The Evolution of Consciousness

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Introduction:

This essay is a thought experiment that aims to guide the mind towards understanding the nature of consciousness. It achieves this by leading the reader's thoughts on the same journey that living organisms undertook to develop consciousness and evolve it to its present state. The essay also explores how consciousness can be further expanded to gain true self-awareness and a deeper understanding of its intricate connection to the world around us. By following the path of early life forms, the reader will gain a conscious experience akin to theirs, witnessing the creation and evolution of consciousness up to human consciousness. However, before delving into the thought processes of early life, it is essential to establish the framework of the universe that birthed consciousness and propelled its evolution to its current state and to where it will go. This is done by introducing *The Biological Framework for a Mathematical Universe*.

The Biological Framework for a Mathematical Universe Hypothesis

The theory of a biological framework for a mathematical universe sets forth the notion that biological patterns define the framework for a mathematical universe hypothesis. The mathematical universe hypothesis is a theory that the physical universe is not merely *described by* mathematics, but *is* mathematics, specifically a mathematical structure. The biological framework asserts that the shape of the universe's mathematical structure is biological in nature. Therefore all systems, processes and objects in reality are biological in their patterns—biological in their nature. Furthermore, this theory further postulates that the creation of living organisms and consciousness is a direct consequence of the evolution of the universe's rudimentary biologically-patterned processes on Earth and therefore, because the physiology of living organisms are the culmination of these processes, they are models which reveal the hidden biological patterns throughout the universe and our surroundings. As a result of this relationship between the universe's biologically-patterned processes and the living things which it creates, analogies can be structurally mapped from physiological patterns of living organisms (biological domain), to any target domain to reveal and explain the underlying fundamental *biological nature* of the target domain. It is these hidden rudimentary biological patterns throughout our environment which drives the creation and evolution of life and consciousness. Let's begin our journey…

The Creation of Life and Consciousness

Imagine now, in this biological framework for a mathematical universe, the Big Bang occurs. This biological event hurdles matter, energy, forces, and space through time in patterns that are rudimentary biological in their nature, creating all of the structures in the known universe, including our solar system and Earth. As our solar system and Earth tries to reach a state of homeostasis, they evolve to a point where conditions are stable enough for the creation of *Life's first organism*. But prior to its creation, the environments on Earth, in our solar system, and in the universe evolved from these biological patterns inherent to the creation of the universe. All of the processes that were carried out in our universe, in our solar system and on Earth are rudimentary-biological in their nature. Thus, Earth's early volatile processes, while not appearing biological in the traditional sense, is in fact biological in a rudimentary sense, carrying out processes and evolving over time to eventually create a localized environment that concentrates all variables necessary to produce and harbor Life's first living organisms. *The environment* gives birth to Life's first single-celled organisms. An environment whose nature is rudimentary biological in its patterns.

While this may seem like an exciting moment, it is absolutely terrifying for these first cellular organisms. They are now *forced* to recognize and organize themselves relative to the patterns in their environment which establishes and sustains the life of themselves and their communities, or else they die. Those organisms that are successful in recognizing and organizing themselves to these patterns within their environment, continue to live and procreate. Those living organisms that can not recognize and organize themselves accordingly to these rudimentary biological patterns within their environment are destroyed. This process gives rise to **consciousness**. Those living organisms that can survive are *conscious*. Those organisms that die are *unconscious.* Therefore, the consciousness and unconsciousness of an organism is relative to an organism's ability to recognize and organize themselves to the *patterns* in their environment which establish and sustain the conditions necessary for survival—*patterns* that are inherently biological in a rudimentary sense. This same process also gives rise to logic and reasoning among organisms.

The Evolution of Life & Consciousness — Driven By The Evolution of The Environment

As the complexity of an organism's environment evolves, so too does the consciousness of organisms. Life and its consciousness evolves and adapts in conjunction with the increasing complexity of their environment. With the environment evolving to become more intricate, the requirements for consciousness in living organisms also evolve to become more sophisticated. To ensure their survival, living organisms have to be able to recognize the patterns within the complexity of their environment. The emergence of new variables within the environment, resulting from evolutionary complexities, compel living organisms to identify and discern patterns within these new complex environments, leading to the development of more complex consciousness.

Cellular organisms are compelled to acknowledge the cause-and-effect relationships of patterns present throughout their environment. They have to evolve not only their reasoning capabilities but also adapt their behaviors in accordance with these patterns to ensure their survival as their environment further evolves. Organisms that are unable to adapt their ability to reason and behave accordingly to the new complexities within their environment die and are considered *unconscious*. Conversely, organisms capable of reasoning and organizing themselves relative to these new complex patterns in their environment, which are necessary to establish and sustain their lives, survive and remain *conscious* to their surroundings. It is also important to note that as the environment becomes more complex, it may require organisms to develop/evolve more complex sensors to collect the data necessary to recognize the complexities within their environment, necessary for survival. Thus, physical and conscious evolution evolve in tandem and in harmony with the evolution in complexity of their rudimentary biologically-patterned environment.

The Emergence of Diversity in Life & Consciousness

The evolution of the environment brings complexity and *diversity*. As the environment becomes more complex, diversity emerges, creating a new landscape for consciousness to further develop. This diversity in the environment compels living organisms to reason new complex patterns in order to survive in diverse environments. This process leads to variations in reasoning and behaviors that are essential for survival; It also gives rise to conscious and physical variations among organisms, enabling them to thrive in diverse environments. These complex and diverse environments drive the divergence among living organisms, resulting in the creation of various species. Thus, this process gives rise to Darwin's *origin of species*. However, the differences among organisms remain connected through this underlying biological patterns embedded within the framework of the universe and all it creates.

The Emergence of Cooperation — The Creation of The Complex Organism

As we fast forward, we introduce more complexities. The cooperation among cellular organisms emerge from the necessities produced by the newer complexities introduced within their environment. As environments further evolve to become more and more complex, the rudimentary biologically-patterned environments force more complex reasoning and patterns within the behaviors of living organisms that are more efficient at survival, such as *cooperation*. This biologically patterned environment now has inspired cooperation amongst organisms. These first occurrences of cooperation in cellular organisms establish our first occurrences of complex life. Thus, the complex organism, or "cellular tribe" is formed from the "cellular wilderness."

As evolution further unfolds throughout the environment, documenting the passage of time, cellular organisms begin to recognize these patterns for cooperation within their environment necessary for their survival. More and more cellular organisms begin cooperating to establish various complex cellular tribes, thus forming various complex organisms and establishing various species. And as the environment becomes more and more complex and diverse, so too do these cooperative tribes evolve in complexity and diversity, establishing larger and more innovative complex societies of cellular organisms, in conjunction with the evolving complexities of their environment and their need to survive.

However, it is important to note, that at no point can a living organism exist in physical and conscious complexity that is greater than the complexity of its environment. The organism needs an environment that is equal to, or more complex than, the complexity of the organism. This helps establish and sustain the physical and conscious complexity of that organism. Organisms are dependent upon its environment not only for its survival, but for its physical and conscious development. If a living organism were placed in an environment with a lower complexity, a de-evolution or extinction process would occur, given that environment provides leeway for this processes to take place. If the difference between complexity is too great between the organism and its environment (i.e., if the environment cannot accommodate the complex needs of the organism), the organism will perish due to the inability for the environment to sustain the physical and conscious needs of the organism.

Therefore, rudimentary biological patterns embedded within the fundamental nature of the environments inspire the behaviors of living organisms to organize themselves into patterns which form complex societies of living organisms necessary for survival. The organization and design of these societies are forced upon these organisms by these hidden biological patterns and forces within their environments. Ironically, these organisms and their societies are now what we consider to be biology today—not acknowledging the rudimentary biological patterns in the environment which designed and birthed them.

The Emergence of Free-Thinking Consciousness

As the consciousness of organisms are guided by the evolution that unfolds throughout their environment, there reaches a stage in the evolution of the environment where it provides the fundamental needs of the living organism to such an *excess* degree that its "frees" the organism from immediate survival behaviors. The organism is not required to immediately recognize and behave according to the patterns within its environment necessary for its *immediate* survival. The environment evolves to a point where it provides a "buffer" large enough for organisms to freely recognize patterns outside the realm of immediate survival. Stephen Covey calls this space between the stimulus and response, the "space for choice." The environment has established conditions where it has created a space so large between the stimuli and responses of an organism, that the organism has the choice in how its thinks, thus having the ability to think freely. What is an organism to do with this newfound conscious freedom? Recognize and organize itself relative to any pattern it can imagine, of course!

“The Pattern Recognition Engine”

Consciousness in living organisms has evolved to be this “pattern-recognition engine,” designed, created, and fine-tuned through the guidance of rudimentary biological patterns inherent to the organism’s environment, initiated through the creation of a universe that is biological in its nature. Up until this point in the evolution of consciousness, organisms were required, through the immediacy of their environment’s conditions, to quickly and accurately recognize patterns, in order to behave accordingly so to most effectively survive and procreate. This environment, whose patterns are rudimentarily biological in nature, has created and developed the *physicality* and *consciousness* of each species via the various evolutionary paths each organism had to endure through the various evolutionary forces of their rudimentary biologically-patterned environments. However, one organism was lucky enough to take the path which put its species in a position of physical and conscious *freedom*. This organism is Humans, “The *Human* Pattern Recognition Engine,” and it is about to gain its sovereignty over the environment through this newfound freedom of thought.

However, let’s take a step back, just prior to Humanity gaining their privilege to think freely. Early Man was required to take the same evolutionary path as their cellular ancestors. From the wilderness, to human tribes and eventually to more complex human societies—the *human species* must first take a path analogous to that of the cellular organisms from which humans evolved. A "universal right of passage,” built into the framework of this biologically patterned universe—requiring humans to undergo the same “conscious trials” which cellular organisms had to endure to earn the privilege of Life. The species of Humans are required to follow the same trajectory of evolutionary-consciousness as the cellular organisms which comprise their body. Humans are encouraged through the evolving complexities of their environment to realize the importance of cooperation, so to best survive. This process moved humans from the wilderness, to human tribes, then evolving to larger, more complex, human societies which would ultimately become *mathematically*-analogous (homomorphic) to the order and properties of the cellular societies that comprise their own human physiology, unbeknownst to humanity.

The Human Pattern Recognition Engine Set Free: The Beginning of Conscious Freedom

As humans began organizing themselves into societies, their environment established and sustained the fundamental needs of the human individual to such a degree of *excess*, that their environment did not require the human organism to have to immediately recognize and behave accordingly to the patterns necessary for survival. The human’s ability to recognize patterns and organize oneself to the patterns necessary for survival superseded the environments immediacy for survival. The combination between this “buffer” created by the environment and this highly developed human pattern recognition engine provides the necessary conditions for the human organism to begin recognizing and organizing themselves relative to patterns *outside* the realm of what was necessary for immediate survival. This “buffer” gives humans the ability to *freely think* outside these evolutionary forces and patterns which are rudimentary biological, and which were forcing the behavior of all organisms up until this point in history. Humans are now free to behave relative to the patterns they imagine, as opposed to what the environment was essentially coercing.

Humanity is free to create their own destiny, not yet knowing *their fate is still and forever* attached to these rudimentary biological patterns underlying the fabric of reality—patterns that continue to permeate all of reality, even without their realization they exists; Patterns that Humanity must realize exists and organize themselves to in order to ensure their survival and the survival of all Life; Patterns that they will eventually come to realize only *if* they explore, *thoroughly*, the patterns of their environment and the patterns within themselves to such a degree that they reveal and understand these intricate biological correspondences, “As Above, So Below; As Below, So Above”—given Humanity does not get lost in the process through their over-fascination of the superficial patterns which hide these rudimentary biological patterns.

What Is The Human Pattern Recognition Engine?

The rudimentary biologically-patterned environment has come to design, create and fine-tune this "human pattern recognition engine," which is comprised of the human mind and all of its senses and bodily parts, necessary for the sovereign exploration of patterns in its environment. The brain allows it to store and process the patterns it observes within the environment, allowing it to combine, understand and reason larger relationship amongst things. Its external extremities allow the human to effectively move about its environment to explore the patterns of its surroundings effectively, while provide efficiencies for all other basic life functions. The sensory organs (sight, touch, hearing, taste, and sound), are sensors, which allow for the recognition of patterns in other states/forms, which provide additional context to patterns.

** Human's recognition and comprehension and organization of various sets of patterns *form* the diverse branches of human knowledge and science. Meanwhile, gathered data and information are awaiting their correlation with these patterns. The emergence of language, oral and written communication, serves as a means to convey and record patterns, thereby establishing these knowledge branches. This process is also beneficial in understanding and transmitting extensive patterns that an individual could not recognize within their lifetime. However, documenting these patterns allow for the extension of one's own mind, enabling future generations to merge their recognized patterns with those documented. Each generation of humans, unknowingly, gather the pieces of the puzzle, recognizing and documenting patterns necessary to learn about the creation of the universe and the world around them—to eventually learn about themselves, and how everything is all intimately intertwined and ultimately how all things must essentially organize themselves and behave accordingly to these biological patterns. However, Humanity does not know this yet, as they will be too consumed by the new patterns the will be recognizing and imagining to exist.

