A PHILOSOPHICAL EXAMINATION OF CAUSE AND EXISTENCE

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Throughout the course of history, scholars, philosophers, scientists, and common people have pondered about the intricacies of the world surrounding them. There is one universal feature however, that has been with man since his acquisition of consciousness. This feature is the belief in God. The concept of God signifies the eternal and supreme conscious being, binding all affairs in existence, for without him as the source, there would be no existence. God is the force from which comes necessary being. Since the dawn of modern man, it appears that the feature of faith has been implanted into his mind.. There are many religions and every culture has one. The first organized institutions of humankind were religious in character. Spiritual belief and deistic belief is not one that happens in "some" areas here or there, it happens everywhere and in all cultures. I find this to be a form of evidence behind God's role in this world. This brings us into the common issues we face when describing the Universe and ultimately, ourselves.

Objective Reality and Critical Thought

The consciousness of a man's mind allows him to think, ponder, consider, and reason. In doing so he may embark upon a journey of enlightenment and inspiration, as he seeks the inner workings of nature and reality. Since the time when human beings first learned to write and record ideas, they were able to establish a new and developing foundation of knowledge. Ever since this time, the human mind has seemed to travel without limit into technological advancement. It all began with writing and documenting ideas, and being able to express the inner workings of the mind into a physical and legible form for better interpretation. This effect lead to the realness behind man's ability to acquire knowledge and the relationship his own mind has with nature and reality. Through the advancement of mathematics, we humans have been able to comprise a language. This language is one of numbers. Symbols of value, change, quantity, rate, time, speed, and so on, are the key parts of this developing and unique language. The language of Mathematics is one, which is used to express the wonders of the world around us. It is a method, in which we can speak to nature. Therefore by learning the mathematical language of nature and the world, nature speaks right back. Some mathematicians will probably agree with me here, when I say, "numbers are not real" This is actually something to be considered. Actual number is not there in the universe, there is no true quantity or other related mathematical issue. Mathematics is how we use our conscious mind to express the beauty of the natural world. Our projection of consciousness unto nature bounces back a feed of mathematical concepts, that we decisively concoct in our heads, in order to reach a deeper level of comprehending the immense network of organization, what we call the Universe.

I once proposed that numbers are not actually real, but rather projections of the human consciousness and mind. These entities which we categorize into a numerical order are there in an organized fashion, however we conscious beings have a level of connection with what is around us, that allows us to see that order, and categorize it into recognizable, understandable sections. It would seem that the network of order in the Universe has a mathematical connection to the human consciousness. Is there order really there? Or do we see it as order? The order is present on the visible scale for sure, but mathematically there is a whole new nominative order that becomes revealed. It is a sequence of numbers and symbols, dictating the course and behavior of nature. The order itself lies at the heart of the Universe, waiting in such a way for us to discover it through the unique language of Mathematics, the language in which the Universe speaks to us. With this branch of science, we have gone far in understanding the world around us. In resolving our questions, talking with the Universe has taken us far. One can definitely see a unique connection between our minds and the structure of the Universe. This is not something that just happens at random. There is an interwoven information network of the Universe, and conscious minds are linked to the network of that established order. We can communicate with the Universe, we understand it and its workings show that it understands us.

Contingency meets Necessity

If we say something is necessary or that it has necessity, than the whole existence of this something can not be attributed to anything other than itself, for its existence demands that it exist from a non specific, non-casual cause. If we say something is contingent, then it is susceptible to random chance, uncertainty of future events, and probability. Meaning ultimately, that there is no reason for why a contingent thing should exist, but if it is found to exist, then it has no specific cause within itself, but perhaps an external one. If I say prior to the event that my favorite football team is going to win, this is probabilistic and rests upon uncertainty. There is no reason why they should win or not win, when based on the statement alone. Furthermore, if I should say, "I will throw the ball" and then proceed to do so, the statement necessitates that I throw the ball, only if the statement is to hold true. To specify this, the throw of the ball is necessity if my statement is true. The fact that the ball is being thrown also necessitates that I throw it. The mere statement does not necessitate that a ball is thrown however. Nor does the throw necessitate that it be stated before hand. If the Universe becomes proven to be necessary, then it has a non-casual cause, an internal cause that necessitates the Universe's selfexistence. However, the more we probe physics and cosmology, we are taken to an extraordinary event, from where the Universe came forth from nothing. This demonstrates what many scientists now say, that the Universe is contingent. It does not self create or necessitate its own existence. Therefore, we must assume an external force behind it, in many cases. This must be a force completely unlike existence and the laws of physics.

Infinite Universes, Fine Tuning and Chance:

Let's suppose that there are infinite universes, and that we, are the lucky, finetuned Universe, as a "chance" in infinity. Our coming into being would then rely on constant probability throughout this infinity. There is a problem with this scenario of infinity and chance. Chance could not increase as infinite time passes, for nothing can be added to infinity, due to the completeness of infinity. By this I mean that new universes being added do not "add" to infinity which always remains the same. Infinity is a continuous complete or whole, and everything about it demands that it is unchanging but continuous. There is no increase in infinity, but rather it is a constant, complete continuum.

The Universe as we see it, on the micro scale when compared to others, would need an outside necessary cause, as the constant generation of universes into infinity would. Although the physical laws, which describe existence, do not necessitate themselves and nothing within a large complex system can prove itself necessary by itself. If a Supreme Being were to decree them, they are necessary in relation to Him. Is there any logical reason as to why such an environment would exist, that it creates Universes? If so, the mere fact that this environment of exotic energy exists, and has always existed for eternity, requires no necessity for it to keep existing under its prescribed behavior, but it is found to be totally contingent and hence unexplainable if one is to seek why it is, the way it is. No physical law of any physical nature could be the determining factor for this, and as far as we know, all physical laws cease at the singularity moment of the Big Bang.

What if this pre-Big Bang era was infinitely under some other law? A law, which cannot yield Universes. The energy remains without explanation, but it is necessary to produce things, however contingent when looked upon in search for physical cause. There is no way to presume why it has the laws it has, so at this basic level, it is contingent in cause, but necessary in maintaining itself in eternal space and time. Space and Time on the other hand, are dependent upon each other, and matter and energy depend on space in order to exist. All fundamentals of a universe are interdependent. In this case, it is also necessary, but the actual cause is found to be contingent once again, because all fundamentals have a common origin. The exotic energy of the universe machine though, would be contingent, because it would be unchanging in this case, but still fine-tuned. The existence of the energy and the reality of the energy are still contingent.

The energy and environment itself would have always been the same way, for infinite time and into infinite space. Given this feature, the energy must have special finetuning about itself in order to keep creating Universes into infinity, giving rise to Physical Constants. When analyzed closer, this energy which is able to produce into infinity must be dynamic in result and static in its most fundamental characteristics, but also embrace all physical laws. How can blind energy initiate new physical laws? Also, why are there laws to anything at all? What would make these laws give rise to a Universe for the laws to describe and allow it to come into being? We cannot explain why things exist, and where the laws come from. Speculation is the only tool to go past the Big Bang moment. The fact that there is something rather than nothing at all demands necessity for existence, but a necessity that is not contained in existence itself, but an external cause.

