2

Hayah - Existence

The Big Bang...

The second sentence of the Towrah is even more enlightening than the first – especially scientifically. After introducing the concept of "bara' – creation," Yahowah said...

"And (wa – then) the material realm (ha 'erets – the physical world and the natural substance of which the universe is comprised, that which is perceived to be solid) existed (hayah – came to be and was (qal perfect – actually for a finite period of time existed)) formless, without shape (tohuw – lacking organization, in a state of lifeless confusion, as something which would dissipate into nothingness without additional energy), an orderless, chaotic, and empty space (wa bohuw – a randomized void, a deserted and unoccupied place, desolate of life), dark, hidden, obscure, and unknowable (wa choshek – a dark matter, incomprehensible and indecipherable, appearing confusing and black, incapable of being perceived or seen) in proximity to ('al – along with, upon, and near the spatial position of) the presence (paneh – the face and appearance of the visible aspects) of the vast, inexhaustible power and inaccessible, mysterious energy of the big bang (tahowm – of the great commotion from the agitated and loud, enormous and yet controlled explosion, with wave following wave without intermission)." (Bare'syth / In the Beginning / Genesis 1:2 (in part))

Dissecting God's message, we learn that without light, without Yahowah who is Light, *the* universe, as well as *our* existence, is "*tohuw*, *bohuw* and *choshek* – lifeless, orderless, and dark." *Tohuw* is "formless confusion, lifelessness and nothingness." It is "chaos which would dissipate into nothingness without energy and intervention." Symbolically, it represents the "idolatry of worthless worship that emanates from false testimony."

Bohuw depicts "a lack of order," of something that appears "random and chaotic." It is descriptive of "an unoccupied place, desolate of life within an empty void."

To be *choshek* is to be "obscured in darkness." It, therefore, speaks of "dark matter," of that which is "hidden and obscure," even "unknowable and incomprehensible." It is so "obscure, it appears indecipherable, absolutely incapable of being seen or perceived."

This was all "'al paneh – in proximity to the presence" of "tahowm – the vast, inexhaustible power and inaccessible, mysterious energy of the big bang." Tahowm speaks of the "great commotion of the agitated and loud, enormous and yet controlled explosion, with wave following wave of light and radiant energy without intermission." Tahowm is also the "deep, dark, inaccessible, and inexhaustible place of separation" created for the eternal sorrow of Satan, his fellow demons, and those who league with them. This is a rather profound Spiritual insight.

There are clearly several scientific revelations here. The first comes from the realization that matter is actually nothing more than organized energy. Therefore, the first of four words describing the creative process depicts an energetic state where matter has not yet formed. It is "tohuw –

lacking organization, formless, and without shape." The transition to matter occurred when the energy emitted to cause the Big Bang cooled sufficiently for quarks to be confined. It was only then that time began to flow. *Tohuw* is, therefore, the perfect word to initiate the process.

By following "ha 'erets – the physical and material realm composed of the natural substance of which the universe is comprised, and that which is perceived to be solid," the juxtaposition of "tohuw – lacking organization" serves to affirm both their definitions and the science behind them. It leads us to the conclusion that matter does not exist until energy is properly organized. Further, since the text transitions from formless matter to the existence of enormous energy, we begin to see the connection and relationship between them. Matter is a diminished form of energy.

The temperature at which quarks can be confined, changing energy into matter, which is the starting point of time, is the subject of considerable speculation with significant implications regarding the age of the universe. Physicists modeling creation in reverse have calculated that quarks and their particle pals, gluons, can break free from their confinement inside protons and neutrons at 2,000,000,000,000 Kelvin. And while physicists extrapolated from this data that the Big Bang's initial temperature had to be in the range of two-trillion Kelvin, scientists have shown through experimentation that free quarks can exist in gluon plasma at seven- to ten-trillion degrees Fahrenheit (4 to 6 trillion Celsius / Kelvin) which is 300,000 times hotter than the center of the sun – and two to three times hotter than the original estimate of the Big Bang.

That is interesting for several reasons. First, "quark soup" is the transitional state between energy and matter in which, at extremely high temperatures and/or density, the nuclei and electrons, confined within atoms by electrostatic forces at ambient conditions, can move freely. That is to say they are "tohuw – formless and unorganized."

Second, once confined, a quark can never actually be liberated and isolated. Their elastic bands break, destroying the quark and replacing it with a new quark-antiquark pair created out of the energy in the field.

And third, if quark confinement occurs at 4 to 6 trillion Kelvin, then the initial temperature of creation was likely two to three times hotter than originally thought, which would make its post-quark confinement age older than the current assessment of 13.8 billion years. This will become especially relevant when we use these findings to prove that six twenty-four-hour days at creation are equivalent to fifteen billion years looking back in time from the Earth.

The Creation account's second descriptive term is equally insightful scientifically. Before energy in the form of light could be introduced, an area had to be created for it to exist. And that space would have to be enormous and expansive. For life to exist, it would have to be three dimensional. For time to manifest itself as Albert Einstein demonstrated, the "bohuw – empty space" would have to be at least four dimensional. (It is likely six, but more on that in a moment.)

The space needed is really big. The universe, by our best estimates, is ninety-three billion light-years across, and it is expanding into this "bohuw – void" faster than the speed of light, traveling at three hundred million meters per second (precisely 299,792,458 m/s).

When I first wrote this chapter, I noted, but did not discuss a fascinating aspect of *bohuw*: chaos. I sidestepped it because its implications seemed contrary to my perception of the multivariable equation God had to solve to know just how much energy He had to introduce to derive the desired result. There was nothing in my mind "*bohuw* – random" about this calculation. With math, no matter how complex, there is an answer.

But not this time. There could not be. Without chaos the entire experiment would have been a colossal waste of time and energy (literally). Had Yahowah known the outcome, had God calculated the result He desired, everything would have been predictable and freewill would have been for naught.

Enter *Bohuw* | Chaos Theory, an interdisciplinary postulate stating: within the apparent randomness of chaotic complex systems, there are underlying patterns, interconnectedness, constant feedback loops, repetition, similarities, connections, and commonality manifesting self-organization. With the apparent randomness of chaos there could be freewill and individual determination. With the underlying patterns and interconnectedness, it would allow billions of approaches to the same path, thereby making our lives unique, individual, and interesting.

God could be consistent without being boring. We could come together in the desired fashion, but as a result of our choices. It would be entertaining, amusing and exciting, sometimes wonderful and at other times horrible, to watch. With randomness buffered by the underlying patterns, interconnectedness, and feedback loops, we would be able to observe the similarities, note the organizational structure, and deduce the connections which facilitate understanding and thus think our way to God.