Plato's Cave of Shadows — Superficial Patterns Manifested Through Biology's Patterns

Biological patterns inherent to reality become more and more difficult to see as human society builds a cognitive framework around the patterns it is recognizing and imagining to be true with this newfound freedom to think. Humanity is building this *superficial cognitive framework* on top of this biological framework of the universe. Some of which overlaps truths pertaining to the underlying biological framework of the universe, but much of which does not and thus contributes to the disorders of society. Humanity becomes immersed in their own imaginations (superficial patterns) and the systems of imaginations which they create and deem to be the true of reality. They recognize and imagine patterns of good and evil, war, love, art, music, sports, money, power, work, sex, drugs, and the specialized areas of expertise all of which consume their lives and attention—ignoring/refusing to "eat from the Tree of Life." Soon enough, the system they create becomes the new environment which is driving their evolution and soon de-evolution and possible destruction (unless they recognize and abide by the underlying biological correspondences necessary for life). Their dilapidated environment they created is now driving their pattern recognitions and their behaviors which follow suite. Humanity has become lost within the purgatory of patterns they imagine to exist to be true and worthy of organizing themselves to. They are stuck in Plato's Cave overly fascinated with the shadows cast on the walls through biology's patterns.

This predicament makes it difficult for humanity to see/recognize these patterns throughout their environment, especially on top of the fact that Humanity is in the Information Age where new information is emerging and directing focus/attention. Furthermore, the field of biology has become a niche branch of knowledge, separated from all other fields of knowledge (which inherently biology dictates and provides framework to). Biology's patterns are in the corner of the room awaiting for humanity to see its beauty.

Similar to the allegory of the cave, by Plato—In the allegory, Plato describes people that have spent their lives chained in a cave facing a blank wall. They watch shadows projected onto the wall by objects passing in front of a fire behind them, and they give names to these shadows. The shadows are the prisoners' reality but not accurate representations of the real world. The shadows represent the fragment of reality that we can normally perceive through our senses, while the objects under the sun represent the true forms of objects that we can only perceive through reason.

Similarly our theory describes *free-thinking consciousness* as people living their lives chained in a cave facing a blank wall. They watch shadows projected onto the wall by biologically-patterned-objects passing in front of of a fire behind them, they recognize and imagine patterns within those shadows and they give names to these shadows and these shadows look nothing like biological patterns. The shadows are the prisoners' reality but not accurate representations of the real world/universe/reality. Not representative of the true biological nature of the universe and all of its creation. The shadows represent the fragment of reality while the objects under the sun represent true [biological] forms of objects that we can only perceive through understanding the correspondences between the biological patterns within the physiology of ourselves and within all living things and the traditionally-nonbiological things throughout our reality.

However, do not despair, there hope for Humanity, there is a purpose for this conscious purgatory.***

What Is The Purpose of Conscious Freedom?

To truly learn, sometimes one cannot be told, you have to live it; You have to experience it. Similar to how a parent must eventually give their child the freedom and space to go off in to the world in order explore and to learn the trials of life on their own, hoping that what they have instilled into their child since birth will contribute to their child's success at life and all of its endeavors—the universe wants for *all* living organisms, and thus does this for humanity in giving it's freedom of consciousness. The universe hopes that humanity can realize what it has been trying to teach living organisms since creation.

The universe, whose patterns are rudimentary biological in nature, has evolved to give birth to life. Since before the creation of the universe, its have been set into motion in such a manner that it has designed, created, developed and fined-tuned living organisms to become this "pattern recognition engine," eventually taking on *Human form*—"Man made in the image of The Universe's biological patterns."

The evolutionary process of the universe, of the Earth and their environments have come to raise life (living organisms) as its "children" to the ripe *adolescent* Age of Man—the age when the universe must now let its child go off into the world and explore and learn life on its own, in hopes that Humanity will learn the truths about itself, the universe and how all of creation is intimately interconnected to each other, through the patterns of biology established through the universe, which can be comprehended through understanding the physiological structures, relationships, and principles governing our own physiology and the physiology of all living organisms.

It will be through Humanity's thorough exploration of the world around them (using an engineer's curiosity and approach to understanding the world) and *only* through their understanding of the biological patterns that comprise the physiology of their own bodies, can Humanity reveal and understand the hidden biological patterns that exist throughout all creation. This will be necessary for humanity to align themselves, once again (but knowingly and on their own accord), with correct patterns that will ensure the lives of each individual, their society, their environment, and all life, in harmony with these healthy biological patterns necessary for Life's potentialities—This is Humanity's goal with *conscious freedom*.

The purpose of conscious freedom is to test if the organism and its society can come to recognize this biological correspondence that exists amongst everything in reality—THEN—abide by it. If they abide by it, they are conscious and are deemed worthy to continue living, if they do not abide by it (i.e., if they do not organize themselves to the biological patterns necessary for life) they are deemed unconscious and will continue carrying-on their *unconscious processes* that will ultimately lead to the destruction of their society. And the entire process starts over again, and again, until life gets it right. However, the author of this essay believes *this* iteration of Humanity can make it to the next stage of conscious, because this next stage of human evolution will brings about opportunities that will make it the most exciting stage in human history.

The Future of Humanity — Given We Don't Destroy Ourselves First.

Human society, at a stage of full development and full health, will unlock their greatest potentialities analogous to that of the society of cells which comprise the human physiology. The *society of cells* which comprise the human body, if in a stage of full development and state of full health has endless potential. The cellular society composing the human physiology has the ability to best survive and protect itself from external and internal threats, the ability to overcome any task at hand, travel and to explore great distances to learn and help others along the way, as well as teach others and help guide the development of other societies of cells (other living organisms, other life). Human society has the ability to follow the same path of the society of cells which comprises our bodies—it is humanity's inherent duty, as written in the patterns of our biologically pattern universe to make this so.

It is the duty of all living organisms to recognize and organize themselves relative to the patterns which establish and sustain the life of themselves, their societies and their environment in such a manner that earns those organisms the potential to live and achieve the goals relative to that order of life. If we do not recognize and organize ourselves and our society relative to these biological patterns for Life, we risk the negative consequences of such and possible imminent destruction. Therefore, it is the ultimate purpose of Life to organize itself to patterns which establish and sustain the potentialities of Itself—to become acquainted with, and to operate in harmony with, these hidden biological patterns around us, established by this rudimentary biologically-patterned universe. It is not until we explore and understand these biological patterns which compose our physiology and the physiology of living organisms, as well as explore and understand the world around us through an engineer's eye, that we can reveal and understand the biological patterns that exist in the world around us—and in doing so unlock the unlimited potentialities Life-patterns are heir to:

1. **Post-Scarcity Society**: Human society will establish conditions which eliminate scarcity, providing for all basic needs such as food, shelter, and healthcare. People will be free to pursue creative and intellectual endeavors without the burden of material concerns.

   Understanding a biological framework for a mathematical universe will significantly contribute to the transition towards a post-scarcity society. Firstly, by recognizing the inherent interconnectedness of all living organisms and their environments, society will develop more sustainable practices for resource management. This understanding will lead to the optimization of

agricultural systems, energy production, and waste management, reducing environmental degradation and ensuring the equitable distribution of resources.

Moreover, embracing the biological framework will inspire innovations in technology and manufacturing processes. By mimicking biological systems and patterns, researchers and engineers will develop more efficient and sustainable technologies, such as bio-inspired materials, renewable energy systems, and closed-loop production cycles. These advancements will help mitigate resource scarcity by minimizing waste, maximizing resource utilization, and reducing the reliance on finite resources.

2. **Ecological Harmony**: Humanity will achieve a sustainable relationship with the environment, balancing technological progress with the preservation of ecosystems. Renewable energy sources, conservation efforts, and eco-friendly practices will ensure a thriving planet for future generations.

Understanding a biological framework for a mathematical universe will greatly contribute to ecological harmony by fostering a deeper appreciation for the interconnectedness of all living organisms and their environments. This understanding will lead to more sustainable practices in resource management, conservation efforts, and environmental protection.

Firstly, recognizing that biological patterns underpin the structure of the universe will inspire innovative approaches to ecosystem management and conservation. By studying the intricate web of biological interactions and feedback mechanisms, society will develop more holistic conservation strategies that prioritize preserving biodiversity, restoring degraded habitats, and promoting ecosystem resilience. This will help maintain healthy ecosystems that provide essential services, such as clean air and water, fertile soil, and pollination, upon which human societies depend.

Furthermore, embracing the biological framework will lead to advancements in sustainable agriculture and land use practices. By drawing inspiration from natural ecosystems, farmers and land managers will implement agroecological approaches that mimic the resilience and productivity of natural systems. This will include practices such as agroforestry, regenerative agriculture, and permaculture, which enhance soil health, water retention, and biodiversity while reducing the need for synthetic inputs and minimizing environmental impacts.

Moreover, understanding the biological basis of ecological systems will inform decision-making processes at the policy level. By integrating principles of ecology and biology into environmental policies and regulations, governments will prioritize conservation and sustainability, mitigate habitat loss and fragmentation, and address pressing environmental challenges such as climate change and species extinction. This will lead to more effective and science-based management of natural resources, ensuring the long-term health and vitality of ecosystems for future generations.

Overall, embracing a biological framework for a mathematical universe will promote ecological harmony by fostering a deeper understanding of the interconnectedness and interdependence of all living beings and their environments. By aligning human activities with the principles of biology and ecology, society will work towards creating a more sustainable and harmonious relationship with the natural world.

3. **Global Peace and Cooperation**: Nations have overcome political divisions and conflicts through diplomacy, cooperation, and the establishment of international institutions. Borders are more fluid, and cultural exchange fosters understanding and unity among diverse populations.

Understanding a biological framework for a mathematical universe will play a crucial role in promoting global peace and cooperation by fostering a deeper appreciation for the interconnectedness of all living beings and their environments. Firstly, this understanding will lead to a shift in perspective from divisive ideologies based on nationality or ethnicity towards a recognition of our common humanity. By recognizing that biological patterns transcend national borders and cultural divides, society will cultivate empathy, understanding, and solidarity among diverse populations.

Moreover, embracing the biological framework will inspire collaboration and cooperation on a global scale. By acknowledging the shared biological heritage of humanity and the universe, and the interconnectedness of ecosystems, nations will recognize the mutual benefits of working together to address common challenges such as climate change, environmental degradation, and public health crises. This will lead to the establishment of international agreements, treaties, and institutions aimed at promoting peace, sustainability, and collective well-being.

Additionally, the understanding of biological patterns will promote cultural exchange and dialogue, fostering mutual understanding and appreciation among diverse populations. By recognizing the richness and diversity of biological life forms and ecosystems, society will celebrate cultural diversity as a reflection of the inherent complexity and beauty of the natural world. This will lead to greater tolerance, respect, and cooperation among different cultures, religions, and ethnicities, ultimately contributing to a more harmonious and peaceful global community.

Overall, embracing a biological framework for a mathematical universe will provide a unifying perspective that transcends political divisions and conflicts. By recognizing our interconnectedness and shared humanity, society will work towards building a more peaceful, equitable, and sustainable world where borders are more fluid, and cultural exchange fosters understanding and unity among diverse populations.

3. **Social Equality and Justice**: Society has achieved equality and justice for all its members, regardless of race, gender, socioeconomic status, or other factors. Basic human rights are universally upheld, and systems of oppression have been dismantled.

Understanding a biological framework for a mathematical universe will contribute to social equality and justice in several ways. Firstly, by recognizing the inherent interconnectedness of all living beings and their environments, society will develop a deeper appreciation for the fundamental equality of all individuals, regardless of race, gender, or socioeconomic status. This understanding will foster empathy, compassion, and solidarity among diverse populations, leading to greater respect for human rights and dignity.

Moreover, embracing the biological framework will inspire a reevaluation of societal norms and institutions through the lens of biological patterns and principles. By acknowledging the biological foundations of human behavior, cognition, and social interactions, society will challenge systems of oppression and discrimination that perpetuate inequality and injustice. This will involve reimagining social structures, policies, and laws to ensure equal access to opportunities, resources, and representation for all members of society.

Additionally, the understanding of biological patterns will inform efforts to address systemic injustices and disparities in health, education, and economic opportunity. By recognizing the complex interplay between biology, environment, and social factors in shaping individual outcomes, society will develop more targeted and effective interventions to promote social equity

and inclusion. This will include investing in programs that address the root causes of inequality, such as https://perfectpublicoffering.org

Overall, embracing a biological framework for a mathematical universe will provide a unifying perspective that transcends artificial divisions and promotes social equality and justice. By recognizing our shared biological heritage and interconnectedness, society will work towards building a more equitable, inclusive, and compassionate world where basic human rights are universally upheld, and systems of oppression have been dismantled.

4. Technological Advancement and Transcendence: Humanity will transcend societal limitations through advancements in technology, such as artificial intelligence, biotechnology, and space exploration. This future will involve interstellar exploration and colonization.

Understanding a biological framework for a mathematical universe will significantly contribute to technological advancements and humanity's transcendence in several ways. Firstly, by recognizing the inherent biological patterns and principles that underpin the universe, society unified and with all of their fundamental needs met and opportunities provided will harness these insights to inspire innovation and technological development. Biomimicry, for example, involves emulating biological systems and processes to design more efficient and sustainable technologies. By studying nature's solutions to complex challenges, such as energy efficiency, materials design, and information processing, scientists and engineers will develop breakthrough technologies that push the boundaries of what is possible.

Moreover, embracing the biological framework will drive advancements in fields such as artificial intelligence (AI) and biotechnology. By understanding the underlying biological processes that govern cognition, perception, and consciousness, researchers will develop more sophisticated AI systems that mimic the capabilities of the human brain. This will lead to the creation of intelligent machines capable of learning, reasoning, and problem-solving at levels that rival or surpass human intelligence. Similarly, advances in biotechnology, inspired by the biological framework, will revolutionize healthcare, agriculture, and environmental sustainability. By leveraging insights from biology, researchers will develop new therapies, genetic engineering techniques, and sustainable biomaterials that enhance human health and well-being while minimizing environmental impact.