Imagine infinite events in infinite space happening for infinite time. If this were to be the case, why would not every event already have been completed? An infinity of physical things proves impossible. The infinite number of things would occupy infinite space and approach infinite time. This is not possible, because every event of this universe's energy would have to have a finite past in order to change dynamically in time. The infinite would have infinite inertia, entropy, and thus, infinite continuum of constancy, stagnancy and non-change. Infinite spatial dimensions would also be needed to accommodate infinity, but we have limits to space. They begin at 1, they do not exist at zero, and there are no negatives. Infinity is without beginning. Without movement, there is no time, without matter/energy, there is no space. So the infinite dynamics of energy would make time infinite simultaneously. This would also demand the existence of space. This poses as a paradox, because in this infinity there would be no beginning and no end, and thus infinity could never become completed. An actual infinite is not something that is ongoing, which continues to become completed. You could not add on Universes to something that is already infinite in time and space. Inertia, Entropy, and Spatial Dimensions would also necessitate being infinite, which necessitate also for a world of no change, occurrence, transition, or even real physical existence. Infinity plus five is infinity, infinity plus one thousand is still infinity, infinity times infinity to the power of

infinity, is still infinity. There is no change in amount, but rather the infinite is already complete. It is complete at the same time it continues to fulfill itself into infinity. Consider an infinite line. The line does not continue to travel further and further like a ray or wave of energy, but it is already complete, however extends forever.

The pre-Big Bang environment of infinitude would necessitate that, every physical effect already have become complete, but yet, there is still more to occur. Here is a problem, due to infinity of inertia and entropy in a physical system. When something is left to itself, entropy increases, and with infinite time, entropy would not only go to the extreme, but it would not exist because entropy itself would be infinite. This is a paradox. Infinite entropy of the system would allow for no work to be done and no transitions of matter and energy. It would insist that nothing happen in this infinity, but that it just exist in stagnancy, in a continuum, however not dynamically increasing. Infinity of physical things would also demand that there be infinite inertia, thus there would be no movement, but total, absolute stillness. Matter and Energy demand movement and kinetic properties within themselves to exist. Also, if infinity actually existed, then everything would be subject to the state of infinity. Every particle in this universe is not infinite in volume, mass, and density. Energy is not continuous, but can be fragmented. In a sea of eternal infinity, there would never have come a time for Time, Space, Energy and Matter to gain definite and finite characteristics within themselves, and then enter interdependent relationships with each other. The system would not close, such as that of our Universe, for it would forever be infinite in all qualities as a part of the infinite whole. This is no the case though, the Universe has limits. As can be seen now, that this infinite is impossible, for the actual infinite, it would exist, is an unchanging, timeless, void of no occurrences. This is a complex issue. Where is the logic then in supposing infinite universes? If they do exist, then they, as a part of infinity require a necessity in each other. The infinity though would be the real universal of existence, and seen as a whole of universes and physical properties, is utterly contingent and unexplainable.

Actual infinities are ruled out in advanced mathematics, as one will find. David Hilbert, the brilliant German Mathematician demonstrated the paradoxes of actual infinity of physicality in his Hilbert's Hotel Model. Hilbert once emphatically stated, "The infinite is nowhere to be found in reality. It neither exists in nature nor provides a legitimate basis for rational thought. The role that remains for the infinite...is solely that of an idea..."

The infinitude will demand that it has always existed and continues to exist, so its existence is not necessary in itself to maintain physical reality, even though all things coming from it are unpredictable. The contingence of the infinite is the fact that there is no reason for any physical law to exist to describe it physically. There is no necessity for infinity whatsoever; the necessary existence of infinity is not logical or viable, because you cannot have an infinite number of physical things. The necessity, which I elaborate, is on that which is observed by cause and effect of Law. For a Supreme Being to decree the laws, all things described by the laws would be necessary, because all of which exists under them, will be dependent upon the Originator and Law Maker. One must be careful when discussing necessity and what it is specifically. An actual infinite can never become observed, so if this infinite has the property to produce existence and universes it definitely has necessary being outside of itself, but is contingent when left to itself, for it has always existed to spawn universes. Let me make a clear overview of the problems with infinity in this section:

1.Infinity would have infinite inertia, and nothing would ever move. The existence of matter and energy demand movement within themselves to exist.Without movement, there is no time or space.

2. Infinity would have infinite *Entropy*, meaning that no work could ever become done, no change in energy could ever occur, no transitions of any state could be made. This correlates directly into the inertia problem as well.

3. Infinity does not fragment into finite sections, but maintains the unchanging constant continuum. It maintains its whole, therefore it could not constitute for finite universes of finite particles.

4. Time would not make transition from infinite non-divisible to a fragment of time with a finite past.

5. Actual infinities cannot have things added on to them, and especially dynamic things, because an infinite is unchanging and without motion. It is a continuum only.

6. Spatial Dimensions would also have to be infinite, however they have a limit. We can conceive one dimension, however there is nothing in 0 dimensions, and certainly not negative dimensions. Infinity has no beginning, but spatial dimensions have a beginning point. There could be no zero, or even a 1 for that matter.

7. The Universe arose from a singularity and immediately after it, came the many quantum fluctuations of the very early era around Planck Time. From one fluctuation after creation, it became many more, and if things were infinite there would be infinite quantum fluctuations and the wave function would have never collapsed. The wave function did collapse and perhaps under the conscious observance of a "Supreme Observer."

Setting Limits

When one seeks to define what is necessary, how does one due that for certain? What may seem the result of pure chance could be on a deeper level, the consequence of physical law. In the lack of one law or behavior, another certain behavior will arise. This is a relationship based on necessity and the existence of something is intertwined into this principle. Let us explore this a bit more closely. Imagine you pick up a bowling ball and roll it down the lane and make a strike. You repeat this and again you make a strike, the third time however, suppose you miss all of the pins completely. If you are just blindly rolling the ball each time without even considering to make a strike, you can say you are throwing it all to chance. In this case, rolling the ball does not necessitate the falling of the pins, however the falling of the pins does necessitate the rolling of the ball and the striking of the ball into the pins, in this scenario.