Rather than toss out the notion that Yahowah calculated the right amount of energy to introduce into the proper dimensions of space, the multi-variable equation preceding creation suddenly became more complex to make the result interesting. And what is especially fascinating about all of this is that the postulates which comprise chaos theory actually define the process which leads to understanding. The transition from knowing to comprehending is predicated upon making connections between things and recognizing patterns. Our minds seek similarities to file information in the proper place such that it can be retrieved and used appropriately to guide future responses. And it is by repetition that we learn.

Supporting this view, *Bohuw* | Chaos Theory is a branch of mathematics which studies probable outcomes. This statistical analysis of probabilities underpins logical thinking, thus allowing us to use reason to transition from observations to comprehension. We have discovered that apparent disorder is actually governed by deterministic and universal laws of nature and physics which were designed into the initial conditions. And yet there is still the possibility of the "Butterfly Effect," whereby a small change in one place and time can result in large differences elsewhere, even in a different period or place. As a result, Chaos Theory is used to predict and understand weather and climate change, the stock market, transportation and logistics, the recurrence of patterns of behavior on a national and global scale, artificial intelligence, engineering, economics, anthropology, and pandemic crisis management.

Turning our attention to the third scientific revelation, *choshek* is as descriptive of "dark matter" as is possible within the Hebrew lexicon. Back in 1933, astronomer Fritz Zwicky was the first to discover what scientists now call dark matter. We don't actually know anything about this phenomenon other than its existence and effect. *Choshek* is "obscure and hidden." It is "unknowable and incomprehensible," which is why it is called "dark." Its nature exceeds our capacity to understand, just as a being in two-dimensional flatland would be unable to perceive the infinite expansion and opportunity a third dimension would provide.

Choshek | Dark Matter is attractive in nature, which is why it is described as "matter." Its influence is so prevalent, it represents 27% of the substance of the universe Yahowah created, which is six times greater than the total value of everything we can currently perceive. So if you

have been led to believe that science holds the answers and that God requires faith to believe, you may want to table that thought for a moment.

Yahowah said that "choshek – dark matter, that which is hidden and obscure, unknowable and incomprehensible, indeed, indecipherable, appearing confusing and black and incapable of being perceived or seen" was "'al paneh – in proximity to the spatial position of the presence and appearance of aspects" of "tahowm – the vast, inexhaustible power and inaccessible, mysterious energy of the big bang." Thereupon, we are introduced to dark energy as well as to Yahowah's sense of humor.

Tahowm | Dark Energy is repulsive in nature, exceedingly powerful and prevalent. Representing a staggering 68 to 70% of the universe, it counters the effect of gravity and not only keeps the cosmos from imploding, and collapsing upon itself, it is the reason behind its unfathomable expansion. Without it, for example, the furthest any form of energy, not matter, could have traveled from the epicenter of the Big Bang some 15 billion years ago would be 15 billion light-years. Assuming that it was random, as astronomers suggest, we would expect to find a spherical universe 30 billion light-years across. And yet within the four dimensions of spacetime that we comprehend, the cosmos is flat and over three times that size.

Tahowm is derived from huwm, meaning "great movement and noise." Its most fitting definition would be "an enormous explosion, the great commotion from the agitated and loud, massive and yet controlled outburst, with wave following wave of light and radiant energy without intermission," also known as "the big bang." This means that Yahowah coined the term Tahowm | Big Bang a few thousand years before the sponsors of mankind's most acclaimed alternative to Bare'syth / In the Beginning / Genesis One plagiarized Him. Methinks God is demonstrating a sense of humor.

And yet, this is no laughing matter. If you are being reasonable, Yahowah has already garnered your undivided attention. You have surmised that Moseh, the aforementioned stuttering sheepherder, didn't pull the concepts of *tohuw* | formless, *bohuw* | chaos theory, *choshek* | dark matter, and *tahowm* | dark energy and big bang out of the thin desert air atop Mount Choreb. How you respond to this newfound knowledge and understanding is between you and your Maker.

Most people are aware of the Big Bang Theory – or at least the popular sitcom based upon the lives of four Caltech nerds which capitalizes upon its nomenclature. It is a proposition in which the universe is said to have started out a hundred billion times smaller than a photon of light. How one would get that much energy into that small a space is worth pondering, but so is how it got there and who created the space in which it would expand?

It should be noted that according to MIT's 2002 Physics Annual: "the theory doesn't explain the big bang but instead its aftermath – that period of time in which the universe expanded and cooled. The theory says nothing about the underlying physics of the primordial explosion and provides no clues about when the bang occurred, what caused it to bang, or what happened before it banged.... The explosion theory gives no explanation for the razor-sharp fine-tuning of the universe...and thus does not describe a universe that resembles the one in which we live."

Now that is the kind of honesty they don't typically teach in schools or reveal in the media. That which is purported to be science, and thus is assumed to be testable, even taught as fact, isn't either. And by comparison, Yahowah's testimony is both factual and testable.

The simple truth is: scientists still have more questions than answers and even their

conclusions are constantly changing. But do not accept my testimony on this, consider P.J.E. Peebles' conclusion. He is the acknowledged leader in the field of universal beginnings, professor of Cosmology at Princeton University:

"Cosmology – the study of the beginnings, formation, and evolution of our Universe – is currently in a badly confused state. At the moment, scientists don't know what makes up 99% [more accurately, 96.5%] of the Universe. This, needless to say, is a rather embarrassing situation. Although much of what is visible in the Universe is becoming comprehensible, with great recent strides in understanding star formation, galactic structure, and spectacular events such as supernovae, it would appear that there is another component of the universe – possibly making up most of its mass – which we cannot see, and we do not understand."

If I may beg your indulgence for a moment. At the mention of Fritz Zwicky and Caltech, there is something you ought to know – something that Yahowah is surely aware. Fritz Zwicky was likely Jewish on his father's side. In 1925, when the controversial Nobel Laureate, Robert Millikan, recruited Fritz Zwicky from Switzerland, it was out of character because he and the institution were anti-Semitic. Caltech had their token Jew, German physicist, Paul Epstein. He did not think that the scientific institution would tolerate another Jewish faculty member because they were dependent upon the Christian, Anglo-Saxon population of Southern California for financial support. Although, there was that other Jew, where fame trumped racism, because Albert Einstein was invited to serve as a visiting professor from 1930 to 1932.

Speaking of Robert Millikan, while he was the first Caltech professor to win a Nobel Prize, it was not because of his judgment or character. Millikan led an organization that advocated forced sterilization of people with disabilities and actively supported Nazi Germany's 1933 forced sterilization laws. Millikan served on the Board of the Human Betterment Foundation, also on the Pasadena, California campus of Caltech. They promoted compulsory sterilization as "the greatest advancement in modern civilization" through "race betterment by eugenic sterilization."

Millikan has recently been charged with "crimes against humanity." A petition to have his name removed from the Caltech campus reads: "It is unconscionable and un-American to place anyone in a position of reverence who was in any way involved in the forced sterilization of African American servicemen and women. The Human Betterment Foundation, housed at Pasadena's California Institute of Technology, played a role in developing the Nuremberg Laws and provided the intellectual underpinning for the extermination of Jews." The Neighborhood Unitarian Universalist Church in Pasadena, which Millikan founded and was a lifelong member, removed his name from the plaques honoring him in 2019.

