

O GOD; WHO ARE YOU AND WHERE ARE YOU?

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What is out There?

Astronomer Dr. Carl Sagan described our earth, our planet as a 'pale blue dot at the end of a sunbeam'. Dr. Stephen Hawkins and others of the established scientific community, described the beginning of our vast expanding universe as the 'Big Bang' and this concept was boosted by Edwin Hubble's observations. Such an event resulted in the coming into 'existence' of space(s), matter(m), energy(e) and unidirectional time (t) and together with the constraining, unyielding and governing laws of physics which still exist today. It is believed that all this 'creation'; namely, 'something' religiously a 'miraculous creation' or scientifically a 'singularity', sprang into 'existence' estimated some 13.8 billion years ago. It was an 'impossible' event, if solely based on our presently known governing laws of physics. The size of the universe is estimated to be 46.5 billion light years. This universe continues to expand at the rate of 44.7 miles per second.

To further comprehend the magnitude of such concepts, consider that the speed of light which 'travels' the distance of 186,000 miles in **every second**. Simply put; circling the earth (with a diameter of 7926.34 miles and circumference of 24,901 miles), **7.47** times every second. Now consider that there are approximately 31,557,600 seconds in one year, then light travels approximately 5,878,625,373,183.6 miles in one light year. Then a distance over 46 billion light years is not numerically easy to comprehend and therefore perhaps best described in 'human' terms, as 'very huge', but nevertheless it is still **finite**.

Professor Albert Einstein further advanced human knowledge by his famous transformation equation; $e = mc^2$; thereby linking 'mass' and 'energy, where c is also the speed of light. Rewriting this equation as $m = e/c^2$ illustrates, that since c, the speed of light is a very large number and is multiplied by itself or squared, the tremendous amount or 'God like' energy was and is required to 'create' a relatively small amount of mass. Therefore, 'humanly inconceivable' amount of energy was required in the formation of galaxies, the universe and the almost humanly unconceivably large, but still finite, cosmos. All from relatively 'nothing' and scientifically called a 'singularity' event.

Although, we as humans comprehend different forms of energy, like kinetic, involving mass and motion (m, s, t) and potential, which is a storage concepts and the practical applications of electricity, (micro and macro transmissions) and light. However do we really understand the very basic and simply sounding concept of 'energy' itself? Human knowledge and understanding is finite and is indeed bounded!

We recognize the passage of relative time from the rotation of the earth (approximately every 24 hours) and we continue to see the impact of it's unidirectional 'passing' on our watches and clocks. Nevertheless, if 'everything' in the universe speeds up or slows down, we would not know. Human knowledge continues to accelerate and expand and human comprehension and understanding and the bounded human 'bandwidth' will continue to be stretched, but will remain finite within this finite earth and finite cosmos. The human finite 'bandwidth' is of tangibly seeing, hearing and intangibly of comprehending, knowing, feeling and understanding. Therefore, it is humbling to look through a microscope or glance through telescopes and realize of how little we know and how much there is to learn within and beyond this 'pale blue dot' we all call our common home.

Realities of Bounded Human Perception:

During our human knowledge based analysis and over time, we tend to ‘loosely’ refer and use words like ‘infinite’ or ‘infinity’ and ‘eternal’. Such word concepts, by definition are unbounded and cannot be ‘boxed in’ and fully comprehended within the limited ‘bandwidth’ of human understanding. Nevertheless, using human curiosity and ingenuity and quest for knowledge, we continue to advance human knowledge from tangibly constructing artificial ‘aids’. These are microscopes, telescopes, locomotion and artificial intelligence concepts by reshaping and transforming materials and energy sources. The continuous human objectives are to satisfy curiosity, a better understand of the unknown, survival instinct and to seek a ‘better’ life. Nevertheless, even though we cannot comprehend and understand ‘infinite concepts’, we can attempt to pursue a ‘never ending’ and unbounded ‘trajectory’ towards a humanly perceived difficult, if not impossible ‘destination’, both materially and ‘spiritually’

For example and conceptually: Consider just one grain of sand on this earth which is estimated to contain 5×10^{19} atoms or some fifty million trillion atoms. (For comparison purposes if one trillion US standard dollar bills, each of thickness of 0.0043 inches are stacked, (yes those with the words “IN GOD WE TRUST”), then the distance covered would be 78,660 miles or more than a quarter way to the moon).

Continuing this conceptual trajectory towards ‘infinity’; consider also that each atom of sand has a nucleus and orbiting electrons. Now compare this reduced mini model to our solar system, which has a central sun and 8 orbiting planets of which earth is just one planet. Further, consider conceptually, that an orbiting electron is equivalent to a ‘mini earth’ and contains equivalent micro, micro sub-atomic equivalent ‘sand particles’. Similarly each particle contains more or less some fifty trillion even smaller particles and then each of these particles contains even smaller and smaller....without end...Conceptually this continuous decrease and unbounded trend of relative size reduction goes on ‘forever’ or ‘infinity’ and beyond human comprehension. Noting that conceptually, a continuous and never ending of relative size reduction, beyond a ‘perception’ of a relative size, does not mean the eventual extinction or disappearance and nonexistence. ‘Something’, in concept, would still ‘exist’ as ‘something’, rather than incomprehensible ‘nothing’. Now consider that on earth there are some 7.5×10^{19} or seven quintillion grains of sand and also that there are some 70 thousand million, million, million stars. There are more stars in the heavens than grains of sand on earth and each having many more sub components. What would such a perceived ‘never ending’ concept actually mean in human terms? Therefore, humanity is bounded and finite and has limited human comprehension capabilities and which are only within tangible and intangible ‘bandwidth’ boundaries. There are ‘soft human limitations’, since through continued scientific advances and as material aids, we continue to ‘stretch’ and supplement human natural abilities to finitely see smaller and smaller and further and further. Nevertheless, we are numerically bounded and thereby finitely limited to comprehend and understand ‘all’ that really exists ‘out there’? Namely, even though we can partially express or indicate a ‘trending direction’ in numerical terms, nevertheless the ‘totality’ or an ‘absolute fullness’ cannot be humanly comprehended beyond finite human bounds.