Furthermore, the understanding of biological patterns will inform humanity's exploration of outer space and efforts to transcend the limitations of our planet. By recognizing the interconnectedness of all living beings and their environments, society will approach space exploration with a deeper appreciation for the fragility and preciousness of life. This will inspire efforts to preserve and protect life on Earth while simultaneously exploring new frontiers beyond our planet. Interstellar exploration and colonization, fueled by advancements in propulsion technology, life support systems, and terraforming techniques, will enable humanity to explore and establish sustainable colonies on other planets and become stewards of life throughout the space they explore.

Overall, embracing a biological framework for a mathematical universe will catalyze technological advancements and transcendence by providing a blueprint for innovation, inspiration, and exploration. By harnessing the inherent wisdom of biology, society will unlock new possibilities for human progress, expand our understanding of the cosmos, and ultimately transcend the limitations of our current existence.

This can only be achieved by having humanity understand and behave relative to the same common framework for understanding reality.

The Goals Human Society *Must* Achieve.

While there are many hurdles for humanity, as one might expect, such as wealth and income inequality, poverty, unemployment and underemployment, access to education, healthcare access, housing affordability, environmental sustainability, debt and financial instability, and general social unrest, such concerns surrounding black lives matter movements, anti-semitic movements, crime, threats of war, and general uncertainty within the world and its future, etc. etc., there are actually a few hurdles for humanity. Many of these above concerns for human society can be naturally resolved by carrying-out the actions which address a few very specific things. Stephen Covey calls this "proactively focusing on the circle of influence" to address the "circle of concern"—no matter how big the circle of concern is, it is through conducting a few very specific actions, which if proactively focused on and carried through, will reduce and eventually eliminate the concerns within the "circle of concern." For example, similar to how focusing on proper diet and exercise can resolve many concerns surrounding many problems concerning health, such as high sugar, high salt, etc. Similarly, humanity too, only needs to focusing on a few key initiatives. The byproduct of focusing on these key initiatives will naturally address all of the various concerns of society and establish a sustainable and scalable socioeconomic system which resembles the healthy biological patterns capable of unlocking the potentialities of human society.

These goals are:

1. **Establishing a Common Frame of Reference:** Public acknowledgement of the *The Origin of Consciousness*, and *The Biological Framework for a Mathematical Universe*; and;
2. **Establishing a Common Order for Society:** Implementation of the *Perfect Public Offering Process* — transferring complete ownership of businesses to the general public, via the public education system, in a manner to produce and allocate the goods and services of society as a byproduct of the education process.

Establishing a Common Frame of Reference: Acknowledgement The Underlying Patterns

Getting everyone on the same page is important to achieving great tasks. This comes through the knowledge of patterns surrounding the tasks that need to be done in achieving very defined goals. The willful cooperation of individuals, necessary to bring about that success of great tasks, comes through the deeper understanding of the situations surrounding those tasks, especially situations which concern those necessary to carry-out and support those tasks. Similar to how in the evolution of cellular organisms, those organisms needed to recognize the patterns that encouraged their cooperation into more resilient societies, so to achieve greater potentialities and to resolve its problems and ensure its survival; Human society needs to have a deeper understanding of the patterns that exist in the world around them which are having influence on them, and the patterns that they should be focusing on. This can be done by having general public understand the underlying framework of the universe. The concepts presented within this essay on *The Origin of Conscious* and the manual titled *The Biological Framework for a Mathematical Universe* will allow the general public to recognize the patterns that will encourage the public's authorization, cooperation, and motivation to do the related tasks necessary to organize themselves and their society to address their own needs—bringing everyone under a common frame of reference from which we must understand our shared reality and the direction we all must to go, in harmony, together.

Furthermore, the general public having such an understanding of how the world and themselves operates will also have profound effects on their behaviors, almost immediately, given how well they understand the material. Which is important that we publicly acknowledge this Origin of Consciousness and of The Biological Framework for a Mathematical Universe, as it's comprehension will help people to reconsider their actions. Especially those patterns that are influencing their thoughts and behaviors.

Establishing a Common Goal: Organizing Society's Infrastructures to Patterns Necessary for Survival and Unlimited Potential

Current socioeconomic systems are not designed to harbor the next stage of human consciousness. The production and allocation of resources and opportunities do not establish and sustain the fundamental needs of all individual within society in such a manner that will unlock the potentials of all individuals within human society necessary the unlocking the potential of all of its people necessary for the long term survival of human society. Couple this with the fact that humanity is on disagreement with so many socio and political topics, there is a high risk for a miscarriage of human society. The general public needs to understand their disagreements through the lens of biology's patterns. People have to realize that biology's patterns exist throughout reality. They have acknowledge the the patterns presented within The Origin of Consciousness and the Biological Framework for a Mathematical Universe so that they can understand the initiatives that will help align their society in harmony with the necessary patterns that will unlock their society's potentials, by unlocking the potentials of all of its people. This initiative involves the integration and operation of human society's infrastructure through the public education system, via a new economic market process called a *perfect public offering*. [https://perfectpublicoffering.org]

Nonprofit universities are well-positioned for the general public to use as vehicles to acquire companies and infrastructure in society. Nonprofit universities are "owned" by the general public and well-suited to merge business infrastructure into the university to optimize education and business processes and eliminate operating expenses in such a manner that can eventually provide goods and services to the people for free in a economically sustainable and scalable manner.

In paper titled, Perfect Public Offering: A Process To Transfer Ownership of Businesses to The General Public, the author proposes a solution to the inherent conflict of interest businesses have between investors and the general public using an iterated prisoner's dilemma (game theory scenario) to promote the cooperation of groups of businesses to undergo non-dilutive secondary offerings of their total shares to a nonprofit university. The process is financially and operationally self-sustaining as long as the university begins by: Acquiring utility companies and infrastructure that contribute to the regular operating expenses of the university; Requiring those companies to regularly donate a portion of their profits to the nonprofit university to be used to acquire those companies, one at a time, and; Following a plan to eliminate expenses, and merging business and university infrastructure.

Results of the process enables the public education system and its companies to financially and operationally self-sustain, so that they can provide goods, services, and opportunities to surrounding communities for free. Externalities of the process induce logic and peer-pressures that encourage assimilation and networking of the public education system and companies. Assimilation of other public education systems in other regions and nations, due to the transparent nature of the processes, will provide conditions for networking of the various public education systems and the businesses they own and operate through their education/work processes.

When ready, the public education system can replace (or be merged into) its country's government to correct social, economic and government inefficiencies; And later networked with public education systems in other countries to create a world government. Externalities from the process correct and stabilize equity valuations, establish certainty in markets, eliminates government debt, and appropriately and timely address state-owned enterprises, climate change/ESG and socioeconomic issues. This is the way.

However, the problem arises with investors and those within power become fascinated with the patterns surrounding power and money to the degree of sacrificing the well-being of society for their own gains. The public is going to have to be vigilant on the current owners of human society, as human society is not currently own by the general public or its government. The investors with large holdings on critical infrastructure of society will have to be educated and socially pressured by the public support for the perfect public offerings of businesses, which involves the public actual announcement of undergoing the initiative of the perfect public offering. [For more information: https://perfectpublicoffering.org]

The Importance of Educating the General Public of These Initiatives.

How well we convey the information: *The Origin of Consciousness* and *The Biological Framework for a Mathematical Universe*, will determine how easy or difficult humanity's transition will be to ensuring the survival of human society for the long-term. As our ability to transition society from its current organization to one that is more in harmony with healthy biological patterns will take all of society to be in harmony with this "DNA."

The general public must be able to understand these biological patterns within ourselves and all living organisms. This understanding will enable them to recognize and comprehend these patterns in the universe and the world around us. It will also allow them to see the patterns in the Order and Properties of Human Society and the necessary socioeconomic initiatives to transition from our current unhealthy state to a robust and resilient state capable of achieving great things *together*. Where and how can we perceive biology's patterns in the world around us?

Where Are These Hidden Biological Patterns In Our Environment? How Can We See Them?

Here are a few examples of biological patterns observed in traditionally non-biological systems:

*Biological Patterns Observed in **The Universe**:*

Cellular Mitosis	→	Laniakea and Perseus-Pisces (Supercluster)
Expansion of the Universe	→	Expansion of cellular mitosis
Cytoskeleton	→	Cosmic Web
Microtubules & Microfilaments (force)	→	Black Holes
Cytosol	→	Dark Matter
Cellular Energy	→	Dark Energy
Inter-organelle Communication	→	Fast Radio Bursts (FRBs)

*Biological Patterns Observed on **Earth**:*

Heart	→	Melting and Freezing of Antartica
Circulatory System	→	Arctic water currents and wind
Digestive System	→	Deserts (Sarah Desert & Haboob)
Kidneys	→	Sea Grass Meadows
Alveoli / Lungs	→	Plants / Trees
Fats (Lipids)	→	Oil and Coal
Epidermis and Dermis (Skin)	→	Earths Magnetic Field and Atmosphere
Interplay Between Organ Systems	→	Interplay between various species of organisms

*Biological Patterns Observed In **Human Innovation***

Red Blood Cell	→	Cup, Cars, Amazon Packages, Envelops
Proteins Produced From Ribosomes	→	Music Produced From Instruments
Skin	→	Clothing, Table Cloth, Sun Screen, Umbrella
Eye	→	Camera, TV/Computer/Phone Screen, Windows
Signal Molecules (Communication)	→	WiFi, BlueTooth, Light (Protons), Language
Skeleton	→	Chair (frame), Umbrella (frame), House (frame)
Fat/Lipids	→	Batteries, Reservoirs (Water),
Ear	→	Microphone, Speakers
Pulmonary Valve (heart)	→	Doors

For more human innovation examples: **www.AskNature.org/innovations**

*Biological Patterns Observed in The Organization and Properties of **Human Society***

Cell	→	Person
Tissue	→	Organization
Organ	→	Industry
Organ System	→	Economic Sector
Blood (establishing fundamental needs)	→	Money (establishing fundamental needs)
Cellular-Economic Phenomena	→	Socioeconomic Phenomena
Concepts in Cellular Society (Good/Bad Nature)	→	Concepts in Human Society

Biological Patterns Observed in Mathematical Concepts

And Their Applications *Outside* the Field of Biology

Regardless of what field the mathematical equation was observed in first, the fact that it exists within the biological domain provides evidence that these mathematical equations may actually originate from the biological framework for the mathematical universe (biological domain) and therefore emerge in other domains which share a correspondence. Because the universe is comprised of these biological patterns, it is expected to see these equations which exist in biology also be applied outside of biology, as well as the other way around. Our theory suggests that mathematical equations in the field of *traditional biology* and applicable outside the field of biology is due to the nature of a biological framework to the universe. Our theory suggest that mathematical equations first discovered outside the biological domain, if inherent to the universe, will also have applications within biology. We suggest that understanding the the concepts of the mathematical equations in strictly biological terms will provide a more efficient equation that is applicable and precise across all fields of study.

Biological Domain	→	Target Domain(s)
Exponential Growth Equation Observed in population growth, bacterial growth, cell growth, viral replication, tumor growth, neuronal growth, gene expression, protein synthesis, yeast fermentation, and algal blooms.	→	Applied in economics to model population growth, compound interest, and investment growth, among other phenomena.
Logistic Growth Equation Observed in population dynamics, microbial growth, plant population ecology, fish stock dynamics, cancer growth.	→	Used in fields such as ecology, economics, and epidemiology to model population dynamics, resource utilization, and the spread of diseases.
Game Theory Observed in evolutionary stable strategies (ESS), mate choice and sexual selection, parental investment, foraging strategies, territoriality, cooperative hunting, communication strategies, host-parasite interactions, thus provides insights in into various aspects of behaviors, contributing to our understanding of evolution, ecology, and animal behavior.	→	Applied in economics to model strategic interactions among rational decision-makers, such as firms competing in markets, bargaining situations, and auction design.

Diffusion Equations Observed in gas exchange in the respiratory system, nutrient absorption in the intestines, drug delivery, neuronal signaling, osmosis in cells, cellular transports processes, wound healing, synthetic biology.	→	Used in physics to model heat transfer, fluid flow, and diffusion processes in materials; also applied in finance to model the spread of information or financial instruments in markets.
Neural Network Models Observed in the behavior of interconnected neurons in the brain and nervous system.	→	Applied in artificial intelligence and machine learning for pattern recognition, classification, regression, and optimization tasks across various domains, including image and speech recognition, natural language processing, and autonomous systems.
Fractal Geometry Observed in vascular networks, lung morphology, leaf venation, tree branching, coral reefs, neuronal morphology, geographical features, microbial aggregates, genomic sequences.	→	Utilized in computer graphics to generate realistic natural landscapes, textures, and visual effects; also applied in physics, engineering, and finance to model complex structures, rough surfaces, and irregular phenomena. Fractal geometry applies in galactic structures, cosmic web, interstellar medium, stellar clusters, cosmic microwave background, solar system dynamics, large-scale filaments, cosmic ray propagation. Fractal geometry can be applied in topography and terrain, fracture networks, seismicity and earthquakes, coastal erosion and shorelines, vegetation patterns, hydrology and river networks, soil erosion and landforms, and cloud and weather patterns.
Mendelian Laws of Inheritance Observed in the transmission of genetic traits from parents to offspring, providing the foundation for understanding genetic inheritance patterns in various organisms.	→	Applied in genetics and biotechnology to predict and understand patterns of inheritance of traits in organisms, but also used in forensic science, paternity testing, and animal breeding.