As for Fritz Zwicky, he was brilliant, but not particularly moral. In 1971 he self-published a 23-page rant designed to settle scores with his colleagues. He would brand them: "scatterbrains," "sycophants and plain thieves" who "have no love for any of the lone wolves who are not fawners and apple polishers," who "doctor their observational data to hide their shortcomings and to make the majority of the astronomers accept and believe in some of their most prejudicial and erroneous presentations and interpretations of facts," and who therefore publish "useless trash in the bulging astronomical journals." They were charmed, I am sure. Or perhaps not. His colleagues regarded him as "an irritating buffoon" who "promoted goofy notions." And speaking of such, his daughter, a born-again Christian, said of dark matter: "I think it's the Lord."

Returning to Someone who does understand, whose judgment and character is impeccable, here is a summation of my translation of Bare'syth 1:2. It reveals that Yahowah was the first to

address the scientific concepts of "chaos theory," "dark matter," "dark energy," and the "big bang."

"The natural and material realm existed formless, without shape or organization, random and chaotic in empty space, dark, hidden, obscure, and unknowable as dark matter, incomprehensible and indecipherable, in proximity to the presence of the vast, inexhaustible power and inaccessible, mysterious dark energy of the big bang." (Bare'syth / In the Beginning / Genesis 1:2)

If the scientific community only knew where to look, long ago they would have come to recognize that God was explaining what happened, defining the very concepts which frame our study of the universe: "Matter Not Yet Organized," "Chaos Theory," "Dark Matter," "Dark Energy, and "Big Bang." These are things which astronomers and physicists are just beginning to ponder.

In these statements, Yahowah is also introducing the concept of relationship and separation. We must choose which side of the divide we want to be on – darkness, confusion, and lifelessness or light, instruction, and life – the family or the void. It should therefore be no surprise then that light, instruction, and life occupy Yahowah's thoughts over the first three days of creation and that on the fourth day He presents the ultimate guide to them.

While we are on the subject of God knowing that which man does not know, of God being light, and of man stumbling in the darkness, the most recent tests conducted by the Wilkinson Microwave Anisotropy Probe satellite experiment has affirmed that indeed, dark energy, a repulsive force completely unknown to man, occupies 68 to as much as 73% of the universe, and dark matter, the attractive effect which is equally mysterious and inaccessible to man, represents 23 to 27% of universal content. Thus our known and testable theories can only account for 4 to 5% of the structure of the cosmos. All we know is that they work together harmoniously such that the universe exists in a manner which is hospitable to life – evidence which suggests intelligent design behind such fine-tuning.

It isn't pertinent to our discussion, but should you be interested, the reason scientists know that a substance they call "Dark Matter" exists is because spiral galaxies are spinning ten times faster than the laws of physics specify based upon the gravitational effect of their observed mass. And the reason we know that something scientists refer to as "Dark Energy" exists is because the universe's expansion is accelerating. If it were not for an unknown source of enormous energy, the cumulative effect of gravity would slow and then contract the universe – the opposite of what we are observing. Further, "dark" is not a pejorative adjective. It simply means that we are unable to see it, much less understand what it is. These things remain a "mystery, unknowable and inaccessible." Also, as we move forward, keep in mind that "matter" is a form of diminished energy. The ability to transition from one to the other will help us understand much of what Yahowah is sharing with us.

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Before we advance further into Yahowah's testimony, let's establish a more complete foundation so that we can better appreciate what God has to say. In that regard, it is important to recognize that *how* God created the universe was well beyond the comprehension of His initial audience. The languages of astronomy, physics and calculus, the matrix of spacetime and

relativity, the equivalency of energy and matter, and the language of life, DNA, would not be understood for another 3,400 years. Without them, the Towrah's purpose for most of its existence was not to explain *how* the universe and life were conceived. Even with these advances, mankind's quest to comprehend our existence remains clouded and unfulfilled. Therefore, for the Creation account to be relevant for all people in all ages, for there to be something all generations could understand and apply regardless of their time or circumstance, there were equally revealing storylines regarding the who and why of our genesis.

Sadly, these themes are not commonly known. And what is even more egregious is that which is taught in schools is often wrong. Fortunately, today we are in a position to appreciate the significance of each message.

For example, in the last thirty years, scientists have discovered that Yahowah was right regarding every important aspect of the beginnings of the universe and of life. The cosmos had a genesis, contrary to what most astronomers believed at the middle part of the 20th century. The universe began with an enormous, practically infinite, concentration of energy in a singular place and time, a big bang, consistent with Yahowah's declaration and terminology. Light was in fact the first thing to exist. This energy would eventually coalesce to form matter. We even find that the universe is stretched out and consists of spacetime, again harmonious with Yahowah's accounting.

Plants preceded animals, and simple forms of life emerged from the sea the moment liquid water existed on the earth, consistent with Yahowah's assertions but not with Darwin's. Plants and animals are both comprised of the elements of the earth and they literally exploded onto the scene in separate eras, in absolute accordance with the Bare'syth testimony.

The fossil evidence confirms that there was no gradual mutation from simple to complex lifeforms nor was there an evolutionary tree between phyla – the basic categories of life. As we shall discover, Yahowah's witness is accurate: representatives of each of the thirty-four animal phylum alive today were present among the fossils of the Cambrian Period. They all came to exist, reproduced after their kind, and flourished in their complex forms within a cosmic nanosecond of less than five million years. Insects and fish, vertebrates and invertebrates, complex bone structures and most sophisticated internal organs, even male and female forms all appeared simultaneously in one enormous explosion of life – precisely as Yahowah described it, and in complete discord with macroevolutionary theory.

In fact, it is macroevolutionary theory which is errant. Not only do harmful mutations (which destroy information) outnumber beneficial ones by a million to one in the genome (genetic structure including chromosomes, genes, and nucleotides), natural selection, acting on the phenome (entire body) rather than genome, is unable to keep pace, meaning that every animal species is irrevocably degenerating over time – not evolving to become more complex organisms. Further, no scientist has been able to demonstrate that any animal gene mutation has actually added a meaningful amount of new information. While some random mutations have been beneficial, they are insignificant in quantity compared to destructive changes, and they are irrelevant in comparison to the vast differences between species. We will return to this subject (which forms the foundation of the scientific mindset and secular humanism) and discuss it in great detail in the "Chay – Life" chapter.

Yahowah's creation account, barring three potential exceptions, is completely consistent with the evidence mankind has most recently discovered. And yet high school and college textbooks still clinging to the notions scientists have since disproved. Science would be advanced in schools if *Bare'syth* / Genesis were understood and taught.