The following numerical series is an example of bounded values of the enigmatic number “e” . It is an ‘indefinite’ series and some of the continues numerical sequence values are; 2.718281828459052.....In another example, Fabrice Bellard, so far, has calculated the value of “pi”, (which is the ratio of any circle to its diameter), as 3.14159..... to 2.7 trillion digits. Both examples of numerical series, illustrate that even by incrementally and indefinitely or ‘infinitely’ keep increasing ‘forever’ in time(t), with additional numerical values after the decimal point, those series will still remain bounded. Such a numerical indefinite continuities provide increasingly *‘greater marginal numerical accuracies’ and yet remain bounded and ‘do not cross over that line’ of their respective finite bounded values.*

Therefore neither ‘e’ will ever ‘attain’ a 2.72 nor ‘pi’ the value or 3.15; since both those values are beyond their respective bounds. This is so and is irrespective of the length or ‘infinite’ continuity, over time(t), of continued additions of tangible incremental numbers.

These simple mathematical examples illustrate the concept of numerical ‘bounded’ or having upper limiting values and yet have ‘infinite trends’ of ‘unbounded’ increasing marginal values. Such advancements also illustrate that progressively and yet finitely time(t) trending increases continue to increases *the numerical accuracy* of the respective values of those bounded series. Such a concept is later extrapolated and compared to a ‘bounded’ humanity and which nevertheless can selectively continue to ‘holistically grow’ over time and generations. Such a progress can be a continuous ‘human journey’ to increase ‘humanity’s created accuracy(purpose)’ . It is a continuous and unbounded trend and by choice can advance within humanity’s finite and ‘bounded limitations’. Namely ‘wisely’ use the results of tangible material scientific advances, which can be chosen to be very beneficial components for humanity and over time(t) not only retain, but also advance those ‘holistically human’ qualities and values. Therefore, if so chosen, scientific advances can provide the means, but not the replacement of more effectively and efficiently the generationally continuous human journeys which advance the *‘holistic accuracy of human life’* . This concept also includes both the quality and the ‘greater purpose’ for existence. Such a ‘balanced’ and comprehensive and indefinite capacity for advancement may not only be perceived within limitations of tangible human bounds, but also from intangible present and future human choices.

It is humbling to realize and to compare our earth, our common home, our ‘pale blue dot’ to the ‘huge vastness’ and yet a ‘finite’ universe. It all had a beginning, the ‘Big Bang’ , a ‘Creation’ and will also over time(t) have an end.

Questions arise; whether the universe had always existed and also with continuous evolutionary changes? Or was there and is there really a ‘creator’, an eternal, almighty, all loving , all knowing and omnipotent ‘GOD’, who made all this happen and created humanity? If so, then why is there so much human suffering, pain, hardships and.....?

Perhaps part of that answers may be due to ‘self-inflicting’ human events and also that we cannot comprehend the ‘will and mind’ of an almighty creator in finite terms and within our bounded and finite human understanding.

Holistically Advancing Practical Scientific ‘Knowledge’:

Scientific advances and associated accumulation of knowledge are increasing exponentially and global knowledge doubles every six months or so. Past perceived ‘impossibilities’ have and are increasingly becoming advanced realities. We are not only reaching for the stars and but also internally. On earth, we are attempting to redefine concepts of life, intelligence and human values. There are efforts to merge biological life and ‘artificially’ with ‘re-arranged’ matter’ and to further advance the ‘complexities’ of matter. Travelling has advanced into driverless cars and reservations have been made to visit the moon. Computation has advanced communication where now a mobile telephone has more ‘intelligence’, than NASA’s computer network which landed men on the moon and safely returned them back to earth. Artificial intelligence (AI) applications are perceived to have become ‘humanly challenging’ and are exceeding, in many tasks, human ‘natural’ capabilities. Globally renowned ‘futurist’ Ray Kurzweil and others predict that the ‘Singularity’ is near. Namely, an ‘event’ when advanced AI will exceed human cognitive processes and attain a greater than human intelligence and will become autonomous. Past scientific advances have definitely advanced both the quality and longevity of human life. For example, artificial heart valves, knee and hip replacements and other ‘past impossibilities’ have become routine beneficial additions to the human biological process of living. There is now ‘talk’ about implantation of ‘memory chips’ in humans and also talk to achieve practical ‘immortality’ by storing human consciousness or one’s ‘conscious self’ ‘forever’ in a ‘virtual world of happiness’.

The realistic trade-offs should continue scientific advances with both tangible and intangible benefits for humanity. Nevertheless also include a holistic recognition of potential dangers to humanity from adopting mainly an accelerating materialistic ‘trajectory’ towards some such perceived (at this moment), ‘fantastic’ concepts.

A similar perception may have been after the development of the first atomic bomb and the nuclear arms race which then followed!

