that interact only via gravity and the weak nuclear force and therefore slump into tenuous, featureless swathes. They have arguments to support this point of view, but of course we don't really know for sure. Some astronomers, noting subtle mismatches between observations and models, have suggested that dark matter has a richer inner life. At least some component may comprise particles that interact with one another via long-range forces. It may seem dark to us, but have its own version of light that our eyes cannot see.

In that case, dark matter could contain real complexity, and perhaps it is where all technologically advanced life ends up or where most life has always been. What better way to escape the nasty vagaries of supernova and gamma-ray bursts than to adopt a form that is immune to electromagnetic radiation? Upload your world to the huge amount of real estate on the dark side and be done with it.

If you're a civilization that has learned how to encode living systems in different substrates, all you need to do is build a normal-matter-to-dark-matter data-transfer system: a dark-matter 3D printer. Perhaps the mismatch of astronomical models and observations is evidence not just of self-interacting dark matter, but of dark matter that is being artificially manipulated.

Or to take this a step further, perhaps the behavior of normal cosmic matter that we attribute to dark matter is brought on by something else altogether: a living state that manipulates luminous matter for its own purposes. Consider that at present we have neither identified the dark-matter particles nor come up with a compelling alternative to our laws of physics that would account for the behavior of galaxies and clusters of galaxies. Would an explanation in terms of life be any less plausible than a failure of established laws?

Part of the fabric of the universe is a product of intelligence.

The universe does other funky and unexpected stuff. Notably, it began to expand at an accelerated rate about 5 billion years ago. This acceleration is conventionally chalked up to dark energy. But cosmologists don't know why the cosmic acceleration began when it did. In fact, one explanation with a modicum of traction is that the timing has to do with life—an anthropic argument. The dark energy didn't become significant until enough time had gone by for life to take hold on Earth. For many cosmologists, that means our universe must be part of a vast multiverse where the strength of dark energy varies from place to place. We live in one of the places suitable for life like us. Elsewhere, dark energy is stronger and blows the universe apart too quickly for cosmic structures to form and life to take root.

But perhaps there is another reason for the timing coincidence: that dark energy is related to the activities of living things. After all, any very early life in the universe would have already experienced 8 billion years of evolutionary time by the time expansion began to accelerate. It's a stretch, but maybe there's something about life itself that affects the cosmos, or maybe those well-evolved denizens decided to tinker with the expansion.

There are even possible motivations for that action. Life absorbs low-entropy energy (such as visible light from the sun), does useful work with that energy, and dumps higher-entropy energy back into the universe as waste heat. But if the surrounding universe ever got too warm—too filled with thermal refuse—things would stagnate. Luckily we live in an expanding and constantly cooling cosmos. What better long-term investment by some hypothetical life 5 billion years ago than to get the universe to cool even faster? To be sure, it may come to rue its decision: Hundreds of billions of years later the accelerating expansion would dilute matter so quickly that civilizations would run out of fresh sources of energy. Also, an accelerating universe does not cool forever, but eventually approaches a floor in temperature.

One idea for the mechanism of an accelerating cosmic expansion is called quintessence, a relative of the Higgs field that permeates the cosmos. Perhaps some clever life 5 billion years ago figured out how to activate that field. How? Beats me, but it's a thought-provoking idea, and it echoes some of the thinking of cosmologist Freeman Dyson's famous 1979 paper "Time Without End," where he looked at life's ability in the far, far future to act on an astrophysical scale.

Once we start proposing that life could be part of the solution to cosmic mysteries, there's no end to the fun possibilities. Although dark-matter life is a pretty exotic idea, it's still conceivable that we might recognize what it is, even capturing it in our labs one day (or being captured by it). We can take a tumble down a different rabbit hole by considering that we don't recognize advanced life because it forms an integral and unsuspicious part of what we've considered to be the natural world.

Life's desire to avoid trouble points to some options. If it has a choice, life always looks for ways to lower its existential risk. You don't build your nest on the weakest branch or produce trillions of single-celled clones unless you build in some variation and backup.

Maybe there's something about life itself that affects the cosmos.

A species can mitigate risk by spreading, decentralizing, and seeding as much real estate as possible. In this context, hyper-advanced life is going to look for ways to get rid of physical locality and to maximize redundancy and flexibility. The quantum realm offers good options. The cosmos is already packed with electromagnetic energy. Today, at any instant, about 400 photons of cosmic microwave radiation are streaming through any cubic centimeter of free space. They collectively have less energy than ordinary particles such as protons and electrons, but vastly outnumber them. That's a lot of potential data carriers. Furthermore, we could imagine that these photons are cleverly quantum-mechanically entangled to help with error control.

By storing its essential data in photons, life could give itself a distributed backup system. And it could go further, manipulating new photons emitted by stars to dictate how they interact with matter. Fronts of electromagnetic radiation could be reaching across the cosmos to set in motion chains of interstellar or planetary chemistry with exquisite timing, exploiting wave interference and excitation energies in atoms and molecules. The science-fiction writer Stanisław Lem put forward a similar idea, involving neutrinos rather than photons, in the novel *His Master's Voice*.

That's one way that life could disappear into ordinary physics. But even these ideas skirt the most disquieting extrapolations.

Toward the end of Carl Sagan's 1985 science-fiction novel *Contact*, the protagonist follows the suggestion of an extraterrestrial to study transcendental numbers. After computing to 10^{20} places, she finds a clearly artificial message embedded in the digits of this fundamental number. In other words, part of the fabric of the universe is a product of intelligence or is perhaps even life itself.

It's a great mind-bending twist for a book. Perhaps hyper-advanced life isn't just external. Perhaps it's already all around. It is embedded in what we perceive to be physics itself, from the root behavior of particles and fields to the phenomena of complexity and emergence.

In other words, life might not just be in the equations. It might *be* the equations.[43]

Caleb Scharf is an astrophysicist, the Director of Astrobiology at Columbia University in New York, and a founder of yhousenyc.org, an institute that studies human and machine consciousness. His latest book is The Copernicus Complex: Our Cosmic Significance in a Universe of Planets and Probabilities.

[43] http://nautil.us/issue/42/fakes/is-physical-law-an-alien-intelligence This article was originally published on *Nautilus Cosmos*, in November 2016.