Now do not get me wrong. This will not be a religion versus science debate. I despise the first, because clerics are misguided. And I enjoy the latter, because the evidence scientists discover almost always points to God, confirming His witness. Such is the case regarding our existence. Yahowah's testimony has not changed in 3,450 years. He was right all along, which is not surprising since He was an eyewitness. It is the late 20th century scientists who have come full circle. Based upon the evidence, they now agree with God, although it remains too painful for most of them to admit it. Moreover, their predecessors, the fathers of modern science – Copernicus, Kepler, Galileo, Newton, even Darwin and Einstein – were theists not atheists.

In this light, let's review some scientific highlights that are pertinent to our discussion. We begin by recognizing that without the existence and active engagement of God, or an inconceivably enormous energy system completely unknown to us, the universe could not be expanding at an accelerating pace. Its expansion would slow due to the effect of gravity if there was not an active and enormous source of energy currently at work.

Next we must consider DNA, the double helix computer code of life. This blueprint is a language, and languages require a creator, a beneficiary, and a purpose. No designer, no language – especially one with billions of character combinations providing instructions to trillions of human cells.

Further, the odds of elements unintentionally, inadvertently, and fortuitously engaging in a manner capable of forming life, and doing so with nutrients available, a means to acquire and process a food source, and a means to reproduce itself, all within the ten-to-fifteen-million-year timeframe this actually occurred, is astronomical beyond reason, beyond belief. Statistically, it is less than one chance in ten to the billionth, billionth power. This probability is so ludicrously extreme, the number exceeds the quantity of fundamental molecular particles in the entire universe by a million-billion-fold.

Furthermore, since life existed on earth immediately after liquid water was available, there was no time for random chance in either inception or mutation. Mathematically, biologically, and physically speaking, macroevolution from inorganic matter to complex lifeforms through natural selection rather than intelligent design is so improbable that belief in such a theory ironically requires a blind leap of faith, one that requires ignorance of the evidence and a complete suspension of reason.

Moreover, the universe is clearly built around man in scale, substance, and tuning. It retreats inwardly just as significantly as it expands outwardly. Life requires the specific elements, parameters, and behaviors which resulted from the Big Bang. According to current scientific models, if any one of a thousand physical aspects differed by as little as one part in 10^{120th} power, life could not exist in any form. Therefore, our reality is consistent with God having created the universe for man and inconsistent with random chance.

There are three places where some may envision *Bare'syth* / Genesis to be in conflict with the still touted, yet irrational and unverifiable, theory of non-causal creation and random chance macroevolution. They are as follows:

First, the Towrah speaks of microevolution, of all phyla replicating after their kind. It does not advocate macroevolution, that is of the progression of chemicals to amoebas to humans by

chance. In support of God's position, there is but one transitional body form in the fossil record (archaeopteryx – which is the one that the prophets anticipated us finding, which is a blend between bird and reptile), and there would have to be millions of transitional fossils for macroevolution to be accurate.

Further, the second law of thermodynamics, the notion of entropy, that disorder and randomness evolve in closed systems, or that systems mutate from ordered complexity to confused disarray without outside influence, has always served as macroevolution's death certificate. This law states that information is lost, not gained, in transmitted messages and that there is a universal tendency for all matter and energy to evolve toward an inert and deteriorated state. Animals evolve downward, losing genetic information with time, consistent with the laws of thermodynamics.

The second perceived difference between creation and science is the early timing of water on day one and its emphasis on the second day of *Bare'syth*. But even here, God's testimony is accurate. He is not talking about liquid water on earth but instead interstellar molecular clouds. When we apply the lessons of relativity to creation, day one covers seven to eight billion years from our perspective and the second day, three-and-a-half to four billion years.

Calibrated to the perspective of the witness, the focus on water during these stages is essential. Water is the second most abundant molecule in the universe, ranking only behind molecular hydrogen, H₂. Interstellar clouds are especially loaded with it, and they serve as the maternity wards of the universe where new stars, planets, and comets are born. Moreover, water is the central ingredient in all organic systems, which is why scientists look for it first when searching for extraterrestrial life. Therefore, in *Bare'syth* / Genesis, water takes its rightful and scientifically accurate position related to the beginnings of stars on day one, of our solar system on the second day, and for the emergence of plant life on the third day.

But there is more to it: water plays a crucial role during this period of our spiritual development as well as in man's history. So its inclusion makes perfect sense when the creation account is seen depicting the *why* of creation and the *when* of our salvation, replete with Yahowah's plan of redemption. Water is the Towrah's primary metaphor for the purification of human souls. Moreover, in the second millennium of human history, the waters of the flood were used to purge the region around the Garden of corruption. We will detail how these events relate to the Bare'syth account as the days unfold.

The third perceived conflict between science and the Towrah is the most glaring. If the fourth day were about the creation of the sun and the moon, it is out of place. Vegetation, which is said to have blossomed on the third day, could not have existed without the sun.

However, if as God shall demonstrate, the fourth day is the fourth millennium in the story of man's reconciliation after expulsion from 'Eden, then its "signs, signals, and remembrances" are precisely where they must be – tied directly to the arrival of the Passover Lamb and the fulfillment of the first four Mow'ed Migra'ey in year 4000 Yah (33 CE).

Additionally, God does not say that He *created* the sun, moon, and stars during the fourth day. He said that they would be "signs," and thus would be *visible* at this time.

Scientifically speaking, the Bare'syth testimony is an accurate chronological depiction of what actually occurred. The sun had existed for billions years before the atmospheric debris from the onslaught of volcanic activity and the aftermath of countless asteroid impacts settled sufficiently for the sun to be seen. The dust cleared and plants gradually filtered out the carbon dioxide that

had been spewed into the air, creating and transforming the atmosphere into the oxygen-rich and nearly transparent condition which exists today. The sun and moon could finally be *seen* in the fourth era of universal creation.

Also pertinent, we find in the fossil record that there is a billion-year gap between the "earth bringing forth simple plant life" and the emergence of complex "sea animals which exploded onto the scene," using the parlance of Bare'syth. This gap is acknowledged in God's accounting. Further, having the creation of plant and animal life separated by a cosmological epoch enables Yahowah to devote the fourth day to a different form of life – eternal and spiritual life.

The biggest barrier for most people however, between science and the Towrah, is it's obvious that all of this could not have occurred in six earth days. Unfortunately, most everyone deals with the conundrum by either accepting the impossible as fact or by discrediting the *Bare'syth* / Genesis account, and therefore all of the prophets along with it. Not only are both choices errant, they both lead away from God.

On the subject of a cosmological day, over the course of the first three chapters, we'll reveal how the universe can be both six days and fifteen billion years old – depending upon the perspective of the witness. But for now, appreciate the fact that the best current estimation of cosmological age is between 13.7 to 15 billion years being the most likely range.