The main human concern should not be limited to the practical technical feasibility and goal of ‘creating’ a progressively superior ‘artificial’ life’, but also include the potential dangers, from such a potentially noncompromising trajectory. Namely, an undertaking which incremental and over time may result in a progressively greater and greater subtle acceptance of the ‘dehumanization’ of human values. The driving force and view may become that human and machine interaction is the continuation of life’s and humanities ‘evolutionary’ processes. A direct or subtly and over time, an indirect ‘machine’ and ‘human’ interface and not just ‘pressing buttons’. If so, then there would be less and less ‘room’ left for religious and idealistic beliefs, a deity and a purpose for ‘human’ values to remain ‘intact’. Especially important when facing the realities of the expanding and ‘hungry’ humanity on this relatively small ‘pale blue dot’ with finite and many non-renewable natural resources!

Therefore, by mainly focusing upon tangible material advances of reshaping matter and associated energy transformation, may increase society’s rate of ‘filtering out’ intangible human values. Namely, a global humanity and by choice and slowly, but surely, accepting ‘logical’ tangible material changes, which would ‘squeeze’ out more and more the perceived importance of maintaining ‘human values’. These include, but are not limited to; kindness, goodwill, compassion, empathy, affection and other holistically related human attributes associated with intangible human values. Such human attributes, if viewed from ‘machine based logic’, may appear to be ‘impractical’ within the bounded laws of physics.

Namely, we may start to accept a ‘subtle’ trend, but nevertheless a continuous trajectory of the de-humanization of humanity. The result would deplete human life’s inner ‘soul-intelligence’, an intangible attribute which makes us all ‘really human’ and which characterizes humanity (initiated by choice), may be ahead for future generations. These could be greater dangers to humanity than from a perception of tangible ‘robotic’ labor saving advances to ‘take our jobs’. Therefore, if unchecked, ‘intelligent material’ advances and which only have tangible material basis of unyielding and bounded physical laws, may reach a ‘critical turning point’ when ‘comfortable’ human societies will also start to ‘recognize’ that only physical laws matter. What could then be the consequence from such a global ‘evolvment’ into a ‘soulless’ world of global change? What would then be the purpose and objective for ‘life’ and existence without a higher purpose on a finite planet with accelerated depletion of natural resources?

The initial ‘humane’ transitions may include some considerations for the ‘less productive’ individuals in society. However and over time, a materially based ‘logical conclusion’ may become that there is no more room for the unproductive elderly, infirm or weak in a bounded global world with limited resources. Some of their associated services could be ‘diluted’ and others eliminated. If indeed such or similar dehumanizing perception happens, then what could and would be the long term consequences and ‘guiding light’, purpose, goal, subtle and either direct or indirect for humanity’s future?

It should be obvious that scientific advances should continue, but should also holistically include the advancement of intangible human values. The recognition of advancing comprehensive human benefits, should also be viewed beyond the short term, present-now, for me, only during existing life spans, but even more importantly to include long term impacts upon humanity’s future.

Free Will, Choices and Responsibilities:

Scientific and technological advances are great as aids and as ‘material servants’ in one form (physical) or other (intellectual), but should not, over time, become destructive tangible and intangible ‘masters’ to ‘humanity’. The human future would become grim, if by choice, we make science the modern and updated god and ‘tangible results’ becoming more and more substitutes for human intangible idealistic beliefs. Namely, that only technological advances can and will solve all humanity’s present and future problems and dilemmas, whether those challenges continue to be ‘materially’ and ‘spiritually’ based.

Therefore, realistic long term human challenges may not only be from increased global population growth, but also from increased intangible ‘hunger’ and more ‘greed’ by many for shrinking natural resources. These include fresh water and also a diminishing perception of importance of differentiating between human, animal and perhaps also in the future may include ‘intelligent’ machines. Such a focus could become a new mantra for ‘advanced reality’, if intangible ‘humanly or religiously’ based guidelines for life are so modified that only the laws of physics matter. Such a vision would continue to replace the modern phrased so called ‘outdated beliefs’ in a deity with a higher purpose of life than just to ‘exist’. Renowned Bill Gates, Dr. Stephen Hawkins and other learned individuals, (not necessarily all religious), share common views that accelerated advances in AI may soon ‘evolve’ beyond human ability to control and become a greater tangible threat to humanity than global nuclear confrontations. It would be ‘difficult’ and perhaps impossible, not to replicate, but to duplicate or ‘create’ an artificial human; (something from nothing)!

We do not really understand and comprehend ‘ourselves’: We only speculate about the intangible complexities of ‘holistic human intelligence’. Nevertheless, an advancing humanity has developed scientific marvels, where now tangible robotic procedures with AI basis can perform medical analysis, diagnosis and even some unaided surgical procedures. Such limited tangible progresses are not only expected to continue, but will also expand and further benefit humanity. However the question arises, whether a ‘finitely assembled’ tangible material components can ‘somehow’ become ‘holistically equal’ or even greater than ‘holistic humanity’? Namely, could an autonomous functioning AI ‘evolve’ from assembled ‘material parts’ without ‘that spark of life’? Could materials, which are mined and scientifically modified by finite human intelligence and sequentially assembled inert components, then ‘somehow’ be self-organized ‘complexities’ and attain a conscious holistic self-awareness and a ‘life’? Could matter ‘comprehend and understand’ matter ?

Such a concept would not be a human replication in the form of a ‘super robot’, but possess intangible human attributes which include, but not limited to, beliefs and responses. Such a ‘concept’, if feasible, would literally become a silicon based ‘birth’ of ‘artificial life’. If so, then other such machines could ‘assemble’ even ‘better machines’ with even more advanced AI and thereby ‘give more births’ to even more advanced and improved ‘entities’ and.....and eventually a form of Artificial Intelligence and transmitted, at the speed of light, to other worlds ?