Now we will determine the factors coming into play: Gravity is one, the torque of my wrist is another, the velocity of my step, the rigidity of the lane and friction, the linear

follow-through of my arm, as well as the force I put into the ball. When the pins are all knocked down, a certain combination of these factors was in occurrence before the ball ever made it to the pins. The occurrence of this combination of factors necessitated the direction of the ball, the proper position and force to knock down all the pins. The falling of the pins is the direct result of the fundamental forces and actions, which necessitated their falling. The throw in this case, directly causes the pins to fall. When the pins did not fall, the basic fundamentals comprising the throw necessitated that the ball, miss the pins. Furthermore, because it is totally unpredictable to determine the ball when observing the participant throw it, we deduce it to be a chance event, but really it is not. The lack of knowledge of the object and the forces acting on it makes it appear that way. Now imagine I am lining up my shot and I am experienced enough that I know just how to knock all the pins down. To an observer it is still completely random chance and unpredictable as to where the ball will go. Through the fundamental physical laws already defined and in play, my conscious decisiveness allows for the ball to be thrown and knock down all pins. In the absence of conscious thinking and decision, I can still aimlessly throw the ball and make a strike, but I can just as easily miss totally.

The logic of this entire case is summarized in the following. The "lucky strike" that I achieved was due to chance only in the mind, but in all reality it was already destined to be, but in an unpredictable manner. Can one say that a Universe is a "lucky strike" then? Never! One must take into account that it was my own self-conscious being, who made a decisive and conscious decision to just throw the ball, and allow physical law to let it reach its target. These laws were already in effect before I ever considered throwing the ball. The laws of this though, are contingent when looked upon from universal origin. Without pre-existing conscious decision, there would be no reason that the pins fall down whatsoever. There would be no reason for the pins and ball to be made, and they would not be. There would be no reason for the lane to be smooth for a ball to roll down it. The laws of physics are similar, because there is no reason for them at all. They cannot and do not necessitate themselves. Does the ball necessitate that it is round? No, the definition of a ball necessitates it be round, however both the ball and the definition come from conscious ingenuity. Although the definition of what a ball is, does

not mean a ball should exist, but given an observed ball, a definition can be applied to it. The conditions are then tuned when the time comes for me to roll the ball, making it able to succeed in striking. My will is responsible for allowing the physical laws to act upon the ball in a precise way to necessitate the strike. My will is also responsible if the ball misses, because I chose not to concentrate, but throw aimlessly. It is a paradox of necessity and contingency because although the right combination necessitates a strike, the very principles of these laws that combine are purely contingent. The pre-existing laws of physics do not make necessary an environment for bowling to take place. Therefore, the bowling match is contained within something contingent, and therefore anything happening there in, will be contingent, even though it seems otherwise. The Bowling Alley has no reason to be there, neither do I, however both it and I are present and I made a strike. Conscious reasoning allows for the Bowling environment to exist, but it is taken for granted when looking into this case. Then everything must be contingent. Why then, if ultimately all things are contingent, can I not just negate all of existence? Of course, this is another paradox, for all is still here. A Supreme Creator set his will into existence. The Supreme Creator would also be responsible for the very physical laws making up the exotic primal energy responsible for Universes. He could make what is necessary to him, but to the observer, there would be no proven answer to the status of the creation. Due to the lack of knowledge and the inability to apply outside rules to a system, the issue of what seems necessity and contingency collapses. What if this infinite and eternal energy had only the potential to be stagnant and do nothing? Or what if its existence did not necessitate a creative feature, but one that never changes form and it simply bounces and ricochets through infinity? This elaborates more on why there is something and not nothing at all. If the Creator preceded all physical existence, He then would not be dependent on physical law, but his dependence would simply be that he is super-physical and depends only upon himself. Therefore, he is eternal and unchanging in nature.

What is necessary or contingent of Creation?

If the Creator is the Supreme Being, Who connects all reality and all of existence, He is then indeed the absolute heart of all that is. This necessary being should only be able to create necessary things. I have already elaborated though on necessity and what is contingent. Everything that the Creator brings into existence would be necessary to the extent of its arrival at reality. The behavior of the material may seem to be subject to random, future events, but in fact, its randomness (or chaos) could be its purpose. By now I have illustrated, that randomness is not effect without cause, but it is caused, by other effects. The entire Universe is a great network of physical constants and laws working in a harmonious process that fuels existence. We cannot then assume something not to be unnecessary, but necessary because it exists. The Creator made it necessary, but physically when universal features are applied to their own laws, they are contingent, for there is no reason whatsoever, for why it exists. It only necessitates existence after the establishment of law and its establishment of definite relationships amongst other physical features. If a person deems the result of an effect unnecessary, then perhaps the truth of the matter is, that they know nothing or very little about the initial cause that allowed the effect to take effect and ultimately, give a result. Our limitations can be what create the illusion of Chaos. Our interpretation of physical reality may indicate to us that some things may be unnecessary or contingent, but in the reality itself, without the observer to make interpretations, reality is necessary within itself, because it is maintained by something extra-physical. What then makes the reality be as it is, so that it may eventually allow observers to enter it to question it? A Supreme Being could take this position to be that observer, who keeps everything bound. This Higher Being would be the life force of everything from quarks and photons to spiraling galaxies, to alternate worlds. What appears unnecessary to us is necessary to Him, because He made it real and physical. What is then real and physical is dependent upon all other real and physical things.

And among God's signs is that the skies and the earth stand by his command (Quran 30:25)

This relationship between things makes all of existence as one, rather than many different things, which float around without direction. The entire whole, would thus be a necessary projection of the Supreme Being.

Free Will can be examined and further understood through Chaos Theory and Uncertainty. The physicist, Henry Stapp writes:

If the attitude of Quantum Mechanics is correct there is no substantive (inanimate) physical world.(add citation here)

Another physicist, E. H. Walker writes:

Consciousness may be associated with all quantum mechanical processes. Since everything which occurs is ultimately the result of one or more quantum mechanical events, the universe is inhabited by almost an unlimited number of rather discrete, conscious, usually non-thinking entities that are responsible for the detailed working of the universe.(add citation here)

If all features and base characteristics, which comprise the foundation of the Universe are these minutely conscious, yet non-thinking entities, it proves that they have been assigned a particular role, and the role of each constitutes for the effectiveness of the whole to exist. Each entity would have to be "aware" of the other.

Infinity revisited:

To extrapolate more on the multiple universes (multiverse), this would require that there also be infinite dimensions. A definite problem is seen in this. Infinity has no beginning nor ending, it is complete to the degree of being self contained and unchanging, constant in actual number, but continues forever. In our world, we see three dimensions. We can draw in two dimensions. We can go a little further and consider one dimension, where something would appear as a minuscule line. What about zero dimensions? This is unfathomable by the human imagination. In zero dimensions there would be no space and hence no time, and furthermore no energy or matter. If there were infinity of physical things, then dimensions too would be infinite and eternal. There is a beginning starting at one dimension and going onward, prior to one dimension is the nothingness. This very nothingness is what the Universe sprung from. A super-physical and external cause proves to be the most valid one. The brilliant theoretical physicist Heinz Pagels once said back in the late 1980s, "The nothingness 'before' the creation of the universe is the most complete void we can imagine. No space, time, or matter existed. It is a world without place, without duration or eternity..." (Perfect Symmetry: The Search for the Beginning of Time, Simon&Schuster Books, New York, 1985)

He also went on to say,

"The nothingness converts itself into a plenum of existence. What tells the void it is pregnant with a potential universe?" (Perfect Symmetry: The Search for the Beginning of Time, Simon &Schuster Books, New York, 1985)

We can clearly recognize the problems here in trying to assume a necessary universe by mere physical laws. We also can see the problems with infinity more and more. It is becoming extremely illogical to credit the Universe's vast network of functions to blind chance, which is only induced by the illogical, blind faith of those who select to divert around God, and seek naturalistic interpretations. A Supreme Being, super-physical and beyond all bounds will always be needed in the logic that our thinking requires.

