THE BUBBLE VERSE

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I was 11 years old. For Episcopal Church confirmation classes, I was told to read the Bible, so I started with Genesis. "In the beginning God created the heavens and the earth," Genesis 1:1. One day, while hoeing weeds in the garden, I stopped, looked up at the hill behind the house – long yellow grass against a bright blue sky – and asked this question:

"If there was absolutely nothing in the beginning, nothing at all, where did God come from? How can something come from absolutely nothing?"

It might be that even God does not know. That he just was and is and always will be.

I have always wondered about things, where they come from, how they work, what things mean. So, let me talk a little about the size and nature of the universe God has laid out for us to experience and enjoy.

The Bible does not exactly tell us what came *before* this universe, but we assume God dwelt in a spiritual realm already and sort of added our physical universe. This idea is inferred because God is there now and talks about having created everything here. The spiritual seems to exist either parallel to, within, or contingent to our universe. (contingent – occurring or existing only if certain circumstances are the case; depending on something else; something that could have not existed, but does exist).

But does the spiritual universe exist inside something else or parallel to something else? We can't know – at this time. God could have been somewhere else originally, and created the spiritual realm, from which he then created our physical realm. It seems there was a previous creation of the spiritual dimension and the race of angels (because they rejoiced at the creation of our physical universe—Job 38:7), implying that God was even before that realm. I mean, where did God come from, if not another place, or object—before the spiritual—a first verse of a multiverse series of creations? Although we may begin to roughly grasp where God might have come from, we will not know how until he tells us. Hopefully, at that time we will understand the answer. (object – a phenomenon perceived by senses, by a mind).

THIS IS WHAT I STARTED WITH

Many people assume the Bible begins with the creation event itself: "Let there be light!" (Gen 1:3), but it does not—note: it is chapter one, verse 3. The first two verses of the first chapter of Genesis start with a fairly odd, general description.

"In the beginning God created the heavens and the earth. Now the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of God was hovering over the waters" (Gen 1:1-2).

What is going on here? Is this an overview or summarizing statement? Or is God telling us that the earth was a lifeless water or ice world made before absolutely anything else in our universe—before moons, planets, stars, and galaxies? I do not think either idea is accurate.

If you were a storyteller sitting around the campfire thousands of years ago and wanted to set the stage for an astounding and extraordinary event and your audience was mostly unlearned folk, you would need to keep the explanations and descriptions fairly simple and mostly understandable, at least as much as possible. When the first two verses mention heavens, earth, darkness, deep, and waters, I wonder what else is going on. I am thinking about the earliest possible creation episode, couched in the simplest possible terminology. In other words, in the first two verses, God seems to be telling us, "This is what I started with."

THE BUBBLEVERSE

Based on what I read in Genesis, I have always believed the universe was a bubble, mainly because I cannot imagine a universe without a boundary—just endless, openness with no boundary. Then you can imagine my surprise when I found a scientific paper supporting what I had only imagined.¹

The Bubble is a perfect expression of creation in its simplicity purity of form. I am also thinking of the perfectly round pearl gates of the New Jerusalem. The idea of a Bubble also implies that creation is three-dimensional, while the Bubble's interior would have four-dimensional properties in relation to space-time events and objects—think of the movie *Interstellar* and the black hole event horizon. We can also surmise 4th dimensional space outside the Bubble, but we cannot know or measure something like that at this time.

Flat and infinite or round and infinite? It's about math and perspective.

Someone wrote that Einstein thought the universe was a bubble (a closed system), but that we lived on the surface. I could not find that quote, but I could imagine him saying that. Other scientists have speculated that if the universe is a bubble, that would indicate a closed system but we can't see the curvature and so doubt the very idea. I think the problem is not in the measurements, but rather the perspective. Imagine the fish in the aquarium trying to measure the room outside using radiation results (Cosmic Background Radiation, Dark Energy, Normal Baryonic Matter) and come up with varying results, which, at times, seem to contradict observations and the math and even each other.

But think about this: If the furthest light we can gather is about 14 billion years *in every direction*, wouldn't that indicate a bubble?

GENESIS

I believe the word *heavens*—the first object mentioned—speaks to the expanse of the Bubble, and is plural because it describes the stellar universe, "stars of the heavens" (Deuteronomy 10:22), and the idea of the parallel spiritual dimension at the same time—the third heaven of the scriptures (2 Cor 12:2 - the first heaven our atmosphere, the second being outer space, the third the spiritual realm). The idea of space.

The Hebrew word for earth is *erets* and means dirt, dust, ground—rocks, and by extension land and countries. So, it would be safe to say the word *earth* speaks to basic matter, all elements—not yet formed into anything—which are described as formless, void, empty, yet absolutely essential. The Hebrew word for formless—without form—is *tohu* and has also been translated as chaos and confusion. You cannot really say there is a planet present at this point in the story. The raw materials of *earth* are there, perhaps in a roiling round-shaped soup but with no sense of the size, before a Guiding Hand shapes and molds all of this matter into the desired form, order and harmony. The idea of matter.