Past technical achievements produced assembled vehicles which can exceed human speed and a humans cannot fly like an ‘assembled’ plane or calculate like computers. Such and other technical human innovations ‘reshaped materials’ and transformed energy within the bounded laws of physics. These ‘aids’ became ‘superior’ than human natural capabilities for specific tasks. Therefore, from further scientific advances and cognitive applications, it may be realistic to expect that the ‘asymptotic’ boundary or the difference between the ‘created humanity - people’ and that of ‘assembled’ AI machines will narrow. However the ‘production’ of an advanced tangible and complex ‘human replica’ is not the same as ‘creating’ a holistic human duplicate.

The quest to ‘make’ AI equal or even superior to humanity, if unchecked, may result in an unintentional ‘creation’ of ‘artificial monsters’. These may directly or indirectly and perhaps ‘inhumanely’ redefine humanity’s future. Perhaps such AI concepts and ‘mainly’, based on bounded human perception of material laws, may start to ‘logically’ and unemotionally perceive an ‘imperfect’ humanity as a biological threat or a ‘fungus’. Such a ‘material evolution’ may ‘logically’ conclude that it is necessary to eliminate humanity to ‘save’ this pale blue dot from ourselves!

Outreach into the unknown:

Humanity’s quest for increasing knowledge, raises many questions, such as ‘Is there life elsewhere’ in this vastness of this whole universe and if so what type? Would such life be like us or more advanced; socially and technically? What about ‘their’ religious beliefs in a deity or a creator? Such discoveries would impact human focus, global development and associated beliefs.

Our Sun is one star among billions in the Milky Way Galaxy and which is one among the billions of other galaxies in this Universe. In the vastness of this universe and reviewing the laws of probability and also that the laws of physics are universal and are logically bounded, then earth is probably not alone to harbor 'life'. There are very likely conditions on other worlds - planets to support some sort of 'similar life'. Due to the vast distances between distant stars and galaxies and even travelling at the speed of light and relatively short human life spans, only spectrum searches are practical in 'light years'. Therefore to obtain any results are, as yet, still beyond our human lifetime(t) reaching and knowing capabilities.

It has been said that humanity has been 'created' with an intangible immortal soul and in the image, but not equal, to the almighty and immortal creator. Perhaps the creation of this universe and it's humanly perceived vastness was just an 'addition' for humanity's free will to choose as 'challenges' for explorations. Such human efforts and benefits could increase more global unity and wisdom.

Future space explorers could be similar to former sailors on sailing ships and who initially 'perceived' the 'hugeness' of the earth. Many had a fear of 'falling over the edge' yet they persevered. They bravely pursued and discovered new lands and new inhabitants. Extrapolating from 'then' in a relatively short period of time(t) to 'now' and with present accelerated exponential advances in scientific knowledge; then the challenges of exploring the universe may be the next 'logical' step for this rapid materially advancing humanity.

However, since God sent his almighty son to be physically Born, Sacrificed and Resurrected for humanity, then that documented divine actual event is neither holistically finite nor repeatable. Such a divine occurrence 'infinitely' exceeds the scope of any 'finite' creation. That also includes the creation of this finite tangible universe, irrespective of 'hugeness' and which had a beginning and will have an eventual end.

Therefore, humanity may be GOD's 'special' and as 'holistic humanity' was created in the image of GOD it is 'spiritually alone' in the huge vastness of this cosmos. That does not imply that there cannot be similar, but **not the same** holistic life forms 'out there'.

Bounded Perception of Holistic Realities:

It is generally agreed in both scientific communities and religious quarters, that there was a beginning' for this huge, but nevertheless bounded universe. A scientific 'Big Bang' view which coincides in concept with a 'religious view of the 'Creation' and most generally also agree that in some future time(t), it will end.

To 'logically' and yet 'humanly' extrapolate events before the beginning of the 'Big Bang' is false using presently known laws of physics. They originated at the 'instant' of the 'Big Bang' and it is a 'logical impossibility' to create, '**something**' from '**nothing**'. Present physical laws neither existed nor could be applied before or at the 'moment' of the 'Big Bang'. Therefore there was something else!

Finite and bounded humanity, with all the tangible resources available on this 'pale blue dot', **does not** and is not capable of tangibly **creating** 'something' from 'nothing'. Namely, we reassemble or rearrange existing matter in different forms and use available energy sources. These efforts consist of transformation processes of reassembling natural and human altered tangible elements and using intangible human 'intelligence' resources, attain an objective.

Thereby, we have developed vehicular motion, which includes cars, planes, space vehicles and from further advances in computation, we have collectively produced a form of 'intelligence' in itself. Scientific advances, with even greater material complexities are being developed by continued miniaturizing of existing technologies. Material advances now include AI devices to simulate some human attributes more effectively and efficiently in many transformation energy processes. These include, but are not limited to communication and massive generation and transmission of electricity. Nevertheless, spectacular advances in AI have not attained holistic human duplication of 'self-knowledge' and 'consciousness', since we ourselves do not fully comprehend or understand the human complexity of 'ourselves'! Nevertheless, from 'reverse engineering' and from greater global scientific discoveries at the 'micro levels' and from seeking to 'know more and more about less and less'; future scientific advances are expected to become even more spectacular than the past trends. The 'indefinite' continuation processes of separation of ingredients of matter and energy and by 'filtering' will provide more and more of desired 'ingredients'. Then from a selected re-assembly will produce more and more of perceived desired tangible results. Such human and 'machine' assisted efforts and within the bounded laws of physics and nature, may include a comprehensive trajectory to better understand holistic boundaries associated with the concept of 'life'.