Kurt Gödel turns modern knowledge upside-down

Kurt Gödel is responsible for the *Incompleteness Theorem*, which suggests that mathematics cannot be consistent and will be susceptible to contradiction within itself. Gödel is considered the greatest Logician of all time, as well as one of the world's greatest Mathematicians. Gödel proved that Mathematics is inconsistent and can have contradictions within it when applied to real things. He applied the concepts of Mathematics against themselves to make a true statement, but this was not always the case and so he proved his *Incompleteness Theorem*.

Gödel found the paradoxes contained within everyday Mathematics and Life. With the Incompleteness Theorem, he provided concrete evidence that any axiomatic mathematical system contains characteristics, which cannot be proved or disproved within the axioms of the system. He also demonstrated how consistency of mathematics could not be proved, so it is deduced to be incomplete. In Gödel's proofs comes one that demonstrates how one cannot determine or prove a complex system, if they happen to be a part of that system. Gödel showed how the Universe cannot be proved to be anything by man, but that it would have to be a contingent physicality, incomplete in terms of being described totally by mathematics and physics.

Kurt Gödel began to reshape the very perception of the Universe, in relation to mathematics and physics. He demonstrated the complexity of systems, and that they cannot be reduced to repetitive mathematics. Self-Reference was a term that Gödel introduced, which makes the actual mathematics refer back to itself, to make a logical or illogical statement when applied to reality. Either it will prove itself incomplete, or show a true result. No matter what though, it shows that Mathematics is inconsistent and incomplete. Gödel devoted much of his life to the study of logistics and mathematics and their fused relationship in describing absolute truth and reality. As time went on after 1931, Gödel had well laid the foundation for Incompleteness. He had shown beyond shadow of a doubt, that no matter how much knowledge one has of a complex system, one cannot prove it true or false, or even totally understand it without going outside of the system to apply different external rules to prove the internal axioms. Internal consistency was seen as a faded dream, and now one could never know the truth without stepping outside of a system. Kurt Gödel went on in the 1970s to formulate an Ontological Argument for the Existence of God. Gödel believed he could establish God as a fact, but he was a bit reluctant from what people would say about it being "factually proven" he did not have his work published, and it was not published until 1987, 9 years after Gödel died.

Gödel taught us that we cannot know everything about the Universe, because we are a direct part of the Universe, but confined within the complexity of it. One cannot entirely define a complex system in order to make a proof, unless they step outside of the system to make reference and observation, as well as apply different rules to it. The Supreme Being would be the ultimate necessary being, who does not change and who, does not age. This Being would be the essence of all things, and totally necessary within Himself, and ultimately would have conscious knowledge of all complex systems under Him. His necessity allows him full knowledge of His own being, and those He sets into being. Kurt Gödel began with this in the 1960's and believed by the 1970's that he has ontologically proved God's Existence.

Conclusively, we can reflect on all of these ideas and say that everything bothers to exist, but yet does not necessitate its own existence. We can analyze existence with conscious minds and what we find is that the Universe itself is structured in a way to directly appeal to our minds. The functions of the mind and the organization of the Universe correlate into one another, exposing the vast super network of design. The dance of organized particles and waves in this Universe hints to us of the unique reality the Universe expresses to those unique beings, which are here to understand it. Just as We use organized categorization to view and describe the Universe. The Universe has already done so in way, that our Minds would have been able to handle the feat. This deeply implies that the Universe is an expression of the Supreme and Ultimate Mind. All things are accounted for, and all things serve their function. This Universe is one, which is brilliantly projected into a form of reality for us to learn about. Chaos is simply where we have not ventured, and the beginning of understanding Chaos and Quantum Physics, is the very beginning to understanding the ultimate Mind of God, the entire source of all logic.

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Our Current Knowledge of the Universe and its Implications By Matt Agona

To open this statement, I would like to simply inform my readers that I am a college student, who has some knowledge of Physics, although I am not an expert. I have engaged in research that pries into the mystery of our universe, and I shall present this in a clear format to show where we stand given our current state of knowledge.

Big Bang Cosmology

After the collapse of the Steady State Theory set forth by Fred Hoyle, science was in the realm of accepting a new theory, The Big Bang Theory. The Universe, as indicated by Hubble Space Observations and Microwave Radiation, emanated from a cosmic seed, the size of an atom. This is called a *singularity*. Through the application of the *General Theory of Relativity*, physicists can trace the expanding Universe back to this superdense, superheated singularity, which arose in an instant from absolutely nothing! To better grasp this matter, it has been shown through the constant expansion rate of the universe, along with the structure of matter itself and the smoothness of space, that the Universe at one time was in a state of infinite density and was dimension-less. It was absolutely nothing.

The Universe was a caused action imposed upon the nothingness. In a void, or "nothing" there are no laws, there is no fundamental atomic behavior, and there are no material guiding principles. The instant of the appearance of the singularity, which is something, our physical laws, all of which are finely tuned, were blasted into existence after Planck Time. This infinitesimally small interval of time bore all of our laws of physics, which as we now know, necessitate orderly existence. In sequence, it is observed that there was nothing, then the singularity, from which came all of our dimensions, time, space, energy, and matter (blasted into existence) from something smaller than a hydrogen atom. Time had its beginning at this point.

Space Time Theorem

Cosmologists Stephen Hawking and Roger Penrose concluded through many experiments and equations in the 1970s, that space and time are bound together by one single boundary, which is confirmed by the *General Theory of Relativity*. The General Theory of Relativity is one of the most empirically proven principles in Physics and Science. Through the complicated efforts of Hawking and Penrose, it was shown that Time had a beginning, and due to the Space-Time boundary, both came into existence at one time. This occurred immediately proceeding the singularity. It had tremendous theological implications upon modern understanding of science and physics. Atheist scientists did not take well to the fact that space and time, shared one single beginning, in a "creation event." It is ironic, because after this was proven and accepted, Hawking and another physicist, James Hartle, used mathematical proposals in a 1984 model, suggesting that the Universe had no beginning, that it was the product of an event from pre-existing, eternal (imaginary) time. There are problems with this, and currently the "imaginary" theory has been rejected.