The Hebrew translation says, "Darkness on the face of the deep." The Hebrew word for on is often translated in Bibles as over, covered, upon or above. Interestingly, this word has also been used as against or opposed. This led me to wonder if darkness was more than just darkness, or God's way of describing the presence of anti-matter and dark matter—against or opposed to matter—earth. Anti-matter and dark matter are not the same thing but necessary in the creation event and subsequent outcome. The idea of anti-matter.

"...on the face of the deep." Deep can be translated as void, referring to a great empty place, the potential depths of creation, untapped, unrealized, essentially an empty, hallow Bubble—or just the "face" of the Bubble (as Einstein postulated), before it is anything. In fact, the Hebrew word pawneem, often translated as face, could be mouth, or presence of the before—a cryptic description. At this point in the story, the mouth of the Bubble could be flat. I am thinking of a wand dipped into the soap. The soap is flat on the wand until you blow and form the Bubble. Deep sounds like an entity—perhaps electrons, which seems rather odd, unless it is a reference to the Bubble's nature—the potential state of things once the creation event starts; at the same time, the idea of surface tension in equilibrium in this pre-creation moment. The idea of tension and expectation.

The Spirit—in Hebrew the RUAH or Breath of God (another reference to the soap bubble idea: blowing)—hovers over the waters, but scholars have translated it as brooding over the waters. This gives the scene a sense of expectation—appropriately, birth in waiting in or before the Bubble. The RUAH is the hen brooding over creation, incubating her eggs, protecting them with her presence and warmth. Worrying over them. Pondering. But I also think of RUAH as the energy aspect and essence of the triune God—potential energy: In this case building up in zero entropy space. "...and the Spirit of God was hovering over the waters." God could not tell his readers that he started with oxygen and hydrogen, so what does he say? Water can be broken down into the basic elements of hydrogen and oxygen, which are key to the creation process. What will the RUAH Spirit and energy of God do with the hydrogen and oxygen? Simple: CREATE STARS. Nuclear fusion powers stars when hydrogen turns into helium, giving us LIGHT, and stars create heavy elements (metals, nonmetals, semimetals), which become planets. The idea of potential energy.

The stage is set with the necessary materials to begin creation.

Darkness is in place over the Deep—in front of, before, the Bubble. RUAH broods until given the Word to Act. Then, the RUAH—Breath of God, through the Son of God, SPEAKS a WORD of intense and incredible energy into this perfect mix of preeminent energies and ideas, and creation begins. From the flat plane in tension, the Bubble forms, expanding outward.

"In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made" John 1:1-3.

God Breaths—speaks—the WORD, "LIGHT!"

An extreme excitation of resting and potential energy is released. Gravitational and kinetic energy are borne in the outward motion, following the LIGHT—energy, mass, momentum—from a zero energy balance and entropy to a higher entropy state. And the essential elements scatter forward as the Bubble expands. Not at the speed of light, rather each star purposefully positioned with the intent and speed of God's mind. Enter velocity and gravity—mass as an expression of energy, including all forms of electromagnetic energy. Flowing, spinning, singing outward, probably from a galactic center: Imagine sound emanating from a tuning fork in 3-dimensional representation: this powerful sacred sound flowing outward, everywhere. And sound brings the idea of perfect cosmic music, all parts, even what appears to be empty, vibrating, resonating God's music—God's mind. A vibration that continues to this day as the signature of this holy work, even where there appears to be nothing at all.

The power present in this creation event, flowing from the RUAH, is beyond imagination. Look what happens when we split one atom—cities disappear. This power flows outward and begins to interact with its new environment: Building blocks building, coursing through the universe—and our bodies—basic photons and gluons, antimatter, dark matter, elements of earth, hydrogen, oxygen, electrons.

The Apostle Paul knew something about this: "He is before all things, and in him all things hold together" (Col 1:17). God is Creator, and that means these substances and materials, these intricate parts of the creation event down to the level of gluons are God himself—at the elemental level—concentrated, unimaginable raw, vibrating power. To me, that almost sounds scary. The righteous fear of the Lord might be a smart idea. "Fear of the LORD is the beginning of knowledge" (Proverbs 1:7). "Let all the earth fear the LORD" (Psalm 33:8).