There are two primary astronomical methods of measure for universal age, pulsars and redshift, but they both employ a substantial array of unproven and even untestable assumptions. For example, we know that the universe has not been constant, as it is always changing, and consistency is required for either method to render a reasonable result. In addition, both astronomical calculations are forced to speculate regarding the composition of 96% of the universe, rendering our conclusions based upon the observable 4 to 5%.

This known and assumptions aside, man's most enlightened guesstimate, inclusive of studies of carbon dating, star evolution, and nuclear fuel consumption is that the universe was created in a "Big Bang" some 13.7 to 16 billion years ago when energy was first transformed into matter.

The lower end of that range is all too often touted as being factually accurate and confirmed. However, there are three problems with that assessment. First, there is no telling how much time passed for the initial explosion to cool sufficiently for quarks to confine and time to commence. Second, the temperature conducive to the formation of matter, marking the beginning of time, could be as cool as 2 trillion Kelvin or as hot as 6 trillion degrees. Third, the universe is 93 billion light-years in diameter, not 27.4 light-years, and there are stars with apparent ages exceeding 15 billion years.

The initial galactic formation stage lasted just shy of eight billion years. Our planet, orbiting around a second-generation star, was formed just over four billion years ago. The first signs of plant life on Earth manifested themselves shortly thereafter as liquid water formed on the surface. These plants produced oxygen, helping to clear the atmosphere two billion years ago. This provided the catalyst needed for the emergence of more complex and energy-dependent animals one billion years later.

As you may have noticed, these events not only parallel the Bare'syth testimony, they occurred in the same order God specified. Equally important, the duration of each cosmological epoch diminished at the rate of what is known as nature's spiral. Each successive aspect of the spiral is approximately half the size of the one which preceded it.

While it would be too premature at this point to get into a discussion on the longevity of man's time on earth, the evidence indicates that *Homo sapiens* have existed a hundred thousand years or more. In the "'*Eden* – Joy" chapter, we will discuss why this too is completely harmonious with God's testimony.

Since we have broached the subject of "testability," there are two popular and contemporary myths I would like to bust. First, despite secular humanist claims to the contrary, many of the scientific theories taught in schools as "science," which by their definition comprise those things which can be empirically tested, cannot, in fact, be validated. Even worse, many, if not most of man's cosmological, molecular, and biological evolutionary theories are in conflict with the empirical evidence and reason. While we know many things, most of the fundamentals currently escape our grasp.

For example, we don't know how many dimensions actually exist. Some scientists claim two within a holographic construct, the mundane say three, relativists claim four inclusive of time, but the more adventurous string theorists promote seven to ten. Based upon what I've learned over the past twenty years of translation and thought, I think the universe is six dimensional and was created by Yahowah in the seventh dimension.

Mankind does not actually know how many forces are operating within these unknown dimensions. Electricity and magnetism are both forces, but they not only change from one form to another in moving fields, they coexist in light, which is not a force. Gluons are thought to generate the strong nuclear force, holding quarks together, but explanations of how that occurs require untestable String Theory in which the math itself is too complex to formulate or calculate. According to the theory, as many as $10^{60\text{th}}$ colors, or variations, of these invisible rascals are needed to rationalize our reality.

Gravity remains a complete mystery to scientists, with Quantum Theory and Relativity mired in an irresolvable conflict as to what generates its attraction. The first calls it a force but cannot qualify the mechanism and the second says it's an effect. Within this macro realm, ninety percent of the universe's energy cannot be accounted for within the matrix of spacetime or within the assumed construct of three to five fundamental forces. And that means that our understanding of the Big Bang theory, apart from an intelligent designer and instigator, is errant by 96%. Only arrogant fools would postulate a theory as being "true" when it is in fact 96% invalid.

Turning to molecular constructs, there is no assurance that quarks and gluons represent the minutest atomic particles, but only that something smaller in scale eludes our ability to detect it or them. More befuddling still, there is no assurance these or any particles actually exist. The material world could be, and probably is, nothing more than organized manifestations of energy with everything in motion.

On the biological front, every attempt to mathematically demonstrate that life, given enough time, could have emerged by random chance from inorganic matter has failed. The fossil record of the Cambrian period confirms that the two billion years needed for the improbable to become probable has evaporated by at least 99%, thereby rendering man's conclusions errant once again. Further, in the transition from plant to animal life, macroevolutionary theory predicts the opposite of what we have observed. Rather than a single and simple animal body-type gradually coming to exist from which all others were eventually evolved, every animal phyla known today burst onto the scene at the same time.

Without a Creator there is no way to explain the development of life's extraordinarily complex blueprint, the quaternary language of cell communication, DNA. And the simultaneous existence of male and female forms occurring in one species, much less every species, by random chance and evolutionary mutation is absurd. Moreover, even if these things could be miraculously resolved, science still has no concept as to what consciousness is or how it came to exist. Nothing is more fundamental to life.

Therefore, the core building blocks of cosmological, molecular, and biological science remain mysterious and untestable. Scientific assumptions not only have not been proven, they cannot be tested, and those which can be demonstrated have been found to be wrong. And that would explain why secular humanists do not want intelligent design taught in schools. They know that their theories will not stand up to scrutiny. But it begs the question: why are the promoters of the West's liberal and communal religion so arrogant as to say that they are right, and that God is wrong, when the opposite is actually true?

That leads us to the second myth. All of these things, and especially the existence of the male and female form, are explained in *Bare'syth* / Genesis, with God providing His rationale for everything He did. Moreover, the notion that is advanced in popular culture, that the Towrah and Prophets cannot be tested and therefore cannot be taught as science, is not accurate.

Yahowah's Word can be validated. God even told us how to do so in *Dabarym* / Deuteronomy 18: rely on the accuracy of His prophetic predictions. Yahowah inspired men to document His forecast of future history centuries and millennia before the events they foretold occurred. He provided us with tangible evidence of their existence – proof – a paper trail of His prophetic proclamations. We can therefore test His witness against the ledger of history and archeology.

Testing aside, there is another measure of proof. Consider the fact that God's testimony regarding the creation of life and the universe is over 3,450 years old, and yet it is accurate. The scientific assumptions over that period have been reassessed a thousand times, with each new theory repudiating the prior one. The moral of this story is that it is wise to trust someone who has consistently told us the truth.

That said, the universe is not 6,000 years old as the Creationists advocate. When they postulate such nonsense, they embarrass themselves and prevent many from trusting the lone Source that can explain the existence of life but can also provide the means to sustain it. Moreover, they affirm that their god is a deceiver, someone who would make that which is relatively recent appear ancient just to toy with us.

The word for "day" used in Bare'syth is *yowm*. It is based upon an unused root meaning "to be hot." *Yowm* can mean "daytime, an undisclosed period of time, and even a year," or simply "warm." As a day, *yowm* can last from sunrise to sunset, from sunrise to sunrise, or from sunset to sunset, as is Yah's custom. A *yowm* is "a lifetime, an indefinite period in time, a generic temporal reference, today, yesterday, or tomorrow." It is only a twenty-four hour period of time when *yowm* is modified by the definite article or by a cardinal number. In the Towrah, Prophets, and Psalms, *yowm* is translated: "afternoon, age, always, chronicles, continually, daily, day, days, first, forever, life, long, period, time, today, when, year, and years," on multiple occasions.