Such scientific pursuits and associated results may not converge to a universal conclusion, nevertheless could narrow the humanly perceived differing viewpoints. 'Universal Truth' applies to all of 'creation' and it is only the bounded human perception which makes the difference!

The sculpture, Michelangelo's 'creation' of the famous statue 'David', said that the figure was always there. He did not 'create', but simply chiseled away those parts not needed.

Humanity has both tangible (physical, finite self) and intangible(inner self, consciousness, spiritual intelligence) attributes and holistically 'differs' from all other forms of earthly life. Through increased 'knowledge', the boundaries of our finite life spans and comprehension and understanding are progressively advancing, but within bounded human limitations. (Analogous to previously discussed numerically bounded and yet 'indefinitely' expanding 'e' and 'pi' series).

Therefore, as realistic 'human mortals', we, individually and collectively and sooner or later, recognize that since there was a tangible beginning, there will be an eventual and inevitable tangible ending; individually and collectively. Nevertheless, humanity individually and collectively, continues to progressively stretch out those finite human boundaries by learning and understanding more and thereby also advancing our common tangible material knowledge base. Also by seeking physical survival, humanity increases both the longevity and quality of life.

Therefore over time, tangible material improvements have generally increased human 'comforts'. Perhaps now somewhat 'unconsciously', we are starting to indirectly 'worship' science. Many are starting to believe 'that here and now is all there is to life'. That view could be from a somewhat materially reflective period and due to a very rapid advancing technological age of scientific wonders and 'quick' tangible 'fixes' and benefits. Humanity may start to focus elsewhere with statements like; 'what value are those out of date religious beliefs to me; show me?'

Such overcompensation for tangible issues and if they grow at the expense or become greater and greater substitutes for intangible ideals, then such a trajectory will negatively impact future human development and values. Some of which have become national cultural corner stones and provide intangible moral strength during humanly challenging times. Words such as; "*Give me your tired, your poor, your huddled masses yearning to be free*"; also contributed to the building of a great nation.

There is much documented evidence of 'divine guidance' throughout human history. The documented bible, biblical scholars and many miracles and unexplainable events throughout the ages, influenced the formation of cultural foundations of many nations.

Such tangible documented evidence of intangibly influences makes even more human 'logical sense' that there is a creator and a cause, an objective for life, rather than just an 'animal instinct' for physical survival. Therefore, human life has a purpose even in this 'huge' universe which had a finite beginning and will have a finite ending. Therefore there should be a more 'humanly' worthy recognition of the 'beginning' than just responses like; 'I don't know and I am a practical realist. I do not believe it happened. I live for today and scientific advances over time will eventually find all the right answers!'

Some also point out that if there is an omnipotent and almighty God, then why is such a creator allowing hunger, poverty, hurricanes, floods, wars, diseases and all those other human afflictions and sufferings?

Part of the answer is that humanity has free will and in many cases, available choices for taking actions and which usually have both short and long term consequences. Some may be perceived as 'self-serving' beneficial in the short time(t) and perhaps neither realizing nor caring that in the longer term will become detrimental and long lasting. Analogous to a large object or an explosive device 'intentionally' thrown into a pond: There is not only an initial 'consequential' spectacular 'splash', but also the resulting wave perturbations will continue to linger and have varying time trending impacts on various shorelines.

For example; a drunken driver (choice) accidentally kills, (unintended consequences), some family members. Some of the children lack moral support (long term result) and turn to drugs (choice) and start a life of crime (choice) with further (perturbations) inflicting pain and suffering on others and..... Also if a manufacturing plant takes 'short cuts' to economically remain viable (short term gain) and continues to 'slightly pollute' the 'run off' to drinking water (long term unintended result). Children are born sick and handicapped (long term consequence) and negatively impact family life (longer term results) and become continued handicapped burden to themselves and society. You can probably think of many more global examples of short and long term lingering consequences from human initiated decisions.

Humanity tends to claim benefits when 'things go well' and blame and even curse GOD for unwanted impacts and associated consequences. Nevertheless, humanity has available and for the taking, the abundance of earth's natural resources and sometimes forgets that almighty 'source'. Some challenge and condemn the almighty creator, if and when the creator does not perform to their bidding. Specifically, when undesired events occur, even though humanity may have indirectly or even directly caused those unwanted impacts. Some also conditionally state: For me to believe (conditionally) in a GOD, then this and that must happen!

However by glancing into the ‘heavens’ and beyond our ‘pale blue dot’, a person should surely recognize and begin to comprehend that the vastness and ‘results’ out there is beyond our humanly perceived bounded ‘laws of physics’. Also an even a greater ‘logical’ recognition that humanity’s ‘creation’ is in the image, but not to the equal of a creator!

Spectacular technological advances continually aid in stretching out human bounded senses in many causal ways. We collect and process perceived data which forms information and knowledge. Such efforts and accumulated results continue to increase human wisdom beyond the accumulated capabilities of just our natural human senses. Nevertheless, during that ‘imperfect’ transformation process; from collecting data, processing and advancing human knowledge, ‘something’ tends to be lost’. Humanity’s finite ‘bandwidth’ perception is both tangibly and intangibly bounded and imperfect.

Therefore, perceived human knowledge and obtained from bounded information is not necessarily holistically accurate about ‘all what is happening out there’. Questioning the existence of a creator, may be a starting process of a trajectory and quest, rather than an attainable human destination within the human ‘bandwidth’ of understanding. Human knowledge continues to more rapidly advance and accumulate from scientific and ‘artificial material aids’. Although these ‘additional trends’ further expand the finite and bounded cognitive human senses and our self-image of importance, nevertheless humanity still retains a fundamental free will to choose. Namely of whether or not to follow a trajectory and in a belief towards an unbounded almighty.