In the above model, are somewhat simple equations, the space-time cone is rounded at the bottom, instead of having a point of origin. The point of origin would be the singularity, the birth of time, space, energy, and matter. Hawking and Hartle utilized imaginary numbers to constitute imaginary time outside of the real time of the Universe. In doing so, t=0 and the singularity would not exist. However, the use of imaginary numbers in mathematics is only for assertion of mathematical concepts and in many cases, they do not correspond to reality or logic and can violate the scientific method itself. Hawking did not bother to convert back to real numbers, as one must. He himself stated, "we live in real time", imaginary time can pass as far as speculation is willing to take it. Hawking and Hartle realize that we live in real time with a beginning, and when real numbers are re-converted to, the singularity comes back under any circumstance.

Four Dimensions

We live and make actions in 3-Dimensional space. Time is considered to be a dimension also, but really it is understood to be only half of a dimension, since time only moves in one direction, forward. Time and Space are bound by a single boundary as Relativity indicates. They shared a single origin as does matter and energy. If there was no space, energy and matter could not exist. Often it is believed that space is nothing, or emptiness. It is actually far from nothing, and indeed something. The smoothness or isotropy allows for a universe like ours, and in this finely tuned space, matter and energy are allowed to traverse without disruption or hindering effects. For instance, light travels through space, planets revolve through space, everything that is in the universe takes up space, because it is in fact a crucial part of the universe. If matter and energy did not exist, even a single atom, there would be no space at all. If there is no space, energy cannot traverse and matter cannot be situated.

Time is the dimension,(1/2 dimension) that dictates the occurrence of events. If we know, that time and space are demonstrated as being bounded, we also must conclude, that all components of the universe, time, space, energy, and matter, are dependent upon one another for existence. This leads us to further conclude their instant and simultaneous origin in the Big Bang, an explosion of the Universe from nothing. This takes me into the next topic of discussion.

Big Bang Models and Creation Explanation

I mentioned the Hawking-Hartle model proposed in 1984, but there are other models that try to explain the Big Bang as a natural, uncaused event. This is conjecture that defies the laws of physics and pokes at metaphysics. It is contradictory to scientific methodology itself. Materialist scientists have long asserted that what is there, is there, and there is no need to make assumption beyond what is observable and proven. Given this, they are no going beyond the observable/testable, making proposals of what could be, without rational or demonstrated evidence. The Multiple Universe Theory and Big Bang Models are examples of this. As science continues to find more and more uncertainty behind their theories, they immediately formulate new ones that are beyond the realm of current physics. They have contradicted their methods in doing so, and the atheist or materialist scientists are invoking ideas, that require faith to believe in, because their theories are ones that predict unobservable entities. Materialists always ask that something be there, or be shown, so that it can be observed and studied. In so doing, they felt the need to expel God from the picture, because they only believe in what can be seen. What about Multiple Universes?, which cannot be witnessed or studied, yet they seek to propose them because it takes God out of the picture. I will summarize the Theoretical Models of the Big Bang and indicate just what is flawed in them.

The Vacuum Fluctuation Model: As far back as 1973, physicist Ed Tryon tried to demonstrate the Universe popping into existence from a Quantum Vacuum Fluctuation. People have used this as recent as the late 1980's as well. Basically, it states that the Universe can appear uncaused, and randomly from nothing, because it makes reference to particle pair creation in a virtual vacuum. In a vacuum, particles appear for less than Planck Time, before annihilating each other and returning their energy to the vacuum. A vacuum is even more of something than empty space is, it is certainly not *nothing*. A complete vacuum is also impossible to create, even under the "fine tuned" laboratory conditions. The vacuum, there is an array of energy fields outlining the very existence of the vacuum, in OUR REAL 4-dimensional space, i.e it is something, not nothing. The "created" and "fine tuned" vacuum conditions allow for these energies to generate particles, which almost instantly, dissolve back into the vacuum again. As one can see already, this is not nothing.

The vacuum operates under the same physical laws as our Universe, and these laws are definite and unchanging. The mere existence of the creation of the vacuum is permitted under our current laws. We have already confirmed a universe from nothing, so the vacuum, which exists as something, is ruled out. Actions in a vacuum require our 4Dimensioal space, and the vacuum as well as its actions, are made possible under space and time. The space-time boundary acts upon the events of the vacuum, and since we have established space and time, share the simultaneous beginning as matter and energy, this is an impossible feat to accomplish. Vacuums are something, not nothing. If something can come into existence from nothing through Quantum Fluctuation, ask yourself this, "What is there to fluctuate?" "If time is non-existent, how can these events occur?" If there is no time, there is also no space for the actions, as well as no energy or matter. A vacuum is a product of our universe. It shares the same laws, which came into existence all at once out of nothing.

Quantum Tunneling: This scenario tries to envision the Universe as a wave function. It ties right in with the Hawking-Hartle Model of 1984. A wave function is the act of an occurrence given a finite amount of time with a finite amount of energy. It relies upon probability and chance. It is to say, if you let something exist in time long enough at the Quantum Mechanical Level, a Quantum Event will occur randomly through particle emission or wave fluctuation, etc. The alpha-particle decay of Plutonium would be an example. The alpha emissions from the Pu-239 Nucleus are unpredictable, as well as inevitable, but given a finite amount of time, they will occur at random. In this model, the Universe is supposed to come into existence through a Quantum Event, meaning that its occurrence is due to the random, unpredictable, yet probable circumstances. It is based on the assumption that a Quantum Event will occur, and a transfer of energy will lead up to our Universe. The problem with this is that it calls again for imaginary time, time outside of our universe.

Since we interpret Quantum Events, which require the time, and space of our Universe, real time, how can we call for them to be the action of our Universe when it didn't exist? It is impossible for this to have been the case. The imaginary numbers solution, which suggests that infinite time exists and our real time is a point on that cone of time with no origin, presents the same problems . As I already stated, real time needs to be accepted into the equations for it to be logical. Imaginary time can exist any way you desire when using imaginary numbers, just as I can imagine my car exists infinitely, but is contained to a point in my finite garage.

Given infinite time, every quantum event possible would have occurred, since given finite time, a quantum event shall occur. Quantum Events occur in real time though, and they require the joining of time and space under the space-time continuum, which is present in our Universe. One can suppose our Universe to be a Quantum Event, but the problem is, Quantum Events are not even real until the singularity, which scientists have always failed to get rid of. Consider this as well; if all these events were leading to multiple universes being created into infinity, every single possible point would be taken during this approach to infinity. There would be no space for the multiple universes, and they would coalesce and collide amongst one another, leading to chaos and disorder. If every point in infinite space is supposed to be occupied by infinite occurrences, by chance, then this would lead to a chaotic paradox.