That said, I have a confession to make. Not long ago I viewed the creation account through this lens. I considered *yowm* to designate a general period of time or an unspecified era. But live and learn: time is not a constant, and like matter, it did not always exist. Time is relative, differing considerably in relation to the velocity, energy, and/or mass of one observer or in proximity of one observer relative to another. At the velocity of light, for example, time seems to stand still as all time exists simultaneously.

As we progress in this study, with the help of physicists, we shall prove scientifically that from Yahowah's vantage point at creation, not only is the universe six twenty-four-hour days old, but that each day uses a natural spiral to lay out a timeline from light to life over the course of nearly 15 billion years looking back in time from our perspective. If proving Yahowah's existence, if validating His testimony, and if coming to know what He is offering and expects in return are of value to you, then you will come to prize this realization due to the implications it will have on your life.

But there is more, because as I have shared, the Bare'syth revelation is three stories in one. In addition to creation, Yahowah is providing us with an accounting of our reconciliation and of human history. Therefore, to appreciate how and when the events unfolded, to understand Yahowah's timeline past and present, we will search the prophets for further elucidation. And for that, there is no better place than the 90th Psalm.

In the 90th Mizmowr, Moseh (commonly known as Moses, meaning: to draw out) provides us with the quantification of the unit of measure Yahowah is using to depict time. But before he gets to it, the great liberator and prophet shares some valuable insights for living that are worth exploring.

If you are checking, the 90th Psalm (actually Mizmowr, meaning "Lyrics to be Sung") would appear to commence with "Lord," regardless of which English bible you are reading. Lord was rendered from the Masoretic substitution of 'adonay for YHWH, pronounced, **Y**·**ah**·ow·ah.

Fortunately, based upon the Septuagint, we know Moseh wrote "\(\mathbb{P}\mathbb{P}\subset - \text{Yahowah."}\) This is one of 132 times that the Masoretes were guilty of making this specific copyedit, purposely changing the Towrah to suit their agenda—which was to keep God's name unknown. On 6,868 other occasions, the rabbinical Masoretes (meaning: those who vocalize) left \(\mathbb{P}\mathbb{P}\subset - \text{Yahowah's}\) name in the text but wrote "'adonay" above it so that whoever read the passage wouldn't commit the religious crime of actually revealing God's personal and proper name.

Then, rather than transliterate (replicating the sound of) the name which actually appeared in the text 7,000 times, consistent with scholarly convention, English translators ignored **Y**--YHWH and translated the rabbinical substitution instead. The combination of these errors has robbed billions of people of a personal relationship with God and has served as a catalyst in the growth of many religions. The systematic removal of Yahowah's name from His Towrah and Prophets may be the greatest crime ever perpetrated against humanity.

The 90th Mizmowr / Song provides additional clues to suggest that Yahowah's creation account is a spiritual guide to the Covenant, a scientific explanation of our existence, and a prophetic history of time all melded together. As such, it is among the most brilliant and inspired treatises ever committed to paper.

"A request and petition (taphilah - a psalm, an earnest plea for favor, a sincere request for intervention and intercession, an assessment that calls for a decision which is morally and justly discerned; from palal - to assess and estimate leading to a favorable reassessment through intervention and pilel - to decide and then settle an affair, reconciling a relationship) of (la - by, concerning, and on behalf of) Moseh (Moseh - the one who draws out (errantly transliterated from the Greek as Moses)), a man ('iysh - male individual) of the Almighty (ha 'elohym - of God):

Yahowah (१९९४) – the pronunciation of YaHoWaH as guided by His towrah – teaching regarding His hayah – existence), You ('atah) have been (hayah – have existed as (qal perfect – genuinely for this finite period of time)) concerned about being our (la 'anahnuw – near us, approaching us regarding our) helper, provision, and support (ma'own – refuge and dwelling, habitation and home; from 'ownah – to cohabitate as if married) throughout (ba – in, among, and with) time and generations (dowr wa dowr – for the entire household and family, including everyone surrounding the encampment and dwelling place for all those who are related by birth, including every successive lifetime and place of habitation)." (Mizmowr / Song / Psalm 90:1)

Hayah, translated "have been," is the second most prevalent word in Bare'syth one. In *Shemowth* / Names / Exodus 3:14-15, we were told that *hayah* serves as the basis of Yahowah's name – affirming that God exists. Here in the 90th Mizmowr, *hayah* is linked to our existence in God's dwelling place. It is speaking of our ultimate provision, with Yahowah helping and supporting us along the way.

As we have discovered, *hayah* plays a significant role in the account of our creation. The Hebrew verb is all about God enabling us to exist throughout time with Him. It also serves as another way of Yahowah telling us that He and His accounting of time combine past, present, and future together as if they were one and eternal.

Noting Yahowah's proclivity for symbolism, it is instructive to note that *hayah* reads the same from right to left as it does from left to right. It is the same, no matter the perspective – as is time from Yahowah's perspective. It signifies that God does not change, nor does His Word, no matter the time, place, or occasion.

The verb which serves as the basis of Yahowah's name helps define the nature of time, where the past, present, and future are the same, no matter the perspective, because they exist simultaneously. This in turn explains prophecy. God is not "predicting" the future, because He has already witnessed it. He reported what He had seen of our future in our past so that we might recognize that He inspired His prophets.

There are few words more basic to the Hebrew language than *hayah*. No one disputes its pronunciation. And yet two of the three vowels which comprise Yahowah's name are presented within it. The missing letter is wah – which is hardly a mystery since it is the most often repeated letter within the text.

In the first two sentences of Bare'syth, the wah has already been used to convey the "oo" and "o" sound in *tohuw*, *bohuw*, and *tahowm*. And in the next two verses, a wah will convey the same vowel sound in "ruwach – spirit," "owr – light," and "towb – good." The Hebrew letter wah even helped us properly transliterate ma'own, the Hebrew word for "help." A wah was also found in the midst of "dowr – generations" in the Psalm. It is also the source of the "o" sound in "Towrah." Therefore, scholars and theologians deceive when they claim that "no one knows the proper pronunciation of \$\mathbb{P}\mathbb{P}\mathbb{P} - \mathbb{P}\mathbb{A}\mathbb{P}\mathbb{A}\mathbb{B}\mathbb{A}\mathbb{B}\mathbb{A}\mathbb{B}\mathbb{A}\mathbb{B}\mathbb{A}\mathbb{B}\mathbb{A}\mathbb{B}\mathbb{A}\mathbb{B}\mathbb{B}\mathbb{A}\mathbb{B}\ma

In this passage, *ma'own's* triple meanings coalesce within the nature and purpose of Yahowah. God's principal ambition is to "help" His children. If we will let Him, He will "provide" for us and "support" us. As is the case with any devoted and loving parent, Yahowah wants us to "live with Him in His home." We are afforded the opportunity "to cohabitate as if we were married."