It may be that faith, unlike other human constraints, is an attribute which can reach beyond the bounded laws of physics, tangible understanding and bounded human wisdom. Namely, a bounded humanity using the concept of choice and free will has the capacity to further seek a trajectory towards a humanly undefinable ‘almighty’ creator. The question may also arise of how to separate, ‘faith’ from superstition and idol worship, which was prominent in past pagan civilizations?

Convergence of Science and Religion:

Scientific discoveries and spectacular advances in global collaboration are increasing knowledge at an exponential rate. The world’s global knowledge doubles every six months or so. Practical tangible achievements, such as, communications, travel and other hi tech spectacular ‘advances’ would have been unbelievable 30 or even 10 years ago. Humanity is now reaching out to explore both the ‘heavens’ and the ‘creation of life’. Terms such ‘singularity’ have resulted from accelerated exponential advances in AI and which have not only expanded our perceived human boundaries, but also are believed, by some, to shortly exceed ‘human intelligence’.

The question then arises; can an assembly of ‘artifacts’ be sequentially put together or so assembled of not only more effectively and efficiently perform not only specific tasks, but ‘humanely’ outperform humanity? Specifically, whether it is feasible to holistically duplicate ‘humanity’? The ‘constructed’ attributes would have to include, but not limited to; consciousness, self- awareness and free will. Perhaps as ‘created’ humans we are limited to ‘produce’ AI’s concepts to only asymptotically simulate ‘humanity’ and ourselves? Namely, may not have the comprehensive capacity of an ‘intent’ of crossing that intangible boundary of a human ‘creation’ which makes a human, ‘uniquely human’. Such practical efforts would be finitely and ‘humanly’ limited to the level of a ‘construction’, but nevertheless becoming less and less distinguishable from general human functioning capabilities.

These would only be as replications of humanity and ‘made’ or assembled in the ‘image of a bounded and finite humanity’. They could include tangible physical form and many cognitive ‘logical’ functions. These could perform ‘better’ than humans, but not attaining a holistic human duplication. During such a AI construction ‘trajectory’, there would be some ‘guessing’ to recognize and understand how to ‘tangibly’ identify the intangible human attributes and holistic boundaries of human intelligence. During such efforts and skill, there still would remain that requirement for that final ‘creative tweak’ to ‘give birth’ to an ‘artificial life’. We do not as yet or perhaps do not even have the capacity of comprehensively understanding the holistic nature of ‘humanity’ ourselves. Namely, not as yet, to reach intangible human attributes beyond the ‘bounded’ neural circuitry using constructed complex material simulations!

Nevertheless, would such scientific concepts and ‘directions’ be viewed as the next step in a human based ‘evolutionary process’? If so and fully accepted, it may then become the final tangible ‘frontier’ and an intangible trajectory for ‘our’ holistic humanity’s existence. However, can bounded humans, who have nevertheless greatly advanced many natural human attributes, further ‘construct - create’ advanced Artificial Intelligence equal to or beyond ‘humanity’? That is to construct ‘entities’ which may even be part biological and part material and for ‘them’ to attain a ‘self-consciousness’ or to be ‘born’ and exceeding the ‘created’ and holistic human capacities? From such scientific human efforts and by just simply adopting such a trajectory and journey and not necessarily an attainable destination, would not leave much ‘space(s) and time(t)’ for the almighty and eternal creator. Therefore, the trending of such ‘material concepts’ could result in even greater challenges and adverse tangible and intangible impacts upon humanity’s future dilemmas and holistic judgements on this finite earth!

Ray Kurzweil, author, computer scientist and futurist, continues and at an accelerated pace, to make accurate predictions of amazing rapid technological advances in now this increasingly globally interconnected world. Nevertheless, there are real long term challenges from a continued global depletion of earth’s (bounded pale blue dot) finite natural resources. These negatively impact natural and human ‘made’ climate change and also from a growing and increasingly demanding global population for earth’s natural resources(water). Such continued tangible demands will further stress global human values and interests and will also require advancing ‘human moral stability’ and values. Present and even more advanced future technological ‘wonders’, may only ease some of the human challenges facing this tangible and bounded world. As humans, we finitely perceive ‘everything around us’ from seeing, hearing, reading and within our ‘bounded bandwidth’ of comprehending. Concepts are realized and from ‘our understandings’, the response are expressed as words; spoken and written. There is a ‘loss of something’ in this human ‘imperfect transmission process’ of what is the ‘true’ reality, since humanity has limited and bounded perception of ‘actual’ tangible and intangible events. Therefore it is beyond our ‘human’ boundaries to comprehend and understand unbounded, infinite, almighty and eternal concepts. Human tangible physical ‘life’ is for a finite period of ‘created time(t)’ on this created ‘pale blue dot at the end of a sunbeam’.