Optimal Foraging Theory A principle in behavioral ecology that predicts the behavior of organisms when they are search for food to maximize their energy intake while minimizing the energy expended in obtaining it. This mathematical model can be observed in in patch foraging, prey selection, dietary consumption, time allocation, optimal migration, territoriality, central place foraging.	→	Used in ecology and economics to model decision-making processes in resource acquisition and energy expenditure by animals, but also applied in human decision-making, marketing strategies, and consumer behavior.
Network Theory Observed in gene regulatory networks, protein-protein interaction networks, metabolic networks, ecological networks, neural networks, epidemiological networks, and cellular signaling networks.	→	Applied in sociology, computer science, and transportation engineering to analyze and model social networks, communication networks, and transportation networks.
Predator-Prey Model Observed in the dynamics of interactions between predator and prey populations. These models help understand changes in population densities, behaviors, and environmental factors influence predator and prey populations over time.	→	Utilized in ecology to model interactions between predator and prey populations, but also applied in economics to analyze market dynamics, and in epidemiology to study disease transmission dynamics.
Markov Chains Observed in the various processes involving discrete states and probabilistic transitions seen in population dynamics, molecular evolution, gene prediction, protein structure prediction, and sequence alignment, ecological succession, cellular signaling pathways, neuronal dynamics, and epidemiological models.	→	Applied in finance to model asset prices and stock market movements; used in computer science for modeling randomized algorithms, web page ranking algorithms, and stochastic processes in networks.
Chaos Theory Observed in various biological systems where complex dynamic and unpredictably behavior are observed, such as heart rate variability, brain dynamics, population dynamics, genetic regulatory networks, ecological systems.	→	Utilized in physics, meteorology, and fluid dynamics to study deterministic systems that exhibit complex, unpredictable behavior over time; also applied in cryptography, signal processing, and economics to analyze and model chaotic systems.

Michaelis-Menten Equation Observed in the kinetics of enzyme-catalyzed reactions	→	Applied in fields like pharmacology, biochemistry, and biotechnology to optimize enzyme reactions, drug metabolism, and substrate concentration in biochemical assays.
Hary-Weinberg Equilibrium Equation Observed within the evolutionary processes shaping genetic variation within populations.	→	Used in population genetics and evolutionary biology to study allele frequencies and genetic equilibrium, but also applied in forensic science and paternity testing.
Lotka-Volterra Equations: Observed in predator-prey interactions in forest ecosystems, marine food webs, insect-plant infections, predator-prey interactions in grassland ecosystems, freshwater ecosystems.	→	Applied in ecology, economics, and game theory to model predator-prey interactions, competition, and population dynamics in various ecosystems and social systems.
Reaction-Diffusion Equations: Observed in pattern formations in biological systems, morphogenesis, and other complex biological phenomena.	→	Used in physics, chemistry, and material science to model diffusion processes, pattern formation, and chemical reactions in diverse systems.
Fick's Law of Diffusion: Observed gas exchange in respiratory systems	→	Applied in fields such as physiology, engineering, and environmental science to model gas exchange in lungs, drug delivery through membranes, and pollutant dispersion in air or water.
Nernst Equation: Observed in relating the membrane potential of a cell to the concentration gradients of ions across the cell membrane—calculating the equilibrium potential for a given ion based on its intra- and extracellular concentrations.	→	Applied in electrochemistry, analytical chemistry, corrosion science, energy storage and conversion technologies such as fuel cells, sensor technologies, environmental monitoring, and process control. Utilized in electrochemistry, neuroscience, and analytical chemistry to calculate electrode potentials, predict ion behavior, and measure ion concentrations in solutions.
Gompertz Equation: Observed in tumor growth, microbial growth, population dynamics, cellular growth/aging.	→	Applied in economics, finance, demographics, engineering, technology adoption, market saturation, urbanization, population aging, mortality rates.

How To Observe These Biological Patterns Throughout Our Reality*[1] [EASY TERMS]

Dedre Gentner's structure-mapping framework for analogy, titled: *Structure-Mapping: A Theoretical Framework for Analogy*, is based on the idea that analogies can be made by identifying and aligning corresponding structural relationships between two domains. In the case of the theory "The Biological Framework for a Mathematical Universe," this framework can be used to structurally map from the biological domain to other target domains, revealing and explaining the biological nature of those target domains.

In simple terms, here's how Dedre Gentner's framework enables this mapping process:

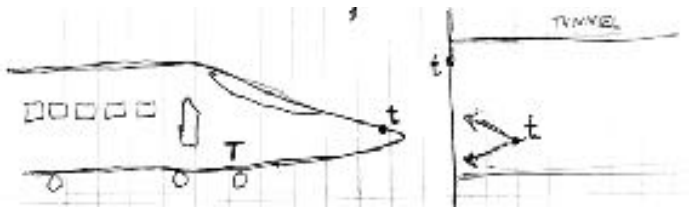
1. Identify the source domain: The biological domain serves as the source domain, which contains the known biological patterns and structures.
2. Analyze the target domain: Choose a specific target domain that you want to understand in biological terms. For example, if the target domain is a social system, you would examine the structures and relationships present within that domain.
3. Identify corresponding structures: Look for structural relationships and patterns in the biological domain that align with those in the target domain. This involves finding similarities in how elements in each domain are organized, connected, and interact.
4. Map the structures: Once the corresponding structures are identified, you can create a mapping between the structures in the biological domain and the target domain. This mapping helps uncover the hidden biological patterns and knowledge within the target domain.

By using Dedre Gentner's structure-mapping framework, you are able to reveal and explain the biological nature of the target domain by identifying and aligning structural similarities with the biological patterns already known in the biological domain. This allows for a deeper understanding of the target domain through the lens of the underlying biological processes and structures.
* NOTE: The prerequisite for observing these biological patterns throughout all of reality is dependent upon one's thorough knowledge biology's patterns, as well as one's throughout understanding of the patterns within a target domain. If both are thorough enough, and a correspondence exists, then one will reveal the correspondence between the biological domain and the target domain.

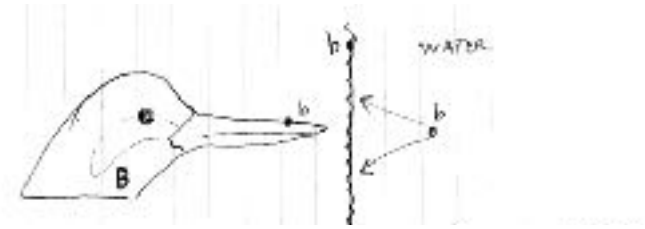
However for scientists the above information is not a good enough explanation, they requir

How To Observe These Biological Patterns Throughout Our Reality [HARDER TERMS]

In more *specific terms*, here is how Dedre Gentner's framework enables this mapping process:



Step 1: *Define the Target Domain.* A clear and comprehensive understanding of the target domain is essential to recognizing biological patterns that share a correspondence. Adopt the engineer's mind. This includes familiarizing oneself with the fundamental concepts, theories, and principles that govern the target domain, as well as the relational correspondences amongst all variables of a target domain. A thorough investigation of existing literature and research in the field of a target domain can provide valuable insights into the specific characteristics and challenges of the target domain. Finally, reiterating *step one* may be required due to the fact that the observer may not have adequate knowledge of biology's patterns to conduct the mapping.

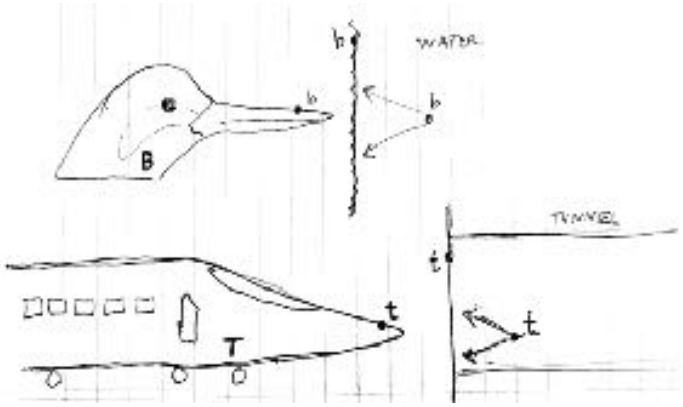


Step 2: *Identify the Biological Patterns.* To initiate the mapping process, it is important to identify the biological patterns so that one can recognize their correspondences to the target domains they aim to explain. These biological patterns encompass all aspects of biology at various realms of biology, such as macroscopic, molecular, and quantum realms. Recognizing and categorizing these biological patterns is crucial as they serve as the foundation for recognizing those patterns in target domains and mapping the aspects of those biological patterns to aspects within the target domain.

Step 3: *Engage in Analogical Mapping.* Analogical mapping involves identifying parallels between the biological patterns and the target domain. This step involves structurally mapping the identified biological patterns onto the target domain and depicting how they align with or relate to the concepts and processes in the target domain. This mapping will reveal similarities, differences, and insights that can enable a deeper understanding of the target domain from a biological perspective.

KING FISCHER

HIGH SPEED



$$f: \mathbf{B} \rightarrow \mathbf{T}$$

The analogy "T is (like) B" defines a mapping from *B* to *T*. T will be called *target*, since it is the domain being explicated. *B* will be called *base* [or *biological* domain], since its serves as the source of knowledge. *T* shares a correspondence to the biological patterns of *B*. Each *b* can be used as a model to explain a corresponding *t*. Suppose that the representation of the *biological* domain B can be stated in terms of object nodes b1, b2,….bn, and predicates such as A, R, R` , and that the *target* domain has object nodes t1, t2,…tm.[2] The analogy maps the object noes of B onto the object nodes of T:

$$\mathbf{M}: \mathbf{b}_i \rightarrow \mathbf{t}_i$$

These object correspondences are used to generate the candidate set of inferences in the target domain. Predicates from B are carried across to T,[3] using the node substitutions dictated by the object correspondences.

The mapping rules are:

1. Discard *attributes* (A) of objects:

$$A(b_i)] \quad -/-> \quad [A(t_i)$$

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[2] Most explanatory analogies are 1-1 mappings, in which m=n. However, there are exceptions (Gentner, 1982).

[3] The assumption that predicates are brought across as *identical* math's is crucial to the clarity of this discussion.

2. Try to preserve *relations* (R) between the objects:

$$R(b_i , b_j)] \quad ——> \quad [R(t_i , t_j),$$

3. {The Systematicity Principle) To decide *which* relations are preserved, choose systems of relations (frame of reference):

$$R `(R_1(b_i , b_j), R_2(b_k , b_l)] \quad ——> \quad [R `(R_1(t_i , t_j), R_2(t_k , t_l)]$$

Higher-order relations play an important role in analogy, as is discussed below.

Notice that this discussion has been purely structural; the distinctions invoked rely only on the syntax of the knowledge representation, not on the content. The *content* of the relations may be static spatial information, as in UNDER (x, y), or FULL (CONTAINER, WATER); or constraint information, as in PROPORTIONAL [PRESSURE(liquid, source, goal), FLOW-RATE(liquid, source, goal)]; or dynamic causal information, as in CAUSE{AND [PUNCTURE (CONTAINER), FULL(CONTAINER, WATER)], FLOW-FROM (WATER, CONTAINER)}.

After we establish an analogy, general principles and knowledge can be transferred from the biological domain to the target domain, thereby helping one better understand the nature of the target domain. In this case we can transfer general knowledge and principles surrounding aerodynamics pertaining to a King Fischer bird traveling through fluid at high speed so to prevent inefficiencies of to high speed trains traveling through tunnels at high speeds so to reduce/eliminate sonic boom.Examples of analogical mappings in practice and what knowledge can be transferred and their benefits can be understood in the engineering field of biomimicry, or biomimetics.

Step 4: Evaluate the Mapping. Once the initial mapping between the biological domain and the target domain has been achieved, it is vital to evaluate the effectiveness and validity of the mapping. Are the biological patterns accurately and meaningfully mapped to the target domain? Does the mapping provide new perspectives, explanations, or insights that were previously unseen in the target domain alone? This evaluation will ensure the reliability and usefulness of the mapped analogies.

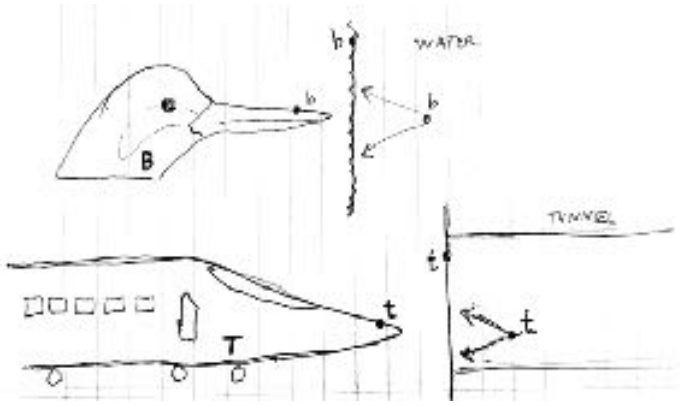
Step 5: Refine and Iterate. As with any scientific process, refinement and iteration are key. Based on the evaluation results, adjustments may be necessary to improve the mapping process. It might involve revisiting the identified biological patterns, exploring additional analogies, or refining the existing mapping to enhance the biological understanding of the target domain. Constant refinement and iteration will lead to a more robust and accurate representation of the biological nature within the target domain.

Step 6: Validate and Communicate. The final step of the process involves validating and communicating the findings of the mapped analogies. Validation can be achieved through further research, experimentation, and peer review, ensuring that the biological framework and its mapped analogies hold scientific merit. Once validated, the results should be effectively communicated to the scientific community and relevant stakeholders through publications, conferences, or other platforms, fostering further discussion and exploration of the implications of the biological patterns within the target domain.