Similarly, *dowr*'s dual connotations coalesce into one when they are considered in this context, which is one of the reasons the word was repeated in the text. Yahowah didn't want us to miss the fact that He is there for "every generation throughout all periods of time, no matter the place." The Covenant is His family. His "encampment" is for those who are "related by birth (racial descendants or spiritual adoptees)."

The etymology of *dowr* is particularly interesting in light of God's symbolism. It was first used to describe an orderly arrangement of harvested grain, which is symbolic of saved souls. And then it was used to depict a protective courtyard surrounded by homes – and thus a secure dwelling place. *Dowr* evolved to convey the circle of life from the womb and then back to the earth, symbolic of time as generations mark its onward march.

As a general rule when a word is repeated in Hebrew, it not only underscores the importance of whatever it is conveying, it calls us to consider every implication of the word. You could consider the repetition of words like "dowr dowr" to denote the fullest and most extreme aspects of their meaning. It is exponential in its connotations, making it dowr².

So by emphasizing "dowr – to live, to surround, to enclose, to harvest, to bring into a home and a dwelling place, to be part of a family for generations over time," in the context of ma'own, and of Yahowah helping His children, providing for them and supporting them so that they live and camp out together, in conjunction with "taphilah – an earnest plea for favor following an honest assessment," Moseh is introducing the underlying purpose of the Miqra'ey of Pesach | Passover, Matsah | UnYeasted Bread, Bikuwrym | Firstborn Children, Shabuw'ah | the Promise of Seven, Taruw'ah | Trumpets, Kippurym | Reconciliations, and Sukah | Shelters.

Passover is the Doorway into God's "dowr – home." UnYeasted Bread depicts His "taphilah – favor and intervention." Firstborn Children represents the initial "dowr – generation born into Yahowah's family. Sevens Sabbaths is an all-encompassing harvest which alludes to the concept of dowr dowr, or of the enormous growth in God's Spiritual household.

The purpose of the *Taruw'ah* Harvest, which is "to signal an alarm," "to shout for joy," and "to announce the gateway to healing," is encapsulated in the twin connotations of *taphilah*: "an earnest plea for favor," as well as "a sincere request for intervention and judgment, for a decision

which is morally discerned." *Kippurym*, meaning "reconciliations," is based upon *ma'own*. Because of God's "great care and concern for us" during *Yowm Kippurym*, He "summons us, calls and pleads with us, to come into the presence" of His "provision, help, and support" which is provided by the Set-Apart Spirit. By way of our Spiritual Mother, Yisra'el and Yahuwdym are reconciled and thus prepared to "camp out" with God.

This in turn leads us to *Sukah*, meaning God's "encampment for life and protective shelter," His "tabernacle and home." *Sukah* is thus synonymous with the entirety of the passage.

Before we continue, I would like to pause here for a moment and reflect. What we have done thus far with Mizmowr 90, verse 1, is to meticulously examine the complete meaning and shading of each Hebrew word using the best etymological lexicons and dictionaries, and then consider the full implication of these words within the context of the passage and the Towrah, Prophets, and Psalms as a whole. This is not unlike viewing blood under a microscope as opposed to the naked eye. The microscope doesn't change or alter the blood in any way; it simply reveals what was always there, enabling us to better understand its nature, design, and function.

This does not make my translations inerrant nor my commentary inspired. I'm currently completing my eighth edit of this material, and each time the translations and insights improve. Besides, the only inspired commentary is when Yahowah or one of His prophets explains the meaning behind the text. Moseh did this throughout *Dabarym* / Words / Deuteronomy and *Dowd* | David did the same in His *Mashal* / Word Pictures / Proverbs and *Mizmowr* / Lyrics / Psalms.

Admittedly, all translations are inadequate and imprecise – especially recognizing that they are a human undertaking. Therefore, my advice to you is the same as God's: trust Yahowah and not men – and that includes me. Purchase some of the tools listed in the *Composition and Methodology* prologue and with the aid of the Spirit, examine Yah's Word yourself. Do what Moseh did: "taphilah – make a sincere request for good judgment and for decisions which are morally discerned." Test the evidence and be judgmental, discerning, and discriminating.

As mentioned before, the 90th Song provides some of the keys needed to decipher and quantify the *Bare'syth* / Genesis revelation. That is why I believe it references the formation of the earth. But you will also notice here that God accurately depicts the earth's violent beginnings.

"Even before (ba terem – previous to the time) the mountains (har – hills, ridges, ranges, and elevated land formations) were born (yalad – were conceived through labor and begotten) and (wa) You brought forth through trembling and twisting (chuwl – You patiently formed through violent shaking and agitation) the earth ('erets – ground comprised of natural material) and (wa) the world (tabel – the planet and its habitable places), even from (wa min) before time ('ad 'owlam – from perpetuity, from as far back as eternity, and continuously existing, forever), You ('atah) always existed as God ('owlam 'el – were infinite and unlimited, eternal in time, as the Almighty)." (Mizmowr / Song / Psalm 90:2)

This, too, is scientifically accurate, depicting the violent upheaval of massive volcanoes, trembling earthquakes, twisting plate tectonics, and the battering of asteroid and comet impacts which served to form the uneven surface of our planet. Yahowah used 'erets, meaning "land, region, realm, area, ground, or earth in the sense of natural matter which is firm," and tebel, meaning "world or planet," to help distinguish between these concepts. Keep this in mind as we cover the subject of Noach | Noah and the scope of the flood.

By announcing that "God has always existed," *Mizmowr* / Psalm 90:2 reinforces the meaning

of *hayah*, and it explains why Yahowah selected it as the basis of His name. While He is "'ad 'owlam – infinite" in relation to time, the religious are wont to make God infinite in all areas, suggesting that He is omnipresent, omnipotent, and omniscient.

In actuality, for God to be omnipresent, and thus to be unlimited in scale or size, He would cease to be unique. He would become indistinguishable from the universe itself, and thus would be in all things from rocks to slugs.

For God to be omniscient, and thus know all things, there would be no merit to creation or to Him forming a relationship with us. God grows by experiencing us grow, by enjoying our company, just as parents grow from the experience of raising their children.

Moreover, if God were omniscient, there would be no salvation, because He would be continuously aware of our mistakes in judgment, as opposed to having them vanish in the presence of the Spirit's Garment of Light. And since this is the purpose of Yahowsha' and the Set-Apart Spirit, the result of Yahowah's Festival Feasts, let's not attribute something to God that is counterproductive.

Continuing deeper into the Mizmowr, we discover that just like the Earth, our mortal birth is fraught with pain, so to exist with God, we must be transformed.