"According to quantum physics, no space is truly empty. 'It is a scientific fact that the space between things is anything but empty. It is full of living, pulsating essence that is so new that scientists have yet to agree on a single term. Some are calling it the *Quantum Hologram*, a very technical sounding name. Dr. Edgar Mitchell, a former Apollo astronaut, calls in *Nature's Mind*. Stephan Hawking called it *The Mind of God*. Others simply call it, *The Field*. In 1944, the father of quantum physics, Max Planck, identified the existence of this field and called it, *The Matrix*.

He said, "Underlying everything that we see, our bodies included, there is the existence of what must be a conscious and intelligent mind." Computer simulation of the Heisenberg Uncertainty Principle, which means that even in a vacuum, the Field is constantly moving (Quantum Vacuum Fluctuations), which means that in a vacuum--empty space, where there is absolutely nothing, the Field is constantly moving, bubbling, fluctuating within the quantum realm" (Dr. Jay Lombard, *The Mind of God: Neuroscience, Faith, and a Search for the Soul*, June 2017).

Can you imagine, a God WHO IS every element in the universe, aware of every element in the universe—every part of his self, so that he even knows how many hairs are on your head at any given moment? That God would even take the time to consider such a mundane subject as my receding hairline. "And even the very hairs on your head are numbered" (Matt 10:30; Luke 12:7).

A God WHO IS can say I AM.

The power of a single atom amazes us, but the sheer computational power of God is also beyond anything we can grasp or comprehend, even allowing us to have free will without compromising his predestined plans and eternal purposes. Which means God gives us a sense of ownership—and actual ownership—in the process, and the outcome. Yes, there is predestination, but our choices still matter. He tells us that over and over in the Bible. "Choose this day whom you will serve!" (Joshua 24:15; 1 Kings 18:21).

Is THIS GOD big enough for you?

A creation event takes place in Genesis, and God is intricately and intimately involved. Still is.

Steven Weinberg said, "The more the universe seems comprehensible, the more it also seems pointless."²

I thought about Steven's statement a long time. Part of the answer to his dilemma is our basic need to find and know this Creator God personally, to experience his love and then know he exists. I say this because God wants us to know his heart and mind...to understand at an intimate and personal level what David meant when he said, "even when I go through tough times, you are with me" (Ps 23:4, my translation).

The other part to Steven's statement takes us to the standoff between science and faith, and the need to find empirical evidence of God's fingerprints in creation—all of creation, from the micro to the macro level, in how the universe works. I do not believe it is important to find a unifying theory for science and theology; we may not find commonality between the natural and supernatural. Scientists will study the natural universe and theologians will study God. What I hope is that we will talk about the scientifically discoverable laws and processes that govern our world and the universe, and from the theological perspective find understanding, meaning, and purpose.

In other words, we are studying the same thing, just from different perspectives, and both of those perspectives are important and valuable.

Saint Athanasius wrote, "He provided the works of creation also as a means by which the Maker might be known—Thus lay open to them, by which they might obtain the knowledge of God. They could look up into the immensity of heaven, and by pondering the harmony of creation come to know its Ruler, the Word of the Father, whose all-ruling providence makes known the Father to all."

The bottom line: God is discoverable. He wants to be discovered. He helps us learn about him by leaving clues to be searched out and discovered. Are you a king?

"It is the glory of God to conceal a matter; but the honor of kings to search it out," Proverbs 25:2.

A BIG BANG

It has been theorized that from any point in the universe, the universe will appear to be moving away from the observer. In that regard, the observable edge of the universe, at almost 14 billion light years away, may only reflect the limitations of our light gathering optics and nothing more. But Edwin Hubble's observations of the stars led him to postulate that they were moving away from us—our planet—expanding outward. Astronomers and physicists took this idea—working backwards—and theorized an explosive causal and first event—a big bang.

But based on my study of Genesis 1:1-2, it seems like a *gentle* expression of creation was at work. No less powerful, by any means, but with stars spreading across the universe by the Breathed Word of God—the Trinitarian concept of RUAH, WORD, GOD—Elohim. Instead of a massive explosion emanating outward as a random, violent event, we find a high-energy scattering and expansion, seeds thrown purposefully, deliberately, and consciously from the Sower's Hand—energy creating and interacting with the basic building blocks, and the creation of NOW. TIME starts at a given point and cosmic time moves outward with gravitational energy and the energy of motion and the energy of Being.

From this primal beginning, God created Light—and by extension, matter. Stars were born, lived, died, exploded, and reformed. As the stars reconstituted, basic elements in orbit coalesced into planets and the building blocks of life. WE WERE CREATED. So, it would be safe to say we are made from stars. The First Breathing created stars and what became the dust of the ground, and a Second Breathing gave life to the first human. "And the LORD formed man of the dust of the ground, and breathed into his nostrils the breath of life and man became a living soul" (Gen 2:7, KJV).