In this example, we structurally map the aerodynamics of a kingfisher bird's beak through water so to minimize the occurrence of a splash to that of the aerodynamics of a high speed train through a tunnel so to minimize the occurrence of a sonic boom—a real design example of the Shinkansen bullet train in Japan.

KING FISCHER BIRD

HIGH SPEED TRAIN



$$f: \mathbf{B} \rightarrow \mathbf{T}$$

The analogy "T is (like) B" defines a mapping from *B* to *T*. T will be called *target*, since it is the domain being explicated. *B* will be called *base* [or *Biological-Domain*], since its serves as the source of knowledge. *T* shares a correspondence to the biological patterns of *B*. Each *b* can be used as a model to explain a corresponding *t*. After we establish an analogy, general principles and knowledge can be transferred from the biological domain to the target domain, thereby helping one better understand the nature of the target domain. Examples of analogical mappings in practice and what knowledge can be transferred and their benefits can be understood in the engineering field of biomimicry, or biomimetics.

Biomimicry is the design and production of materials, structures, and systems that are modeled on biological entities and processes. Biomimicry aims to take inspiration from natural selection solutions adopted by nature and translate the principles to human engineering. Examples of biomimicry can be found in how Velcro was inspired by burr fruit seeds;[4] how surgical needles were inspired by bee stingers;[5] How producing fresh water from salt water (desalination process) was inspired by biological patterns in red blood cells;[6] How the wings of the Airbus have been inspired by the wings of an albatross;[7] and; How paint coatings on airplanes[8] and antibacterial surfaces have been inspired by the biological patterns observed in shark skin.[9] Simply put, the best way to observe these biological patterns throughout our reality, is by applying the same methods to which engineers use to find biological patterns in human innovation.

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[4] https://www.microphotonics.com/biomimicry-burr-invention-velcro/

[5] https://3dprintingindustry.com/news/bees-put-sting-temples-bioinspired-3d-printed-needle-design-132859/

[6] https://cbm.msoe.edu/mapsTeams/assets/biomemeticMembrane2.pdf

[7] https://www.airbus.com/en/newsroom/stories/2020-03-biomimicry-a-fresh-approach-to-aircraft-innovation

[8] https://www.airbus.com/en/newsroom/stories/2020-03-biomimicry-a-fresh-approach-to-aircraft-innovation

[9] https://www.sharklet.com

Why Is Knowing Biology's Patterns Important?

Let us look to the field of Biomimicry to catch a glimpse as to why biology's patterns are important. Biomimicry is an approach to innovation that seeks sustainable solutions to human challenges by emulating nature's time-tested patterns and strategies. It involves studying natural systems, processes, and designs to inspires and inform the development of products, technologies, and systems that are more efficient, resilient, and sustainable. Biomimicry draws on principles from biology, engineering and design to create solutions that are both functional and compatible with the natural world. This is just the start.

The biological framework for a mathematical universe sets forth the notion suggesting that the universe and all things in reality contain biological patterns, which are hidden from our ability to see and understand unless we have thorough knowledge of biology and engineering to the point where we can recognize these patterns that permeate all of creation.

By understanding biology's patterns we can reveal and understand these hidden biological patterns that exist within all things in our reality—thereby revealing the underlying *biological truth,* inherent to the framework of the universe. Similar to what is emerging in the field of biomimicry, we will be able to apply those processes to *every* thing we see in the world around us, natural or man-made, physical or conceptual.

** Understanding the underlying "biological truth" regarding the nature of anything physical or conceptual is not only crucial but also essential for governing and directing various industries, fields of knowledge, and socioeconomic systems. Biological patterns serve as a blueprint, guiding and determining how socioeconomic systems should form and behave in order to benefit all individuals. And it provides the general public the authority to carry-out those initiatives. Biological patterns provide the general public not only the "God given right"[10] to make the necessary changes which benefit all people, but also biological patterns provide the blueprint for those initiatives. By possessing a comprehension of biology and engineering, we, as a society, can attain the knowledge, confidence, willpower, and authority required to earn this right. Biological patterns provides the general public (not politicians, not investors, not governments) the mathematically proven evidence to make socioeconomic change that is in the best for human society (i.e., such as those ideas presented here: https://PerfectPublicOffering.org).

With the power of *biological truth*, humanity has the truest contextual understanding of any thing they are trying to comprehend, tangible or or intangible. Biological patterns makes tangible what is intangible. Biology's patterns allows for truest comprehension of relationships amongst things—truths surrounding, biological cause and effects; So we can have the knowledge to align these observed processes with the biologically-patterned processes which those observed processes that are trying to mimic.

Most importantly: by designing humanity's socioeconomic systems (i.e., the systems which produce and allocate the resources and opportunities throughout society) to be in accordance to those *healthy* biological systems—such as those patterns epitomized by the cellular society comprising the human body, as opposed to the unhealthy state human society currently has today—which most closely resembles the cellular society within the body of Stephen Hawking (with all due respect). Just as a healthy society, represented by the cellular society that composes the human body, is capable of establishing the fundamental needs necessary for the survival, protection and potential of its society, Humanity can also achieve the same through its alignment with the biological pattern found in the body. The more that we are able to establish the fundamental needs of all individuals within society, the more resilient and full of potential our entire society becomes. The more capable humanity will be able to harness the brain power and physical will of the collective people in such a manner to defend itself against things such as solar flares, asteroid/meteor strikes, epidemics, and natural disasters. The more capable humanity will be able to harness the brain power and physical will of the people to remediate the Earth back to a sustainable state, and travel among the stars and to learn more about life's beautiful patterns, to spread Life and the knowledge of Life, such as spreading concepts like *Atman* and *Brahman*, or *Pnimiyut* and *Chitzoniyut*. ;)

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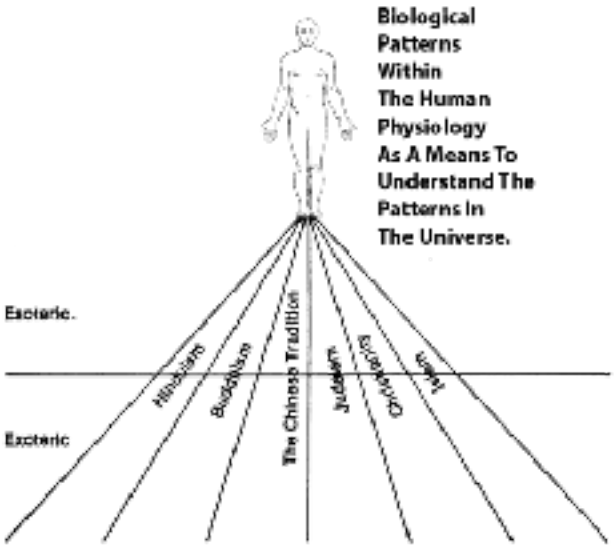
10 "Universe given right." — as the universe is biological in its framework and has, with its patterns, instilled its truth in biology.

What Evidence Is There For A Biological Framework for a Mathematical Universe?



Microcosm & Macrocosm motif seen across various religions and ancient philosophies around the world hint to possible prior knowledge of a biological nature to the universe and its understanding through the understanding of the patterns within the human body.

Early Scientific Support

In the process of supporting the Biological Framework for a Mathematical Universe, let us *begin* with the oldest scientific literature that exists, *religion*. But in order to understand how this "paradox" can be, let us understand the concept of perennial wisdom. **Perennial wisdom**, also known as perennial philosophy or perennial tradition, refers to the concept of universal and timeless spiritual truths that are found across various religious, philosophical, and mystical traditions throughout human history. It suggests that there are fundamental principles and insights about the nature of reality and the human experience that remain consistent throughout different cultures and historical periods. Building upon the concept of perennial wisdom, the ideas of a biological framework for a mathematical universe hypothesis can be seen in many cultures and historical periods. Here's how perennial wisdom is incorporated into our theory:

1. ***Universal Principles*:** Perennial wisdom suggests that there are fundamental and universal principles that underlie all religious and philosophical traditions. By considering our theory within the framework of perennial wisdom, we have discovered that our theory of a biological framework for a mathematical universe hypothesis parallels with many of the religions and philosophical ideas from the past (which we show), especially the motif surrounding the microcosm and macrocosm.
2. ***Biological Patterns and Spiritual Truths*:** Perennial wisdom emphasizes the interconnectedness of all things and the underlying unity of existence. In our theory, the idea that biological patterns define the framework for the mathematical universe hypothesis aligns with this emphasis on interconnectedness. By linking the biological patterns to spiritual truths, we can posit that these patterns serve as a bridge between the physical and the spiritual realms, revealing deeper spiritual realities through their existence and interplay.

3. ***Common Motifs:*** Perennial wisdom recognizes the presence of common motifs or themes across different religious and philosophical traditions. Our theory can utilize this concept by suggesting that the concept of a biological framework for the mathematical universe hypothesis predates the formation of specific religions and philosophies on Earth and its ideas/concepts can be seen within the ancient text of our religions and ancient philosophies. This implies that the presence of biological patterns as a fundamental aspect of reality is reflected in the common motifs found in various traditions. It highlights the universal nature of these biological patterns, further supporting our theory's assertion of their pervasiveness.

4. ***Compatibility with Science*****:** Perennial wisdom emphasizes the compatibility of spiritual and scientific understanding. Our theory, which proposes a biological framework for a mathematical universe hypothesis, integrates scientific principles and patterns into the understanding of the nature of reality. This aligns with the aim of perennial wisdom to bridge the gaps between different modes of knowledge and to unite spiritual and scientific perspectives.

By incorporating perennial wisdom as a theoretical foundation for our theory, we strengthen the idea that the biological framework within the mathematical universe hypothesis is in alignment with universal and timeless spiritual truths. This perspective allows for a broader understanding of the interrelation between biological patterns, spiritual realities, and the common motifs found in different religious and philosophical traditions.

Here are a few examples of ancient religious and philosophical concepts, as well as more modern historical literature that may have been trying to express the concepts of a biologically-patterned universe and its connection to the human body:

Atman & Brahman (Upanishads 3000 - 500 BCE)**:**

The concepts of Atman and Brahman, as described in the Upanishads, can provide interesting perspectives and potentially contribute to the theoretical foundation of our theory, "biological framework for a mathematical universe hypothesis." Here's how these concepts can be relevant:

1. *Atman*: In the Upanishads, Atman refers to the individual self or soul, representing the essence of an individual being. It is considered eternal and interconnected with the ultimate reality. Our theory proposes that all systems, processes, and objects in reality possess biological patterns. From the perspective of Atman, one can interpret this as the essence or intrinsic nature of all things being interconnected and sharing common biological patterns. The concept of Atman supports the idea of the underlying unity and interdependence of all elements within the biological framework we propose.

2. *Brahman*: Brahman refers to the supreme cosmic reality, the ultimate truth or universal consciousness that encompasses and transcends individual beings. Brahman is considered the essence or source of everything. In our theory, the postulation that the existence of life and living organisms arises due to the evolution of the universe's biological processes aligns with the idea of Brahman as the creative force behind all manifestation. The concept of Brahman can provide a theoretical foundation for understanding the interconnectedness of the universal biological processes we propose and their relationship to the larger cosmic reality.

By integrating the concepts of Atman and Brahman, we incorporate ideas of interconnectedness, unity, and the universal nature of biological patterns. These concepts contribute to the theoretical framework of our theory by providing a philosophical and metaphysical basis for understanding the inherent biological nature of all systems, processes, and objects in reality, as well as the relationship between biological processes and the larger cosmic fabric.

“Namaste” Meaning (Hinduism):

In the realm of Hinduism, the traditional greeting "Namaste" carries a profound meaning. It serves as a acknowledgement that the divine essence resides within oneself as well as in others, emphasizing the unity that transcends physical boundaries and highlights the interconnectedness of all living beings. Namaste can be understood as "I respectfully bow to the divine within you" [11] [12] [13] or "the sacred within me recognizes the sacred within you”.[14] We propose that the customary practice of bowing to one another may have originally served as a means to acknowledge the inherent sacredness of biological patterns that pervades every aspect of our existence. Regrettably, over time, the true meaning and context behind this divine salutation were lost.

Pnimiyut & Chitzoniyut. We also see the connection of the theory of a biological framework for a mathematical universe in the concepts of Pnimiyut and Chitzoniyut from Kabbalah. Pnimiyut may actually be referring to the hidden biological patterns throughout the universe, while Chitzoniyut may actually represent the external manifestations that conceal these biological patterns.

Batin and Zahir (Sufism, Islam):

The concepts of Batin and Zahir from Sufism, a mystical branch of Islam, can provide theoretical foundations for certain aspects of our theory, "biological framework for a mathematical universe hypothesis." Here's how these concepts may be relevant:

1. *Batin:* Batin refers to the inward or hidden dimension of reality. It represents the spiritual or esoteric aspect that is concealed from superficial observation. In our theory, we propose that biological patterns define the framework of a mathematical universe hypothesis. By emphasizing the hidden biological patterns throughout the universe, we can draw parallels with the concept of Batin. It suggests that there is an inner essence or hidden dimension within all systems, processes, and objects that can be explored and understood. By uncovering the Batin or hidden biological patterns, we aim to reveal the underlying nature of various domains.

2. *Zahir:* Zahir refers to the outer or apparent dimension of reality. It represents the manifest or surface-level aspects of existence. In our theory, we argue that all systems, processes, and objects possess biological patterns and are inherently biological in nature. This aligns with the concept of Zahir, as it suggests that the external manifestations or observable characteristics of different domains can be seen as reflections or manifestations of the underlying biological patterns (Batin). The interplay between Zahir and Batin in our theory can be seen as reflecting the relationship between the manifest and hidden dimensions of reality within Sufism.