"You can return or restore (shuwb – You can change and renew, thereby transforming or abandon) mortal humankind ('enowsh – mankind; from 'anash – to be weak and wicked) forever from ('ad – eternally as a witness until) being crushed, diminished, and destroyed, becoming dust (daka' – being reduced to nothingness by grinding and pressing minute natural and material particles into annihilation, becoming destroyed, from a state of despondency pertaining to emotional grieving).

So You say (wa 'amar – therefore, You instruct, declare, and encourage): 'Return, be changed, and restored (shuwb – turn around, be renewed and transformed, reestablish relations, be repaired, and be refreshed, come back) children (ben – sons and offspring, descendants; from banah, meaning those who build a home and family, who are restored and established) of 'Adam | man ('adam – human beings and people, the name of the first man with a neshamah | conscience)." (Mizmowr / Song / Psalm 90:3)

Mortal men and women must change, returning to God to be restored by Him in order to avoid returning to the dust from which we came. God has put us on notice that our souls are mortal, and that unless we are willing to leave the world of men and return to Him, the consequence will be the destruction of our consciousness.

While we turned to this passage for the unit of measure needed to unlock the prophetic implications of the *Bare'syth* / Genesis One timeline, the journey into this Song has been priceless. God has revealed that His plan is to "restore and renew" the souls of the mortal men and women who answer His request to return. God wants us to change our ways, and thus to be transformed so that we can live forever in His presence. This is the embodiment of *Yowm Kippurym*, of the Day of Reconciliations leading to *Sukah* | Camping Out, where God seeks to reconcile our relationship so that we can spend an eternity together.

Over the course of three statements, there have been three words for "man." The first was "'iysh – individual," which was used in reference to Moseh representing a "man of God."

The second was "'enowsh – mortal humankind" on the precipice of destruction. God, Himself, defines this term as it is based upon 'anowsh, which means: "terminally ill as a result of an incurable disease." He is speaking of the consequence of religious poison.

Third, we found 'adam representing the descendants of the first man with a "neshamah – conscience," the unique ability to distinguish between right and wrong. Without transformation, "'enowsh – mortals" return from whence we came: dust to dust. The sons of 'Adam, however, who respond to God's call, choosing to change and to be restored, are able to establish eternal spiritual relations with Yahowah.

Now, from the perspective of *Bare'syth*, here is the payoff line:

"Indeed because (ky – for truly and surely) a thousand ('eleph – a thousandfold for those who learn such that they adopt the teaching and instruction, incorporating it into their lives) years (shanah – a repetitive division of time marked by the cycle of every season and equating to alteration and change, making a difference and being different) in Your sight and from Your perspective (ba 'atah 'ayn – in Your eyes and in Your presence, by way of Your thinking and perceptions) are like (ka – exist the same as and equate to) a day (yowm – from sundown to sunset), the same as yesterday ('ethmowl – the day before today) when (ky) it passes by ('abar – it passes through) a perceptive observer (wa 'ashmuwrah – one who takes notice and pays attention, the focused and watchful; from shamar: to closely observe and carefully examine) during the time of minimal light (ba ha laylah – in time of darkness when there is limited visibility during the night)." (Mizmowr / Song / Psalm 90:4)

According to the Mizmowr, "perspective" and "presence" are essential elements in the calibration of time. This is the same claim Albert Einstein made in support of Special and General Relativity. Time moves differently relative to the observer, and slows appreciably in the presence of great energy, mass, or velocity.

But more than that, from our "perspective" and from our "presence" here on earth as mortal men, one of our "days" is "like a thousand years" from God's perspective. Therefore, if we extrapolate to the portrayal of the unfolding story of our salvation in the Creation account, each of the seven days depicted in Bare'syth represents a one-thousand-year period. This aspect of time is not random, but instead has been quantified.

Therefore, as it relates to cosmological time, *Bare'syth* / Genesis readers have a number of options – albeit some considerably less informed than others. They can believe that the universe, our solar system, life, and man were created in six solar days, one of which occurred before our sun was created, two before the earth existed, and three before sunrises and sunsets were even visible, in complete disregard for the scientific evidence to the contrary. And yet, according to recent surveys, most Americans believe the unbelievable. If you are one of them, visit the Creation Institute on the web. You will find many like-minded fools.

The second option, at least before Yahowah introduced us to the concept of relativity, is to render the word *yowm* as an imprecise "period of time" and not fret the details. But if you were of that inclination, you probably wouldn't be reading this book. *Yada Yahowah* celebrates the details and is fully committed to taking Yahowah at His word.

Third, Bare'syth can be scrapped as a scientific explanation and be read exclusively for its spiritual insights. This is the Vatican's most current view. The Church, which has a knack for being wrong, recently issued a statement saying that the creation account was not accurate and that, at

best, God played a distant, fatherly role in our genesis.

I am partial to the fourth option, viewing *yowm* as a precise quantitative measurement, as an accurate accounting, but relative to the "presence and perspective" of the eyewitness providing this testimony. That is the course we shall chart throughout *Yada Yahowah* because it provides the best fit between God's revelation, evidence, and reason.

However, within the framework of six plus one and of a day being equivalent to one thousand years, the readers of *Bare'syth* / Genesis cannot be faithful to the text and ignore the fact that the "days" of creation are prophetic. They reveal key aspects of our salvation history – past, present, and future – from the expulsion of 'Adam to the fall of man, and then to the final Millennial Sabbath. For this accounting, Mizmowr 90 was essential because it provided the scale we must deploy: one day represents one thousand years. Nearly six millennia of human history has passed since man, as we know him, began to record his existence. In that, God's word, science, and history all agree.

In this regard, 'Abraham and Yitschaq affirmed the *Beryth* | Covenant with Yahowah on Day 2, year 2000 Yah, which was 1968 BCE. Forty Yowbel, which is 2000 years, later Yahowsha' served as the *Pesach 'Ayl* | Passover Lamb on the same mountain on Day 4 in year 4000 Yah, as God fulfilled the first four *Mow'ed Miqra'ey* | Invitations to Meet at the Appointed Time in 33 CE. He thereby enabled the promised benefits of the Covenant with *Pesach* | Passover providing eternal life, with *Matsah* | UnYeasted Bread perfecting our soul, and *Bikuwrym* | Firstborn Children certifying adoption into His Covenant family, so that we can be enriched and empowered on *Shabuw'ah* | the Promise of Seven.

Another forty *Yowbel* | Redemptive Years where debts are forgiven, captives are freed, and the land is returned will soon pass, so that in year 6000 Yah, God will fulfill the final two Miqra'ey, starting with *Yowm Kippurym* | the Day of Reconciliations on October 2, 2033 when He will return at sunset in Yaruwshalaim. Five days later, on *Sukah* | Shelters, those who have answered His invitation will Camp Out with their Heavenly Father for all time.