Oscillating Universe: This theory failed rather quickly and is simple to explain. Scientists tried to conceive that a singularity always existed. In this theory, the Big Bang would occur, expand to maximum potential, before re-collapsing in the Big Crunch. The Cosmic Big Crunch could definitely be a real thing. If the critical density of the Universe proves to be close enough to the actual density, 0 or more, then the Universe will reach a point of expansion to which it can go no further, and the domination of all gravity will cause its contraction back to a singularity. From observing the density of the universe and calculating the comparison to the current expansion rate to this figure, and the contraction rate, the collapse would just be a Big Crunch, and not a bounce. Instead of the hypothesized "Basket Ball Universe" bouncing back, the real calculations show it would be more like the dropping of a brick. The Universe could never re-surface. The Oscillating Universe Theory has also, been revoked by most cosmologists, if not all. It also doesn't explain what caused the big bang from the singularity to begin Inflationary Universe and the Anthropic Principle: In the Inflationary Universe, it is presumed that the Universe is the result of yet again, a vacuum, this time it is the inflation of a vacuum, in which intersecting Quantum fields are concentrated and then break their symmetry. MIT professor and cosmologist, Alan Guth, proposed this model. Inflationary Theory is currently one of most accepted models. However, the vacuum is again brought back, and extrapolations are being made about the origin of the universe, which go against the results of General Relativity. Guth admitted that, "the moment of creation remains unexplained." The intersection of 24 Quantum fields, which obey the laws of our Universe, would have to occur, and it is not known if they could result in any such Quantum occurrence. In Inflation, approximately 10⁻³³ seconds after the Big Bang, the Universe went into a state of exponential inflation. Imagine the super dense and super heated universe, so extremely thick and seething, yet only as big as a grapefruit. At this point, it becomes hollow inside and all energy around the outside is pushed out in the super quick inflation. This would be similar to the affect of inflating a balloon, and making dots all over it to simulate the expansion and the spread of matter. As the Big Bang debris cooled, matter was allowed to form from all the newly spawned exotic particles.

Let us just assume that a virtual vacuum did exist. The vacuum itself must be *fine tuned and designed* in order for it to permit these energy fields to create universes. If that is the case, the universe machine would have to have an origin, and we are back to where we started. Since the Universe breaks down at Planck Time, so do all of its observed laws, the Quantum Inflationary Vacuum would be acting under the same laws as our Universe, therefore, a pre-existing structure, such as the vacuum, could not exist, and could not give rise to the laws of physics. A pre-determining, non-observable order must exist. If the laws of physics break down and cease to exist at Planck Time, the laws were born at that instant in time, and therefore could not have existed prior to the Bang, we can not envision a vacuum preexisting the laws. As far as proven principles go, there was nothing before the Bang, absolute nothing. A virtual vacuum existing under our finely tuned conditions and constants would then itself, need to be finely tuned in order for the vacuum to exist and then give rise to a Universe like ours.

The laws and constants cannot be explained and the need for a Creator is ever more evident. Stephen Hawking once said, "Even if a Grand Unified Law is discovered, the laws will be reduced to mathematical equations, what is it, that breathes fire into the equations." Hawking realizes that, even though there is a guiding principle to dictate just why the Universe bothers to exist, there must be a cause behind this marvelous Law, that says to the Universe, "Be!" The cause is Allah. Hawking inquired in his research, "Just why does the Universe bother to exist" It doesn't have to.

<u>The Concept of SuperString Theory</u>: Ever since the discovery of Quantum Mechanics, science and physics took a tremendous turn, a turn toward uncertainty. Quantum Mechanics deal with Quantum Events, which are actions occurring on the micro-scale of nature. In Quantum Mechanics, the position of a given particle and the velocity of that particle cannot be precisely known or approximated. The more on attempts to find out about the position, the velocity is completely lost, and vise versa. When General Relativity is applied, something strange happens. We know Relativity to be correct, but when related to Quantum Mechanics, results come up very wrong.

Quantum Mechanics can prove Relativity false and Relativity can prove Quantum Mechanics false. In this case, the results show that neither of them can be right. This poses a big problem in physics. String Theory is an amazingly huge theory of calculations, which when used in relation of Relativity and Quantum Mechanics, may allow for the two to exist in harmony. Super string is so extremely complex, that it takes years to formulate and then solve equations that unite Quantum Mechanics and Relativity. It states that within all matter, with a billionth of a billionth of a billionth of billionth, the width of a sub-atomic particle, the energy making up the form of that particle consists in loops or "strings" that are one dimensional, but vibrate in 10 Dimensions! We live in 3 defined dimensions, meaning that there are 6 curled up dimensions and there is the dimension of time. Time is a linear dimension, usually considered a half dimension. String Theory will only function properly if there are indeed 10 total dimensions.

Scientists are finding it very difficult to deal with these extra dimensions. These dimensions are curled up and compressed dimensions of space, existing within our 3 dimensional space. All of them though are obeying our time and that is real time too. If a Unified Theory of Everything is discovered, then the Anthropic Principle (the coincidences of the precise value of all constants) would not be reduced to separate coincidences, but mandatory necessities in the emergence of the Universe. In other words, when the instant the Universe came into existence, this one guiding principle assigned to all constants and conditions their value and order. All things would be ultimately inter-linked. As of yet though, there are vast amounts of work to be done on String Theory, and much more work to be done in applying that to understanding the beginning of time and the Universe. String Theory can actually have up to 100,000,000 equations, and we haven't deduced the correct ones yet. String Theory tells us, if it is true, that at the instant of the Big Bang, the 3 Dimensions that we live in were liberated and gave birth to space, matter, and energy, while the other 6 remained super compressed and curled up within matter itself. If we had anymore or any less Dimensions, we could not exist, or have come to existence. The time-space curvature would have been disrupted, as would the smoothness of space and the structure of matter. If String Theory does turn out true, and we do find one Rule of the Universe, this itself should be amazing. The Quran informs us, that when Allah creates, he merely said to the matter or affair, "Be, and it is"

<u>Quantum Mechanics:</u> Quantum Mechanics is the study, which entails probability and observances of specific events, however these Quantum Events are on the absolute micro-scale of existence. The unique dance of subatomic particles in atoms is the foundation of Quantum Physics. Werner Heisenberg was a pioneer in this field and he set forth what is now known as "Hesienberg's Uncertainty Principle". Uncertainty and probabilistic behavior is the true nature of Quantum particles. Basically what the Uncertainty Principle declares is that our knowledge of these micro-scale particles is very limited and attributed to random chance. For instance, we cannot know the exact velocity and position of an electron simultaneously. Quantum particles have this unique chaotic phenomenon where observers cannot predict the outcome of events. The more we find out about the velocity of that particular electron, the less we know about its position and vice versa. Another example would be a radioactive isotope. Elements are radioactive because they have a surplus of neutrons, which upset the overall balance of energy holding the atom together. The extra neutrons make the atom unstable, and in order to stabilize itself, it must make particle/energy emissions. Plutonium is a radioactive element that goes through Alpha Decay. It emits two protons and two neutrons bonded together. In other words, Plutonium emits a Helium nucleus in this process. In doing so, the surplus of energy becomes smaller and smaller, and eventually there will no longer be an upset in the overall energy concentrated in the nucleus. This will happen when the element has decayed into Lead. The point of the matter is, we as observers of this Quantum Event, are unable to predict when the Alpha Emission will occur. We merely witness it, but have no way of determining the process.