BLACK HOLES AND COSMIC RESPIRATION

In college biology we had to memorize and draw human cell and plant cell respiration. We learned that all life breathes in one fashion or another, which made me wonder if the universe breathes. Imagine galaxies circling inside the universal bubble while exhibiting a 3-dimensional (possibly also a 4-dimensional) expansion, contraction, expansion, contraction model. God

breathed into us and we began to breathe. Would it surprise you to learn that God breathed the universe into existence and it continues to breathe also?

Think about it: If the universe is *alive*—a living musical composition from and in the Mind of God, then you would expect a type of respiration and metabolism, an exchange of gasses and material, to be ongoing. This would keep the universe "young" and dynamic, creating new stars from old, and it might explain the purpose of such things as black holes, shuffling material from one part of the universe to another, perhaps from an area where it is needed less, to an area where it is needed more—naturally. In this light, pun intended, the universal bubble might still be expanding until it reaches what God intends as the perfect size. Then again, it may be the perfect size already, and we should just enjoy it.

ROTATION

From that causal beginning and into the present, nearly all objects rotate—the sun, planets, moons, stars, and galaxies. Stars rotate around the galactic center, and the galaxies probably rotate around the cosmic center of the Bubble. The farthest objects appear to be moving away, when in fact they might also be moving sideways or even away from each other in relation to our own position and movement around our galaxy, and the Milky Way galaxy's own movement and rotation in the universe. If the furthest light we can observe has traveled almost 14 billion light years, we could assume some kind of sidereal movement impacting the photons across that distance and time, while allowing for other influences, like variations of gravity.

I AM COSMOLOGY and so are you

The name of God—I AM, is God saying I EXIST or I AM EXISTENCE, also understood as NOW. I AM—NOW. As the author of creation and the very substance of the creation event, he is the TIMELESS. In this respect, time moves in both directions for God. God can say I AM the Alpha and the Omega—the Beginning and the End (Rev 1:8, 22:13), seeing the end from the beginning (Isaiah 46:9-10), linking and holding everything together—timelessly. In this sense, God is saying I AM the Universe. The name he gave Moses, I AM, is most appropriate (Exodus 3:14). He can say, "Because I AM, YOU ARE—all things ARE, existing in the NOW."

JUST MIRACLES

In a 2008 *Discovery Magazine* article, Adam Frank said, "It is almost as if our universe were fine-tuned to start out far from equilibrium so it could possess an arrow of time. But to a physicist, invoking fine-tuning is akin to saying 'a miracle occurred.' For Carroll (Sean Carroll—theoretical physicist at Caltech), the challenge was finding a process that would explain the universe's low entropy naturally, without any appeal to incredible coincidence or (worse) to a miracle."

Let me suggest that from our perspective, just about anything God does would be a miracle. But perhaps less mysterious when we learn and understand the physics of what took place, and is taking place—how it works, and the impact on our world and us personally.

US PERSONALLY

"So God created mankind in his own image, in the image of God he created them; male and female he created them," Genesis 1:27. The bible explains that God created us "in his image." What does that mean? Physical form—with a head, arms and legs? Partly. Jesus tells us that we are also spiritual creatures.

"God is spirit, and his worshipers must worship in the Spirit and in truth," John 4:24. We are created in God's image, so we are also spirit creatures. Perhaps that is more important than just the physical aspect.

Pierre Teilhard de Chardin said, "We are not human beings having a spiritual experience; we are spiritual beings having a human experience."

Because we were purposefully created in God's image, we are meant to bridge the gap between the physical and spiritual universe with our existence here temporary and our existence there eternal—like him. This is important in relation to the ongoing war, which is waged in both the physical and spiritual worlds.

So you are a soldier. You were drafted at birth. Are you aware of your role in this ongoing battle? Do you care? If you are a soldier, what is your role? How do you find out? Let me encourage you to read the New Testament, because Jesus and the Apostles explain what is required and how to live in this world at war. Start with the four gospels and read then until you understand who Jesus is and his importance in this war—as our commander. And find a church that teaches the bible, because a good church is the soldier's training ground for success in battle.

For more on this whole 'soldier' idea, see my essay, The War.

Why was our universe created in the first place? See my piece, The War.

¹ Tuomo Suntola, "The Dynamic Universe - space as a spherical closed energy system," International Journal of Astrophysics and Space Science 2, no. 6-1 (2014): 66-85.

² Steven Weinberg, *The First Three Minutes - A Modern View of the Origin of the Universe* (New York: Basic Books, 1977), 154 - winner of the Nobel Prize in Physics 1979.

³ St Athanasius of Alexandria 296-373AD, *The Incarnation and the Word of God*, 3:12.

⁴ Adam Frank, "3 Theories That Might Blow Up the Big Bang," DiscoverMagazine.com (April 2008): http://discovermagazine.com/2008/apr/25-3-theories-that-might-blow-up-the-big-bang.