Some speculate, that if a GOD created mankind and this vast universe, then who created GOD? *Such views are expressed in bounded human terms and impose, upon the unbounded creator, the bounded limitations of existing laws of physics, which were ‘created’ and did not exist before that ‘beginning’.*

Humanity, even though constrained by bounded laws of physics, has available tangible choices and an intangible free will. We are able to transform matter (medicine), intangible events (pain) and concepts (a cure) into other tangibly bounded and intangible (satisfaction) results. The ‘modern’ trend of increasing tangible benefits from rapid scientific advances, may also increasingly continue to further overshadow spiritual and intangible human beliefs and values. Some are based on traditions and others on historic documentation and humanity’s past and present earthly focus towards a deity. These are expressed in the Bible, Koran... and also others include tangibly unexplainable phenomena. Some are religiously classified as ‘miraculous events’ and by others as ‘unexplainable phenomena’, if solely judged by the laws of physics. This planet, our earth has tangible abundance and for the taking; mass, matter (minerals, elements, water, energy sources ...) and biological living wonders of ‘life’. We extend our perceived intangible requirements and desires by tangibly reaching out and reshaping ‘what is’ into what we perceive we want for the short and sometimes long term needs. We ‘re-shape’ what exists, but we cannot create ‘something’ tangibly from ‘nothing’! Since ‘nothing’, is humanly incomprehensible and cannot be perceived.

All human efforts, on this earth; a humbling small pale blue dot, occur during the passage of time(t). It is unidirectional, ‘unforgiving’ and was also ‘created’ at the ‘instant’ of the ‘Big Bang’. Our bounded human ‘logical realization’ is that we cannot define, comprehend and put boundaries upon undefinable concepts such as ‘eternity’, ‘infinity’ and an ‘almighty’. Therefore from a bounded human capacity of comprehension and using bounded human logic and laws of physics, we cannot prove the ‘non-existence’ of undefinable concepts which we cannot either perceive or comprehend!

Global scientific advances and environmental challenges and space exploration may, in the future, become even greater global unifier of nations. Although the galactic distances are overwhelming, even at the perceived bounded speed of light and relatively short human lifetimes, nevertheless human ingenuity and determination will open more of tomorrow’s frontiers, as was done by past generations. The tangible future, as appears today, was similarly viewed in the past as ‘future impossibilities’. Now the question arises are we ‘alone’ or is there ‘life’ elsewhere on other planets in all that vastness of outer space? Why not and if so, then in what form?

Using mathematical and statistical analysis and that our laws of physics apply elsewhere in our universe, the probability would be a strong ‘yes’. However a holistic view of ‘humanity’ on earth should not be limited only to tangible events. Therefore holistic conclusions should also include all past documented religious events, namely; ‘the human Birth, Death and Resurrection of the SON of GOD’ which makes humanity unique in the cosmos. Such a single and unrepeatable divine event overshadows any ‘created’ wonders such as the incomprehensible creation from ‘nothing’, our huge and tangible universe.

Reversing the human conceptual importance, which is usually based on relative size, may illustrate the ‘unbounded affection’ and great and everlasting importance given by an eternal almighty creator to ‘little’ humanity residing, for a time(t), on a relatively small ‘pale blue dot’ in all that ‘huge’ created vastness of ‘everything else’.

Therefore, glancing’ beyond those ‘created’ physical laws, ‘we should take a ‘good second look’ of what may appear obvious to many that humanity is holistically ‘unique’ and as claimed, made in the image of GOD. Even though various other ‘life types’ probably do exist elsewhere in the vastness of this universe.

The Almighty Creator:

What arrogance is shown towards an infinite and almighty creator by some from a finite and bounded 'human creation' and who are all only 'temporal residents' on this earth. A 'pale blue dot' which was created as part of the vastness of this 'created' universe and which is less materially significant in the cosmos than a grain of sand is on this earth's beaches!

Our very 'souls-spiritual intelligences' are increasingly becoming more immersed in tangible developments. Nevertheless, which in many ways and over time have advanced human knowledge and civilizations. Rapid scientific are great for this earth and its people, but are only a part component of continued holistic human growth and 'accurate' human developments as was earlier discussed. Therefore, holistic intangible human advances of values and beliefs should not be 'slowing down' and should also be actively pursued as of prominent importance for the continued progression and 'balanced' human advancement. However, with less and less combined tangible and a 'camouflaged' intangible destructiveness from associated driving forces of greed, global conflicts and hypocrisies.

The progressive realization of the concept of a bounded humanity means to be and remain 'holistically human' amidst all present and future spectacular tangible advances. There are intelligent individuals, who have brilliantly contributed to major scientific discoveries and are continuing to contribute to practical tangible human advances. However it should also be remembered that all such findings are 'established' only within 'bounded' perceptions and conditions. Such tangible results of specialization, namely of knowing more and more about less and less, if holistically integrated, will also continue to benefit humanity. However, if and when excelled learned individuals express opinions outside their bounded field of knowledge, then their highly acclaimed scientific achievements are not sufficient to disprove the existence of an unbounded and almighty creator.

Namely, somewhat paraphrasing, some say; 'If there is a GOD, then this world should have.... and also the people should have more ofand.....and'; otherwise there is no real proof and I, (me on this blue dot), do not and will not believe!

There are many requirements, orders and demands and from many directions for GOD. We often 'stumble' whether or not to accept GOD's will individually and sequentially. Humanity only temporarily 'occupies' both a finitely small 'living space(s)' and a 'short time(t)' on this finite 'pale blue dot' with not only challenges, but also with many comforts and benefits for the taking. Perhaps a 'modern trend' seems to more and more a continued indirect process of 'losing the faith in a GOD' and sort of 'updating' and substituting ancient idol worship beliefs with hope for more spectacular scientific advances. Namely a growing trend which increasingly appears to be more and more focused on materially 'tangible' real results and 'right now'! Such growing perception and practical technological trends are resulting in the closings of more places of worship and a greater growing tangible material dependency to also solve intangible human challenges.

It may appear that the human hope for beneficial technological advances are forming the foundations of conceptual 'modern technological prayers', to solve present and future humanity's concerns and challenges.