Quantum Chaos Events and Observers In order for a Quantum Event to be clarified, it must be witnessed by an observer. In the past couple decades, Quantum Events have been related to human consciousness and the ability for us to observe. Erwin Schrödinger postulated an example theory into the nature of Quantum Mechanics. This analogy of his is called Schrödinger's Cat. In this, a cat is placed into a box and in this box also is a radioactive element, a Geigercounter, and mechanical trigger, a hammer, and a cyanide capsule. We close the cat in the box and no longer can we see it. Given a Quantum Event such as the radioactive emission of a particle, the Geigercounter will register it, send a charge into the wiring of the mechanical trigger causing the hammer to spring forth from its position and break the cyanide capsule, thus killing the poor cat. Due to the fact that we cannot predict or determine a Quantum Event, we simply say that a Quantum Event is potential. This means that given a finite time interval, a Quantum Event will have to occur in this time. We do not observe the cat or the contents of the box, so due to uncertainty and unpredictability we presume the cat alive and dead at the same time. This is also completely illogical though, so it is better to no longer consider the cat, to assume it never was in there. The chaotic behavior involved in Quantum Physics is quite unique and is also a great challenge for scientists to describe this

behavior in deterministic terms. No matter how random these events may seem though, they still obey strict law and defined principles. We may now think of chaos and randomness as actual results of Physical Law. Although these events may seem to happen without cause or unnecessarily, the fact that they do this, explains that the randomness of it is necessity governed by law. The attributes of Chaos and the ability of randomness in these particles are things which obey a plan almost, and their very nature is something that is totally conscious in itself, but because of the lack of knowledge we humans have, deems the Quantum World unpredictable.

A world based on uncertainty. An analogy to the rules of Chaos could be seen as this. If something is precise and follows strictly one pattern, then it is obvious to deduce that it has an intricate set of laws that make it behave in one particular, unique fashion. If something can be seen as always changing unpredictably, without specified direction, and tends to always deceive the eye, then you would deduce that, this is just happening without cause, it is random and uncontrolled. This is where a more philosophical approach to the matter must be taken. The chaos may come because there is a lack of organizing principle, but in the absence of the organizing principle, the behavior acquires a chaotic effect. The chaotic effect itself has an organized principle or law of effect in itself too. Otherwise, how could it behave random? The cause of chaos is the principle of undefined, yet organized randomness, no matter how random it may seem, it obeys principle laws, and we observers just cannot determine it. To make an analogy, say that I freeze a gas. I can set this ice-cold chunk of frozen gas down somewhere and tell you its exact position, temperature, and velocity. Now say that I place this frozen gas out in the middle of nowhere and detonate a nuclear device of one megaton. The instantaneous temperature change within a millionth of a second will act upon the steady state of the gas. Photons in excess by the billions will be slamming into it, the change in air temperature will overwhelm it. The blast and thermal energy will spread the particles instantly from a fixed solid to a plasma state. Plasma is a superheated gas, in which all electrons are stripped off from the thermal energy. The gas is now diffused over a much more vast area, the particles are now at energies immensely higher than before, and the overall position and kinetic energy has changed to such great degree. I can no longer tell

you one single thing about that frozen gas. It is not gone though and it is still obeying the same Physical Laws that constitute for its behavior and existence, the only change is, the behavior of the gas changed, but accordingly to cause and effect. The gas changes under the laws of its own nature to a new state. It still obeys gravity, it still has strong and weak nuclear attraction, the elements have remained the same, each atom itself still takes up the same amount of space geometrically, etc. Although it seems so unpredictable, it is still held in place by a governing order. This too, can be related to Quantum effects. Easily we can say, things are not always what they appear to be.

Quantum Events themselves are now being thought to be conscious bodies, who are responsible for their behavior and also the behavior of corresponding particles. I have discussed how even Chaos has an order behind its behavior and that its randomness is a cause and effect principle, initiated by other Physical Laws. Now I want to address the issue of conscious entities being able to assign certain values and constants to nature. These Quantum Phenomena are on the micro-scale, but constitute for the existence of our entire Universe. Here it may come into question, what can assign conscious sense to a particle to make it behave in an absolute way, even if they absolute behavior is chaos? Do not misunderstand, the particles cannot think, and they are in no way conscious like you or I, but to a degree, they have their own conscious existence. I spoke of an actual observer being needed to prove the status of Schrödinger's cat in the box, but what about an ultimate and supreme observer to verify Quantum Events and also the physical laws and constants? These Quantum Effects and the constants underlying the universe are uniting it into one unit, from the micro to macro scale. Consider what the Physics Writer, Timothy Harris writes in his book "*The Whole Shebang*":

"As we have seen, the Copenhagen interpretation of quantum mechanics treats as real ONLY observed phenomena, raising the riddle of how the early universe could have evolved in the absence of observers. The riddle may be "solved" by invoking God as the supreme observer, who by scrutinizing all particles converts their quantum potentials into actual states." The "Supreme Observer" would be the one making all happenings possible, not matter how random to us, they are conscious and submissive entities to Him, obeying Law beyond human imagination. We know about the seething soup of Quantum fluctuations occurring after the Big Bang but before Planck Time. If the seething soup of Quantum Particle Events that followed the singularity, but remained before Planck Time had this "supreme observer" then it could explain why the values of constant and certain energies have the values they have. The randomness of Quantum Mechanics along with the unpredictability, that no matter what, they would obey the command of this supreme observer, because 1. They are necessary because of Him, and 2. His mere observance of them allows them to exist as actual and functioning energies in a physical world. The necessity of the constants and energy values would rely on the observer, but ultimately, the observer would have to exist prior to any quantum event. SO, this would mean that if the observer had brought this randomness into existence and then guided it, it would mean all of what is now there, is dependent on Him alone, and his prior existence. The event of creation itself, preceding the Quantum Event would mean that the Quantum Events were already a pre-determined event. For a 0 Dimension state, to erupt into this seething Quantum soup, there must have been somewhere there not to just produce it, but observe its occurrence.