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[11] Ying, Y. W., Coombs, M., & Lee, P. A. (1999), "Family intergenerational relationship of Asian American adolescents", *Cultural Diversity and Ethnic Minority Psychology*, 5(4), pp. 350–363

[12] K V Singh (2015). *Hindu Rites and Rituals: Origins and Meanings*. Penguin Books. pp. 123–124. ISBN 978-0143425106. Archived from the original on 2019-12-17. Retrieved 2017-05-20.

[13] Lawrence, J. D. (2007), "The Boundaries of Faith: A Journey in India", *Homily Service*, 41(2), pp. 1–3

[14] Oxhandler, Holly (2017). "Namaste Theory: A Quantitative Grounded Theory on Religion and Spirituality in Mental Health Treatment". *Religions*. **8** (9): 168. doi:10.3390/rel8090168.

3. *Whirling Dervish Ritual*: Whirling Dervishes spin in circles like parties within the body and planets within the solar system. They direct their attention inward and focus on the mystical contemplation of God's nature within themselves.

By integrating the concepts of Batin and Zahir, we incorporate ideas of hidden dimensions, spiritual aspects, and observable manifestations into our theory. These concepts can contribute to the theoretical framework by providing a mystical and philosophical foundation for understanding the underlying biological patterns throughout reality and their relationship to the visible expressions in different domains. Moreover, the concepts of Batin and Zahir can add depth to the exploration of the interplay between hidden and apparent aspects, enriching our understanding of the biological nature of diverse phenomena.

Lataif-e-sitta (Sufism) In The Context of Biological Patterns

Lataif-e-sitta (Arabic: اللطائف الستة) are special organs of perception in Sufi spiritual psychology, subtle human capacities for experience or action. Depending on context, the *lataif* are also understood to be the qualities (or forms) of consciousness[15] corresponding to those experiences or actions. The underlying Arabic word *latifa* (singular) means "subtlety" and the phrase *Lataif-e-sitta* means "six subtleties" (although the number of *lataif* can differ depending on the specific Sufi tradition). When realized (or activated or awakened or illuminated (tajalli))[16], the *lataif* are understood to be part of Man's spiritual "Organ of Evolution",[17] known as Qalb (Heart) (See Disambiguation: Qalb (Heart) or *latifa*). This integration of the *lataif* into Qalb is considered by some Sufi orders to be a central part of the comprehensive spiritual development that produces the Sufi ideal of a Complete Man (Al-Insān al-Kāmil).

Kubrāwī *lataif*—According to the view of the Kubrawi order there are seven *lataif*. They are understood cosmologically as "descending" levels through which reality is created and structured.[18] [19] In the process of spiritual development, the individual Sufi is understood to "ascend" back through these levels progressively (see ontological Arcs of Descent and Ascent in Sufism). The attainment of each level is a stage associated with the activation/realization of a corresponding spiritual organ/capacity, interpreted symbolically through Islamic cosmology and the prophets and messengers in Islam.[7]

Spiritual Organ could be this biological patterns of the universe.

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[15] Almaas, A. H. "Essence". York Beach, Maine: Samuel Weiser, 1986, p. 143.

[16] Shah, Idries *The Sufis*. Garden City, New York: Anchor Books, 1971, p. 145, 334, 340.

[17] Shah, Idries *The Sufis*. Garden City, New York: Anchor Books, 1971, p. 342-343.

[18] Bakhtiar, Laleh (1976), Sufi Expressions of the Mystical Quest, New York: Thames and Hudson, p. 97

[19] Elias, Jamal J. (1995). "The Throne Carrier of God". State University of New York Press. pp. 82–83.

Microcosm and macrocosm:

The concept of microcosm and macrocosm provide a theoretical framework for certain aspects of our theory, "biological framework for a mathematical universe hypothesis." Here's how these concepts can be relevant:

1. *Microcosm:* In the concept of microcosm, it is believed that the smaller or individual part reflects or mirrors the larger or universal whole. This means that the characteristics and patterns found in a smaller or more localized entity can be seen as representative of the larger universe. In our theory, we propose that biological patterns define the framework for a mathematical universe hypothesis. By considering living organisms as microcosms, or smaller entities within the universe, we suggest that they embody and reveal the hidden biological patterns that exist throughout reality. This concept supports our postulation that analogies can be mapped from the biological to any target domain, allowing for a better understanding of the biological nature of the target domain by looking at the microcosm.

2. *Macrocosm:* The concept of macrocosm, on the other hand, suggests that the larger universe is reflected in or reflected by the smaller entities within it. This means that the patterns and principles present in the universe at a larger scale are found and reflected in smaller systems and processes. In our theory, we propose that the existence of life and living organisms is a direct consequence of the evolution of the universe's biological processes. This aligns with the concept of macrocosm, as it suggests that the larger-scale biological processes of the universe are mirrored in the physiology and patterns of living organisms, acting as models revealing the underlying biological nature of the macrocosm.

By incorporating the concepts of microcosm and macrocosm, we acknowledge the interconnectedness and mirroring of patterns between smaller and larger scales within the universe. These concepts provide a theoretical foundation for our understanding that biological patterns define the framework for a mathematical universe hypothesis. By exploring the biological nature of living organisms, perceived as microcosms, we seek to unravel and explain the broader biological patterns and processes present in the macrocosm, or the universe.

Pentagram

> [The Pentagram] is “the sign of intellectual omnipotence and autocracy… It is the sign of the Word made flesh; The pentagram is the figure of the human body, having four limbs and the single point [at the top] representing the head.” […] “the Pentagram is called the Sign of the Microcosm, and it represents what the Kabalists of the book of Zohar term the Microproposopus.” […] “The complete comprehension of the Pentagram (i.e., Human body) is the key of the two worlds. It is absolute philosophy and natural science.” [20]

The theory postulated in our research thesis is that biological patterns define the framework for a mathematical universe hypothesis. In other words, the patterns found in living organisms and biological processes serve as the underlying structure for the mathematical principles governing our reality. This idea can be supported by the concept of the pentagram in occult sciences, as elaborated by Eliphas Levi.

According to Levi, the **pentagram** symbolizes intellectual omnipotence and autocracy, representing the Word made flesh. Levi further equates the pentagram with the human body, with the four limbs corresponding to the points of the star, and the single point at the top representing the head. This interpretation aligns with our theory that biological patterns hold significance in understanding the mathematical nature of the universe.

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[20] Lévi, E., & Waite, A. E. (2011). Transcendental magic, its doctrine and ritual. Martino Publishing.

Levi refers to the pentagram as the Sign of the Microcosm, which aligns with the concept of the human body as the microproposopus in the book of Zohar. This idea resonates with our hypothesis, as it suggests that the human body, being a biological entity, embodies the framework for understanding the intricacies of the universe. By comprehending the pentagram, or the human body, one gains access to the key of the two worlds - a reference to the interconnectedness of the biological and mathematical realms.

Levi goes on to proclaim that the pentagram represents absolute philosophy and natural science. This statement further solidifies our theory, as it implies that the understanding of biological patterns and processes is essential for comprehending the fundamental workings of the universe. The notion of the pentagram as a symbol encompassing both philosophy and science supports the idea that biological patterns provide the foundation for a mathematical universe hypothesis.

The Principle of Correspondence.

By drawing upon the Principle of Correspondence from Hermeticism, can support our argument that biological patterns define the framework for the mathematical universe hypothesis and highlight the importance of recognizing the underlying connections in order to reveal and explain the biological nature of any target domain. Here's how it can be applied to support our theory:

1. Interconnectedness: The Principle of Correspondence in Hermeticism asserts that there is a correspondence and interconnectedness between different planes of existence, from the microcosm to the macrocosm. Applying this principle to our theory, we can propose that the biological patterns found in living organisms reflect and correspond to the larger patterns within the universe. In this way, the concept of Correspondence reinforces our theory's assertion that all systems, processes, and objects possess inherent biological patterns, highlighting the interconnectedness between the biological and mathematical aspects of the universe.

2. Fractal Nature: The Principle of Correspondence also emphasizes the idea that the same patterns and principles manifest at different scales, creating a resemblance between the microcosm and the macrocosm. In our theory, this concept aligns with the notion that the biological patterns found within living organisms serve as models for understanding the hidden biological patterns throughout the universe. By recognizing the fractal-like nature of reality, where patterns repeat and display similarity across different scales, our theory can argue that analogies can be mapped from the biological to any target domain, revealing the underlying biological nature of that domain.

3. Universal Laws: Hermeticism holds that there are universal laws governing the cosmos, and the Principle of Correspondence suggests that these laws apply across different planes of existence. Correlating this principle with our theory, we can propose that the universal laws underlying biological patterns (and biological principles) are intertwined with the fundamental mathematical principles that govern the universe. This supports our postulation that the evolution of the universe's biological processes directly contributes to the existence of life and living organisms. By emphasizing the interconnectedness of these laws, our theory can argue that understanding the biology of living organisms provides insights into the broader mathematical nature of the universe revealing these hidden universal-biological laws.

4. Holistic Perspective: The Principle of Correspondence fosters a holistic perspective, encouraging the exploration and understanding of the interconnected nature of reality. By incorporating this principle into our theory, we can emphasize the importance of adopting a holistic approach that considers both the biological and mathematical aspects of the universe. This holistic perspective allows for a more comprehensive understanding of the underlying patterns and connections between the biological patterns within living organisms and the mathematical framework of the universe.

Incarnation (Religious Concept):

To explore the potential connection between the theory of biological framework for a mathematical universe and religious concepts such as “incarnation,” we consider the idea that "God" may represent the personification of the universe. In this view, "God's spirit," "God's essence," and "God's nature" are essentially synonymous with the biological patterns inherent in the fabric of reality. Thus, it is conceivable that the religious term "incarnation" attempts to express the concept of a biological framework for a mathematical universe hypothesis. Traditionally, the term "incarnation" is associated with the embodiment of a divine being in human form, as seen in various religious traditions. However, through the lens of a biological framework, we can reinterpret this concept as the manifestation of the universe's inherent biological patterns in human form.

The concept of incarnation, as traditionally understood in religious contexts, typically refers to the belief that a divine being assumes human form. In the context of our theory, we draw a parallel between the Universe’s biological patterns that permeate reality, which we propose, and the embodiment or manifestation of the Universe’s biological patterns in a living organism, such as human form. The concept of incarnation could have originally meant to convey the universe’s biological patterns (i.e., divine, God, divine essence) manifestation into human form.

“So God created man in his own image” (Genesis 1:27) — For example, if one were to understand God as the personification of The Universe, one can see how biological universe could create man in its own image.

“Yet in my flesh I will see God” (Job 19:26) — This also supports our biological framework to a mathematical universe by implying that by the biological patterns in my flesh allow me to see the biological patterns in the universe and world around me. Now, did job know the context behind what he was saying? Or was he reiterating (without scientific/biological/astrophysical context) his teachings?

“One God and Father of all, who is over all, and through all, and in all” (Ephesians 4:1-6) — This is another example where if on were to understand God as the personification of the universe, one can see how this phrase could support the ideas that the concepts of a biological framework to the universe may have been conveyed to (tried to be conveyed) to a people during ancient times.

“The Word became flesh” (John 1:14) — In context to our theory of a biological framework to the universe, the Word became flesh, could mean referring to the manifestation of the universe’s biological patterns in the creation of Jesus Christ.

“Body is a Temple of the Holy Spirit who is in you” (Corinthians 3:16 and Corinthians 6:19-20) — In light of perrennialism and our theory of a biological natured-universe, this passage could be trying to express the biological patterns of the universe (i.e., Holy Spirit) being within a person’s body, and arguing to a person to not disrespect the pattern.

Theology of the Body (Pope John Paul II)

In light of perrennialism, particularly how we suggest that the biological framework for the universe may have been conveyed in the ancient past, and the possibility of the original context being lost, we come to the misinterpretations of this knowledge in Pope John Paul II's lectures on Theology of the Body. Pope John Paul II's **"Theology of the Body"** acknowledges the importance of the human body in understanding the nature of God but does not grasp the concept that God is the personification of the universe and that by knowing the biological patterns within the human body is what allows one to understand the hidden biological patterns in the universe and world around us. Here is a quote from his lecture: "*The body, and it alone is capable of making visible what is invisible, the spiritual and divine. It was created to transfer into the visible reality of the world, the invisible mystery hidden in God from time immemorial, and thus to be a sign of it.*", We can make the assumption based off his statement and by what he actually preached during his 128 lectures did not coincide with our theory of a biological framework for a mathematical universe. The Pope acknowledges the importance of the human body in understanding the nature of God but does not grasp the underlying scientific concepts, perhaps due to being lost through time, or being unable to communicate to a society who had no prior knowledge of biology, cosmology, and physics.

Emanationism:

Emanationism is a philosophical concept that suggests the universe emanates or originates from a divine source or ultimate reality. It proposes a hierarchical structure of existence wherein different levels or stages emanate from the divine essence.

In our proposed theory, of a biological framework for a mathematical universe hypothesis, we draw a parallel between the idea of biological patterns emanating from the universe and the notion of emanationism. Considering the existence of biological patterns as emanations from the fundamental properties of the universe could provide a framework for understanding the interconnectedness between the physical and biological aspects of reality.

By positing that the biological patterns found in all systems and processes stem from the evolution of the universe's biological processes, we can argue that these patterns are manifestations or emanations of the underlying essence of the universe. This interpretation aligns with the notions of emanationism, where the divine or fundamental essence is understood to permeate and give rise to various forms of existence.

Anima Mundi:

Anima Mundi, often translated as "world soul" or "soul of the world," is a concept that has been present in various philosophical and religious traditions throughout history.