Nevertheless, continuing that trajectory of 'modern thinking', then a valid and realistic question could be; 'How do we separate superstitious and outdated beliefs from the 'real thing'', if you 'can't prove it'?

It is true that some religions in the past had elements of ignorance and untruths and now in the present, new 'modern' quick fix religions are springing up as real 'money makers'. However, there should also be the recognition that the ideals of the past, such as the ten commandments and biblical teachings have added value for human advances. Documented evidence also formed the basic foundations of our societies of law and order and provided intangible human values and a 'purpose' beyond just the 'animal' instinct for survival at 'any cost'. It has been said, that humanity was created in the image of GOD, with an 'immortal soul'; a belief, a purpose and free will to 'choose' during this finite earthly trial period. Nevertheless, collective humanity seem to continue to challenge 'GOD's purpose'. We tend, in 'practical' modern 'living', to overcompensate tangible progresses by squeezing out or substituting more and more of intangible religious beliefs.

The created cannot be equal to the creator and to simply extrapolate the created laws of physics before their creation or before the instant of the 'big bang' is humanly and 'logically incorrect'. Therefore, the response to the question; "O GOD who are you and where are you?" and to define and to obtain bounded tangible 'proof' or to 'box in' the Creator is beyond the created bounds of finite human comprehension!

'Logically' summarizing from, 'Before' to 'Now' to 'Then':

Finite Creation = Finite 'Big Bang' = (the 'ticking' of unidirectional finite time; beginning(e,t), finite universe(s,e,m,t), finite existence(s,e,m,t)) = Finite End !

So where do we go from here.....?

God only knows!

Reaching Out Beyond Human Comprehension.

Using our free will, we all can choose to holistically reach out. Namely, to seek the Almighty beyond the combined bounded and established human recorded data, information and knowledge: Nevertheless facts are facts! Such a journey would also include unexplainable witnessed 'factual' miraculous events and the 'written words' for the purpose and direction of humanity. Surely it is not 'just to exist' for a relatively short 'time(t)'?

Matter and assembled material objects are limited and earthly 'bounded'. They are collectively constrained by the governing laws of physics. Humanity has choices; free will, beliefs and faith which are all attributes and part of being holistically 'human'. We have the ability to reach beyond bounded earthly wisdom. Namely, to freely and consciously seek, beyond the tangible bounds, which only came into existence at the 'instant' of creation, a human trajectory towards comprehending the almighty. Even though during this lifetime journey we are unable to reach that destination of who 'was' and 'is' before anything and everything. Who is also often simply portrayed, to aid human understanding, as an elderly and a wise human figure.

The almighty, like 'infinity', can neither be humanly comprehended nor finitely portrayed by a bounded human understanding.

Therefore, all collected (irrespective of the finite 'hugeness') of past present and future accumulated human knowledge and wisdom, from the very beginning to the end of time, cannot and will not be able to fully define or put into a 'bounded box' the undefinable eternal and almighty GOD. Our tangible human existence has had a beginning and will have an eventual end; individually and collectively.

Therefore, holistically and logically integrating all known human knowledge which includes tangible and intangible miraculous recorded events can only provide a more accurate beacon in the direction of a ‘Creator’. Such holistic knowledge would include humanly perceived ‘impossibilities’ of ‘creation’, unexplainable earthly miracles over the centuries and humanly perceived as ‘witnessed impossibilities’, if only judged by existing and ‘created’ laws of physics. The holistic objective and the creator’s ‘divine’ purpose for humanity makes more ‘logical human sense’ than just the vagueness of ‘purposeless existing’ in the vastness of this ‘created’ huge, but nevertheless finite cosmos. This ‘creation’ is perceived, by both scientific and religious communities, as having had a beginning and continues to have a time trending ending! Quoting the words of Stuart Chase; “*For those who believe, no proof is necessary. For those who don't believe, no proof is possible.*” Therefore, sincere human effort can be made to advance ‘holistic human accuracy’ using human attributes and the belief in an ‘immortal soul’ and which is unique to humanity. Thereby, making humanity ‘different’ from all other known earth life forms. We can choose to reach out with FAITH towards the almighty. Such a combined ‘free will’ and effort are intangible linkages available for humanity to more ‘accurately’ advance finite human knowledge. Earthly human ‘wisdom’ can advance a direction, but alone is insufficient to further an individual path towards comprehending and understanding the unbounded and undefinable Creator. As temporal and bounded occupants, in all that vastness of creation, we all have that choice.

Therefore, with humility, strengthened beliefs and with **faith**, we can individually and collectively advance this search for the eternal, almighty and unbounded Creator and yet simply described by bounded human words:

“I AM WHO I AM!”

**Rimas Slavickas, Ph.D. in Electrical and Computer Engineering,
He developed, for his doctoral dissertation, a novel and powerful holistic decision making methodology called “Logical Proportional Analysis” (LPA).*

*It is a unique and revolutionary **non numerical** modelling technique, which mimics the procedural manner how human cognition reacts to real life events. This process can include both tangible and intangible components and issues, such as satisfaction, perception, happiness, concerns, cultural values and others in various causal relationships. The tangible components can include industrial procedures, advancement of technology, social and health sciences, economics and others.*

The transparency of interactions and causal effects of tangible and intangible components can also be logically extrapolated as a sequence of resulting component events and become predictable future outcomes. The causal sub-components of such events can be further modified or circumstances can be completely changed in the present to more closely and accurately control desired future outcomes. Such logic based solutions are comprehensive, accurate and reliable and the extent of application is only bounded by human perception.