Compare the Universe to Schrodinger's Cat. If there is this void, prior to our Universe, it would in principle, be the same as the unknown state of the Cat in the box. Given an unpredictable Quantum Event based on uncertainty, the cat can be considered both live and dead at the same time. Since this is not possible, the cat may as well not be considered at all anymore, as if it doesn't exist, because only an observer opening the box will know. If the Quantum Events and fluctuations proceed the big bang expansion, then their whole coming into being and happening is something that would be completely uncertain, but with a given observer, they occur. It would then have been the same one, who observed them, that would have had to assign them with a sense of conscious behavior in order to form quarks, then leptons, then neutrons and protons, et cetera. The person, who put the Cat in the box, placed the Cat into this scenario of Uncertainty, but... who put the Universe in its box? Who would allow it to spawn through Chaos and Uncertainty but follow strict order thereafter. Quantum Mechanics is a whole new reality in itself, and I think may have something to do with Free Will. Randomness and the Uncertainty Principle can now be defined as only the probability of something, by which the actual reality escapes the human mind. We intend by our very nature to dissect things into rules, laws, and categories, but the laws, which may seem to be random to us, obey the laws of a prescribed probability. These laws and governing principles are not actually probable, but definite to a supreme observe, its probable cause is but an illusion and what we aren't able to predict is only lack of knowledge, in this case omniscience. Anything, no matter how random, no matter how chaotic, is within itself governed by law. Someone up there, is making that possible, the same one who prescribes not only the value of the law, but the material it describes in duality with the laws themselves. This Duality between Quantum Uncertainty and Constant Laws necessitates its own existence after coming into existence, but ultimately comes from somewhere else and is observed before any person was here to observe it. This Duality would also be a "pair" relationship. The certain lack of one feature allows for the appearance and increase in magnitude of another. This relationship is unique in itself, because it requires a balance.

The Whole Current Perspective To date, Cosmologists and Physicists remain baffled on the origins of the Universe. Although, some may feel they know, they really don't for sure. As a brilliant Soviet Physicist by name of Leon Lederman once put it, "when you hear or read something about the Big Bang, someone is making it up, only God knows what happened then." There have been so many theories, from Einstein's initial Timeless and Ageless Universe, to the Steady State Theory, which was once a favorite as well, to the many models of the Big Bang. Theories come and theories go, some shed light, and others fail. The people who are prying into the mysteries of the Universe are merely people, human beings. One should examine, why is it that creatures like us can come to know so much about the world we live in? We do not even have to leave our little planet, yet we can attain the deductive power to make so many assumptions and find so many things out about the Cosmos. Every culture and every tribe has a spiritual belief and the concept of God and the Afterlife.

The signature of the Creator lies within the consciousness of the special beings he made so unique. Roger Penrose, cosmological physicist and mathematician made the

conclusion that, no matter how much we discover and how hard we try, we, with all of our knowledge cannot create Artificial Intelligence on a complexly designed computer. With so many years of input, scientists fail to create a system that can even replicate the basic features of sections of the Brain. As Neurologists and brain researchers are expanding the horizon on the functions of the intricate human brain, they cannot account for consciousness and self-awareness. Roger Penrose has stated that science will never explain human consciousness and pure human emotion. His book, "*The Emperor's New Mind*", deals with the subject. The intricacies and computational abilities of one cell cannot even be summed up or duplicated by human reasoning.

The Universe came from nothing, and became highly organized; it gives rise to life on Earth and consciousness. The complexities of life are another mystery to science. One complex thing leads to the next, the Universe, then Life, then consciousness. In this, conscious and intelligent observers like us were produced to ponder the Cosmos and assert just what our purpose is. To throw all of that to chance is completely foolish. Everything you have ever done, every person you have ever known, every memory or experience you have ever had the pleasure of making would just be due to random chance, and your life would have no purpose or meaning.

Psychologists and Neurological Physiologists are now providing evidence that the brain is a mere interpreter of frequency and impulses. Consciousness cannot be accounted for under such conditions, and many have already declared our conscious existence to be extra-physical. Our amazing conscious understanding of the world we live in was meant to be. Each one of us has the imprint or signature of the Creator, through consciousness and the belief in Him. Atheism is the minority and it is also an absurdity. God's existence must clearly be recognized. If one is willing to attribute life and existence to chance, they are calling themselves, an accident, or something with no meaning or value. All of us are conscious beings making conscious decisions. Take the time to think and say to yourself, "how can inanimate, lifeless matter, that is accidental, come together to form living creatures and develop them in such a unique and complex process, and then give the successors of this consciousness?" Accidental matter, with no purpose cannot self

organize itself into a well-maintained information network like we see in the DNA strand of all life. Also, matter cannot generate consciousness. We have no explanation of consciousness or raw human emotion. Are you willing to attribute the love of your wife, or best friend, to matter bouncing around in your brain, that just happens to be there? Atheism is against nature itself. Allah informs us in the Quran about the ongoing rivalry between believers and non-believers, and so it shall continue. He informs us that, "there are those who will not believe, if you show them sign after sign, one after the other." Overall, we are created to believe in the Almighty Creator, Who has formed us toward Him, so that we may make the decision to seek Him. For instance in 30:30 of the Qur'an it reads, "The nature of God, according to which He created all mankind, there is no altering of the established order set by God. That indeed is the established order, but most among mankind know not."

We are a species who have come to believe in God, the Almighty. Just for this, we should be able to gaze into the existence of God and His influence over not just man, but man's caused existence, and the Universe he was brought forth from. Science cannot account for everything, as many scientists will admit. Consider the Quran:

"When you gaze into the Creation of the Almighty God, you see not flaw in His work, look again, do you see any flaw? Again, your vision returns to you defeated and fatigued."

No matter how far we look into the structure and origin of our world, or how far we gaze out into space, there is still more and more and yet more to discover, with every discovery we see harmony.

In the words of Astrophysicist R.J Russell, we may consider the following. "Whether the origin of the universe as we know it involves a previous quantum superspace, or whether the universe had an absolute beginning 15 billion years ago, the universe is contingent. It does not seem to include the grounds for its own existence. It does not offer an ultimate explanation of why anything at all exists in the first place, and therefore it points to that on which all beings necessarily exist – God". (60)

One of the greatest Mathematicians, Hilbert, provided proof theorems for the impossibility of infinite physical things. One of these attributes involves the concept of infinite space and time, filled with infinite material. Although all would be interdependent upon the other, all of them are contingent. Hilbert pondered that if there is an infinite time, then there must be an infinite past of physical events. So then, Just what is infinity subtracted from infinity? It is a paradox. Every physical event to ever happen would infinitely recede into the past, but never reach a point of origin. Since every event itself is finite in time and quantity, then we cannot deduce physicality to be infinitude, because it would have to remain as a constant. An actual infinite is something that is complete but continues. You cannot add quantity to infinity, because infinity does not change, but remains at a constant. To assume what we cannot observe violates not only common logic, but also Ockham's Razor. Therefore, in finite physical reality, things are contingent to the degree, in which they do not necessitate themselves or possess the ability to maintain random existence alone and unobserved. But, they may necessitate cooperative existence of each other, and this characteristic demands the Supreme Originator, Observer, and Sustaining Being, who sets the laws which lay beneath reality and describe existence, making that there is something, instead of nothing.

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