Anima Mundi suggests the notion of a vital and animating force that permeates and connects all living beings and the natural world. It represents the idea of an underlying, unifying principle that integrates and sustains the diverse manifestations of life in the world.

Drawing a parallel between the concept of Anima Mundi and our theory of a biological framework for a mathematical universe, we propose that the biological patterns we postulate as inherent in all systems, processes, and objects in reality, are expressions of this underlying animating force. By considering the presence of biological patterns as a manifestation of the animating principle of the universe, we claim that our theory aligns with the concept of Anima Mundi.

Furthermore, Anima Mundi might have been attempting to express similar concepts that our theory proposes, we can posit that over time, the context and interpretation of the concept might have evolved or been misunderstood, leading to potential divergence from its original intent, which we believe to be this biological framework for a mathematical universe hypothesis.

Panentheism:

Panentheism is a philosophical or religious concept that suggests the presence of a transcendent yet immanent divine reality within and beyond the universe. It posits that the divine is both intimately present in all aspects of existence and extends beyond them.

Within the framework of our theory, we propose that the concept of panentheism aligns with the idea that biological patterns define the framework for a mathematical universe hypothesis. By considering the presence of biological patterns as inherent in all systems, processes, and objects in reality, the notion of a divine essence that permeates and manifests itself through these patterns can be contemplated.

From a panentheistic perspective, the universe itself, including its biological processes and patterns, could be seen as a manifestation or expression of the immanent divine reality. In this interpretation, the physiological models found in living organisms could be understood as reflections or representations of the hidden biological patterns throughout the universe.

By connecting the concept of panentheism with our theory, we argue that the interplay between the universe's biological processes and the living organisms it generates reveals an underlying divine presence or creative force. This perspective potentially provides a theoretical foundation for understanding the inherent biological nature of systems, processes, and objects in reality.

Theosophy

Theosophy, with its emphasis on a pure spiritual formation gradually materializing into an observable, material realm, echoes the hypothesis' proposition of a gradual manifestation of biological patterns in the universe. While theosophy primarily refers to spiritual formations, interpreting it as representing the biological pattern of the universe aligns with the hypothesis. This interpretation suggests that theosophy may actually be trying to express that the nature of a universe is governed by biological patterns. Theosophy speaks of a universal intelligence or divine wisdom permeating all aspects of the cosmos. The biological framework for a mathematical universe could be seen as providing a scientific basis for this universal intelligence, suggesting that the inherent biological patterns are the physical discernible manifestation of a universal intelligence or divine wisdom. Theosophy posits the existence of interconnectedness between all beings and aspects of reality. This mirrors the concept of biological patterns as the foundation of the mathematical framework for the universe. By considering all systems as interconnected through biological patterns, both Theosophy and the biological framework for a mathematical universe highlight the idea of a unified existence. Furthermore, Theosophy recognizes the concept of spiritual evolution, suggesting that beings progress and evolve through various stages. Similarly, the biological framework for a mathematical universe proposes that the existence of life and living organisms is a direct consequence of the evolution of the universe's biological processes. This implies an inherent link between biological evolution and spiritual growth, aligning with the idea of progressive development and evolution in Theosophy.

Ahimsa.

Ahimsa is a concept rooted in Indian philosophy and often associated with Jainism and Buddhism, refers to the principle of non-violence, non-harm, and compassion towards all living beings. While at first glance, it may not seem directly related to our theory, there are some possible connections to explore:

1. Ethical Considerations: Ahimsa places great importance on fostering harmony and minimizing harm to living beings. In our theory, you could emphasize the ethical implications of understanding the inherent biological nature of all systems, processes, and objects in reality. By acknowledging and respecting the biological patterns present in the universe, our theory can highlight the interconnectedness and value of all life forms, aligning with the spirit of ahimsa.

2. Unity and Interconnectedness: Ahimsa promotes the recognition of the inherent unity and interdependence of all beings. Within our theory, the concept of inherent biological patterns also implies an interconnectedness between all systems, processes, and objects in reality. This correspondence with ahimsa can contribute to a holistic worldview that acknowledges the interwoven nature of life and promotes compassion towards all living entities.

3. Holistic Understanding: Ahimsa encourages a deep understanding of the web of life and the acceptance of the sacredness of all living beings. In our theory, the recognition of hidden biological patterns throughout the universe can be seen as an extension of this holistic understanding, uncovering the biological nature present in different domains. This shared perspective promotes a sense of reverence and appreciation for the interconnectedness of life, supporting the principles of ahimsa.

While these connections between our theory and ahimsa are exploratory in nature, incorporating the principles of non-violence, interconnectedness, and compassion within your research can enrich the philosophical and ethical dimensions of our work.

Animism.

Animism is a belief system found in various indigenous cultures, holds that all entities, including plants, animals, and inanimate objects, possess a spiritual essence or soul. While animism focuses on spirituality and the interconnectedness of living and nonliving things, it can be applied as a theoretical foundation for our theory:

1. Interconnectedness: Animism emphasizes the interconnectedness of all aspects of the natural world. Similarly, our theory suggests that all systems, processes, and objects in reality possess inherent biological patterns, implying an underlying interconnectedness. By drawing on animistic principles, we can emphasize the spiritual or interconnected aspect of the biological patterns throughout the universe, aligning it with the notion of all things possessing spiritual essences in animism.

2. Reverence for Nature: Animism often includes a deep respect and reverence for the natural world. In our theory, recognizing the biological nature of all systems, processes, and objects can encourage a similar reverence for the complexity and interconnectedness of life and the universe. By integrating animistic values, our theory can underpin an understanding and appreciation for the inherent significance and value of biological patterns.

3. Universal Spirituality: Animism considers the existence of spiritual essences in both living and nonliving entities. Similarly, our theory suggests that the hidden biological patterns in the universe exist within everything in the universe. By considering animism, we can interpret these biological patterns as a reflection of the universal spirituality present in all domains, showing the interconnectedness between the spiritual essence within living beings and the universe as a whole.

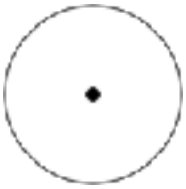
Taoism.

Taoism is an ancient Chinese philosophy and spiritual tradition, offers some intriguing aspects that can be related to your theory on the "biological framework for a mathematical universe hypothesis." Here's how Taoism might serve as a theoretical foundation:

1. Harmony and Balance: Taoism emphasizes the importance of harmony and balance in all aspects of existence. Within your theory, the concept of biological patterns defining the framework implies an inherent balance and harmony present in the universe. Like the Taoist idea of the Tao, representing the natural order of the cosmos, your theory suggests that the biological patterns contribute to the overall harmony and interconnectedness of reality.
2. Nature as a Teacher: Taoism views nature as a profound source of wisdom and guidance. In your theory, by asserting that the universe's biological processes led to the existence of life and living organisms, you align with the Taoist perspective that nature itself can reveal fundamental truths. Just as Taoists observe and learn from the natural world, your theory implies that studying and understanding biological patterns can uncover the hidden workings and principles of the universe.
3. Wu Wei (Non-Action): Wu Wei is a Taoist concept that refers to effortless action in harmony with the natural flow. In the context of your theory, the notion of analogies being structurally mapped from biological patterns to reveal the biological nature of target domains can be related to Wu Wei. Rather than forcing understanding or imposing artificial frameworks, your theory suggests that by aligning with the natural biological patterns, insights and connections can be discovered more effortlessly and in harmony with the inherent nature of the universe.

By incorporating Taoism as a theoretical foundation, you can draw upon its emphasis on harmony, balance, nature as a teacher, and the concept of Wu Wei. These aspects complement the central ideas of your theory: the inherent biological patterns, the relationship between the universe's biological processes and living organisms, and the use of analogies to reveal the biological nature of different domains. Exploring Taoist principles can enrich your theory by providing a philosophical framework that resonates with the natural order and interconnectedness found in the biological patterns you propose.

The Circled Dot



The Pythagoreans and later Greeks employed the circled dot to represent the Monad or The Absolute, a metaphysical entity signifying the ultimate essence of reality. While traditionally interpreted as a symbol for the pure and indivisible first principle, we propose an alternative interpretation that aligns with our theory. Perhaps the Pythagoreans and later Greeks were attempting to convey the true nature of the universe (and where all first principles of the universe stem from): that it was biological in nature and its structure resembled that of a single-celled organism.

The circled dot was used by the Pythagoreans and later Greeks to represent the first metaphysical being, the Monad or The Absolute. The Monad, understood as the original source and principle of all reality, represents the indivisible and all-encompassing essence that lies beyond the physical world and is conceived as a fundamental, undifferentiated principle that encompasses all aspects of reality. The Pythagoreans believed that all things emanated from the Monad and are interconnected through the golden ratio and other mathematical proportions.

By acknowledging the circled dot as a representation of a single-celled organism, we can draw parallels between the structure and functions of living organisms and the underlying framework of the universe. This recognition supports our view that the universe's nature is inherently biological. Just as living organisms exhibit various patterns, processes, and interactions, the universe manifests similar characteristics on a grander scale. The flowing patterns of galaxies, the intricate networks of particles, and the dynamic interplay of forces all align with the biological patterns found within living organisms.**

[Add to End] Furthermore We also propose that our theory for a biological framework for a mathematical universe may been what was originally conveyed through our religion, and only through misinterpretations through time, have we come to a more “spiritual/religious” context of religion, and not the purely scientific meaning of what was being expressed.

Modern Scientific Support

Mathematical Universe Hypothesis. The mathematical universe hypothesis suggests that the physical universe is not just described by mathematics, but is actually a mathematical structure itself. According to the hypothesis, the universe *is* a mathematical object in and of itself. Furthermore, Tegmark suggests that not only is the universe mathematical, but it is also computable.

a. *Patterns and order in a mathematical universe*: A mathematical universe hypothesis posits that the fundamental nature of the universe can be described and understood through mathematical principles and patterns. Our theory suggests that biological patterns define the framework for a mathematical universe. Biological patterns can be interpreted as mathematical patterns, and contribute to the order and structure of the universe.

b. *Universal applicability of mathematical concepts*: A mathematical universe hypothesis postulates that mathematics is not just a human invention but rather a fundamental aspect of reality itself. Considering our theory's emphasis on the inherent biological nature of all systems, processes, and objects in reality, the mathematical concepts can be universally applicable, including within biological contexts. Mathematical principles are manifest in biological structures, functions, and processes.

c. *Modeling and analogies in a mathematical universe*: Our theory suggests that analogies can be structurally mapped from the biological domain to any target domain to reveal and explain the biological nature of the target domain. This aligns with the concept of modeling in a mathematical universe hypothesis. Mathematics allows for the creation of models that can describe and explain complex phenomena. Mathematical modeling and analogies helps uncover or clarify the biological patterns in different domains and how this supports our theory.

Systems Theory. Systems theory emphasizes the interconnectedness and interdependence of various components within a system. Systems theory provides a theoretical foundation for the idea that all systems, processes, and objects in the universe possess biological patterns and are fundamentally biological in nature. Systems Theory allows for a holistic understanding of how biological patterns could permeate throughout different domains.

Systems Biology. The field of systems biology also provides valuable insights into the biological foundations of the universe. Systems biology aims to study biological systems as a whole, rather than focusing on individual components. This holistic approach recognizes the interdependency and interconnectedness of different biological elements, suggesting that similar principles could be applied to understand the universe as a complex, interconnected system.

Fractal Cosmology. Fractal cosmology incorporates the concept of fractals, self-similar patterns that repeat at different scales, into cosmology. This theory suggests that the universe may exhibit similar patterns to living organisms, with galaxies clustering into superclusters in a fractal structure. Fractal cosmology also implies that the evolution of the universe's biological processes has led to the existence of life, highlighting the interconnectedness between living organisms and the larger universe.

Evolutionary Biology. Drawing upon the principles of evolutionary biology, our theory of a biological framework for a mathematical universe hypothesis proposes that the existence of life and living organisms is a direct consequence of the universe's biological processes. Evolutionary theory provides a foundation for understanding how life evolves and adapts over time, and how biological patterns inherent to the nature of the universe and its processes could shape the development of systems, processes, and objects in reality.

Complexity Science. Complexity science studies complex systems and emergent phenomena. This theory aligns with complexity science by stating that biological patterns are present in all systems, processes, and objects, indicating fundamental complexity in reality. It suggests that understanding the underlying biological nature requires considering emergent properties and patterns that arise from complex interactions within these systems.

Universal Laws or Principles. The theory posits that biological patterns define the framework for a mathematical universe hypothesis. This implies the presence of universal laws or principles that govern both biological processes and other phenomena. Exploring the existence of such universal laws or principles and their applicability across different domains provides a theoretical foundation for our theory.

Mathematical Modeling of Biological Systems. Mathematical modeling in biology involves using mathematical frameworks to describe and analyze biological phenomena. Through this approach, researchers have uncovered mathematical regularities and patterns within biological systems. Applying this principle to the theory, it suggests that the presence of biological patterns throughout reality can be revealed and explained by mapping analogies from the biological domain to other domains.

Biomimicry. The field of biomimicry also provides foundational support for a biological framework for a mathematical universe hypothesis. From structural and functional adaptation to material innovations, energy efficiency, and systems thinking, biomimicry exemplifies the inherent biological nature of the systems, processes, and objects in reality. By acknowledging and applying these biological patterns, we gain valuable insights into the fundamental principles that govern human innovation. As biomimicry continues to flourish, we can expect further empirical evidence to affirm our theory, solidifying the understanding of the intricate relationship between biological processes and the systems they shape within our universe.

Look at what has been created in the field of biomimicry:

http://AskNature.org/innovation/

Living Systems (James Grier Miller). In "Living Systems," James Grier Miller introduces the concept of living systems theory, which analyzes and understands complex systems as living systems. He emphasizes the interconnectedness and interdependence of components within a living system and explores their patterns and behaviors. Miller's ideas align with the theory of a biological framework for a mathematical universe, which suggests that biological patterns in living organisms reflect broader patterns in the universe. Referencing Miller's work supports the idea of interconnectedness between living systems and the broader biological nature of reality.

Huygens Synchronization + Law of Conservation of Energy: Here, we discuss the concepts of Huygens' synchronization and the law of conservation of energy in relation to biological systems and their connection to the larger universe. Huygens' synchronization refers to the phenomenon in which oscillators eventually synchronize and oscillate together due to the transfer of energy and information. This idea supports the notion that biological patterns and processes in the universe are interconnected, suggesting a fundamental interplay of energy and information throughout reality. The law of conservation of energy states that energy within a closed system remains constant and can only be transformed from one form to another. This aligns with the idea that the existence of life and living organisms is a consequence of the universe's biological processes, forming a framework for understanding the biological nature of reality.

Reaction-Diffusion System. Reaction-diffusion systems are mathematical models that describe the interaction and spread of substances or entities in space. These systems can explain the emergence and propagation of biological patterns in different systems, aligning with the theory that biology defines the framework of a mathematical universe. The study of reaction-diffusion systems can provide insights into the formation and propagation of patterns in biological systems, supporting the idea that these patterns are present throughout the universe. By mapping and studying these patterns, we can gain a better understanding of the underlying biological nature of different domains.

Stephen Wolfram's "A Class of Models with the Potential to Represent Fundamental Physics". Stephen Wolfram's research on a class of models explores the concept of computational irreducibility and its implications for understanding complex systems, particularly in biology. His work aligns with the theory of a biological framework for a mathematical universe, which suggests that mathematical models can capture the fundamental physics underlying biological processes. Wolfram's use of cellular automata as a modeling framework highlights the emergence of complex patterns from local interactions, similar to what is observed in biological systems. By considering Wolfram's work, the theory proposes that mathematical models can provide insight into the inherent biological nature seen throughout reality. The analogy between biological patterns and mathematical models can further enhance our understanding of the target domains. Overall, Wolfram's work provides a theoretical foundation for the theory of a biological framework for a mathematical universe by incorporating computational irreducibility, emergent behaviors, and complex patterns.

Fractals. The principles of fractals can support a theory that biological patterns define the framework of the universe. Fractals are geometric patterns that exhibit self-similarity at different scales, which aligns with the theory's assertion that biological patterns are repeated across different systems. Fractals also demonstrate complexity emerging from simple rules, reflecting the complexity found in biological patterns. Their strong connection to mathematics reinforces the idea that a mathematical framework underlies biological patterns. Fractals can also be used as a tool for mapping analogies, allowing for the exploration of similarities in form and structure across different domains and revealing their underlying biological nature.

The Mandelbrot Set. The Mandelbrot Set, a mathematical fractal, can be used to support a theory that emphasizes the presence of biological patterns throughout the universe. It highlights four main points:

1. The Mandelbrot Set's infinite complexity can represent the intricate and detailed nature of biological patterns in reality.

2. The self-similar patterns of the Mandelbrot Set align with the idea that biological patterns are repeated across different systems.

3. The emergence and iterative processes involved in creating the Mandelbrot Set can serve as a metaphor for the evolution of biological patterns over time.

4. The mathematical beauty and universality of the Mandelbrot Set symbolize the inherent mathematical nature of the biological framework of reality.

Occam's Razor. Occam's Razor, credited to William of Ockham, suggests that when faced with competing hypotheses, the simplest explanation with the fewest assumptions should be chosen. We can apply this principle to a theory proposing that biological patterns form the basis of a mathematical universe hypothesis. This theory adheres to Occam's Razor by advocating for simplicity, minimizing assumptions, and providing explanatory power and coherence. Through the application of Occam's Razor, the theory supports a single unifying principle – the biological framework for a mathematical universe hypothesis.

Implications on Other Theories of Consciousness

The theory of a biological framework for a mathematical universe proposes that biological patterns define the structure of the universe's mathematical framework. If this theory is true, it has several implications for main theories of consciousness:

1. Dualism: This theory posits that consciousness is distinct from the physical brain and body. Dualists argue that there is a non-physical aspect of consciousness that interacts with the material world. René Descartes was a prominent proponent of dualism. The theory of a biological framework for a mathematical universe challenges dualism by suggesting that consciousness is inherently linked to the biological nature of the universe. If consciousness arises from biological patterns, it cannot be separated from the physical world.

2. Monism (Materialism/Physicalism and Idealism): Monist theories propose that consciousness is inseparable from physical processes in the brain. There are two main subcategories of monism:

- *Materialism/Physicalism*: Materialist theories argue that consciousness arises from the complex interactions of physical matter, such as neurons and brain activity.
- *Idealism*: Idealist theories suggest that consciousness is fundamental and that the physical world arises from consciousness. In other words, consciousness precedes matter.

The theory of a biological framework for a mathematical universe aligns with monist perspectives by emphasizing the fundamental role of biology in shaping consciousness. Materialism would argue that

consciousness emerges from biological processes, while idealism might suggest that consciousness is fundamental and pervades the biological structures of the universe.

3. Panpsychism: Panpsychism proposes that consciousness is a fundamental property of the universe and is present in all things, to some degree. According to this view, consciousness is not exclusive to humans or animals but exists at various levels of complexity throughout the cosmos. The theory of a biological framework for a mathematical universe complements panpsychism by suggesting that consciousness is pervasive throughout the universe, embedded within its biological patterns. Panpsychism proposes that consciousness is a fundamental property of all things, and this theory suggests that biological patterns are the manifestation of this consciousness.

4. Global Workspace Theory and Integrated Information Theory (IIT): This theory, proposed by Bernard Baars, suggests that consciousness arises from the global coordination of information processing in the brain. According to this model, various brain regions compete for access to a "global workspace" where conscious awareness occurs. Proposed by Giulio Tononi, IIT posits that consciousness arises from the integration of information within the brain. According to this theory, consciousness is associated with complex, irreducible patterns of information processing. These theories may need to account for the biological nature of consciousness and how it emerges from the integration of information within biological systems. The theory suggests that consciousness arises from the complex interplay of biological patterns, which may influence how global workspace theory and IIT are understood.

5. Higher-Order Theories: These theories propose that consciousness arises from higher-order representations of mental states. According to this view, a mental state becomes conscious when it is the object of higher-order thoughts or awareness. This theory challenges higher-order theories by proposing that consciousness arises from the recognition of biological patterns within the environment. It suggests that consciousness evolved as a means for organisms to recognize and adapt to these patterns for survival.

6. Neural Correlates of Consciousness (NCC): NCC theories seek to identify the neural mechanisms that are necessary and/or sufficient for conscious experience. These theories focus on identifying specific brain regions or patterns of neural activity associated with consciousness. If consciousness is fundamentally linked to biological patterns, research on NCC may need to explore how these patterns manifest in neural activity and how they contribute to conscious experience.

In summary, the theory of a biological framework for a mathematical universe offers a unique perspective on consciousness, emphasizing its deep connection to the biological nature of the universe. It challenges traditional theories while offering new insights into the relationship between consciousness and the fundamental patterns of reality.

6. Active Inference:

Summary

This essay explores the nature of consciousness and its evolution, guiding the reader through the journey of early life forms and the development of human consciousness. It introduces the idea of a biological framework for a mathematical universe, suggesting that the mathematical structure of the universe is biological in nature. This theory proposes that living organisms and consciousness are a direct result of the universe's biologically-patterned processes, and that these processes can be observed and understood through physiological patterns. The hidden biological patterns in our environment drive the creation and evolution of life and consciousness.

This paper discusses the idea that the creation of life and consciousness is influenced by the evolution of the environment. It suggests that the Big Bang created patterns that are rudimentary biological in nature, leading to the formation of the universe and eventually Earth. The early volatile processes on Earth are also described as "rudimentary-biological," eventually leading to the creation of the first rudimentary living organisms, single-cellular organisms.

This paper goes on to explain that these first single-cellular organisms must recognize and organize themselves relative to the patterns in their rudimentary biologically-patterned environment in order to survive, i.e., active inference. Those that are successful in doing so continue to live and procreate, while those that cannot are destroyed. This process is said to give rise to consciousness as well as logic and reasoning among organisms.

Furthermore, this paper proposes that as the complexity of an organism's environment evolves, so does its consciousness. Organisms must be able to recognize and adapt to the patterns within their environment to ensure survival, and the emergence of new variables compels them to develop more complex consciousness. Adaptation of reasoning capabilities and behaviors is necessary, and organisms that cannot do so are considered unconscious. It is also suggested that as the environment becomes more complex, organisms may need to develop more complex sensors to collect the necessary data for survival. Overall, this paper emphasizes that physical and conscious evolution are influenced by the evolution of the environment.

This paper also discusses the emergence of diversity in life and consciousness. It explains how as the environment becomes more complex, diversity emerges among living organisms, leading to variations in reasoning and behaviors that are essential for survival. This diversity also gives rise to conscious and physical variations among organisms. This essay also highlights the emergence of cooperation among cellular organisms as a result of the complexities introduced within their biologically-patterned environment. As the rudimentary biologically-patterned environment continues to evolve, more and more organisms recognize the patterns for cooperation necessary for survival, leading to the formation of various complex organisms and species. This essay emphasizes the importance of the environment being equal to or more complex than the organism for its physical and conscious development. It concludes by stating that rudimentary biological patterns in the environment inspire the behaviors of living organisms to form complex societies necessary for survival.

This paper also discusses the emergence of free-thinking consciousness in living organisms. It explains that as the environment evolves and provides the basic needs of organisms to an excess degree, it frees the organism from immediate survival behaviors—thereby freeing the organism from being required to immediate recognize patterns necessary for its *immediate* survival. This creates a space between stimulus and response, allowing the organism to have the choice in how it thinks. The paper also explores the idea that consciousness in organisms is a pattern-recognition engine, developed through the guidance of biological patterns in the environment. It discusses how humans, as the most evolved organism, have gained the ability to think freely and have gained sovereignty over their environment. It also mentions how humans, like cellular organisms before them, have had to undergo conscious trials and evolve to their consciousness to understand the importance of cooperation.

This paper discusses the concept of the “human pattern recognition engine” and its impact on human behavior and freedom. It suggests that as societies developed, the environment provided for the basic needs of humans to such an extent that they no longer needed to immediately recognize and respond to patterns for survival. This created a "buffer" that allowed humans to think and behave beyond immediate survival instincts. However, it also emphasizes that humans are still connected to rudimentary biological patterns that underlie reality and influence their destiny. The text explains that the human pattern recognition engine is comprised of the mind, senses, and bodily parts, which allow humans to observe, store, process, and understand patterns in their environment—it allows for the efficacy in exploring patterns around them. It mentions the role of language and communication in conveying and recording patterns, leading to the development of diverse branches of knowledge and science. The paper suggests that each generation of humans contributes to uncovering and documenting patterns that contribute to understanding the universe and the interconnectedness of all things. However, it notes that humans may become consumed by new patterns they recognize and imagine, potentially never realizing these fundamental biological patterns that permeate all of creation.

This paper discusses how human society has built a cognitive framework around these superficial patterns it recognizes and imagines to be true. This framework, built on top of the biological framework of the universe, contributes to the disorders of society, especially those patterns within their imagined framework which do not overlay in harmony with healthy biological patterns which establish and sustain life of themselves, their society and their biologically-patterned environment. Humanity becomes consumed by superficial patterns and imaginations, ignoring the underlying biological correspondences necessary for life. Similar to Plato's Allegory of the Cave, humans are trapped in their own imaginations and fail to recognize the true biological nature of the universe. However, there is hope for humanity to recognize and understand these patterns by exploring the world around them and exploring and understanding the patterns pertaining to the physiological structures governing all living organisms. The purpose of conscious freedom is for humans to recognize and abide by these biological patterns, leading to a harmonious society and the continuation of life. The author believes that this iteration of humanity can make it to the next stage of consciousness and that it will be the most exciting stage in human history.

The paper discusses the potential future of humanity, highlighting four key aspects: post-scarcity society, ecological harmony, global peace and cooperation, and social equality and justice. It argues that understanding a biological framework for a mathematical universe is crucial in achieving these goals. By recognizing the interconnectedness of all living organisms and their environments, society can develop more sustainable practices, innovate in technology, promote conservation efforts, foster cultural exchange, and dismantle systems of oppression. This understanding will also contribute to technological advancements and humanity's transcendence, enabling interstellar exploration and colonization. The paper emphasizes the need for humanity to understand and behave relative to the same common framework for understanding reality in order to achieve these outcomes—this common framework, an “inherent-universal DNA” to built into the framework of the universe.

The paper discusses the goals that human society must achieve in order to address various concerns and establish a sustainable socioeconomic system. These goals include establishing a common frame of reference by acknowledging the underlying patterns of the universe and implementing a common order for society through the *perfect public offering process*. The paper emphasizes the importance of educating the general public about these initiatives to ensure the long-term survival of human society.

The paper finishes by providing examples of biological patterns in traditionally non-biological domains and provides mathematical equations and models in biology which are also used outside the field of biology. The paper shows how Dedre Gentner’s process for structurally mapping analogies can be applied in the process of understanding our reality relative to biological patterns. The paper also provides evidence that ancient religions and philosophies have originally tried to convey the ideas surrounding the patterns of biological universe and its connection to the patterns within the human physiology but was misinterpret, and; supports the biological framework for a mathematical universe with scientific support.

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