## Kabbalah: Revealing Pnimiyut and Chitzoniyut's Connection to Biology

Supporting the Biological Framework for a Mathematical Universe Hypothesis

#### Introduction:

The theory proposing a biological framework for a mathematical universe hypothesis posits that biological patterns define the fundamental nature of reality. These biological patterns are initially hidden from view, but can only be unveiled and understood through the knowledge of biology's patterns and structurally mapping correspondences from the biological domain to a target domain. This perspective aligns with the ideas establishing perennial wisdom, a concept that encompasses universal and timeless spiritual truths found across various traditions. By exploring the parallels between perennial wisdom's core ideas and the theory of a biological universe, we can assert that the mystical concepts of Pnimiyut and Chitzoniyut from Kabbalah may have been attempting to express the underlying principles surrounding a biological universe. In this essay, we will delve into the concepts of Pnimiyut and Chitzniyut and their potential connection to the biological nature of the universe.

#### Pnimiyut: Revealing the Inner [Biological] Essence of Reality

Pnimiyut (בְּנִימִיּוֹם): This term translates to "inner essence" or "internal dimension." In Jewish mysticism, Pnimiyut refers to the inner, spiritual essence or depth of reality. It represents the hidden, esoteric aspects of existence that are beyond the superficial or outward appearance. Pnimiyut is associated with the divine spark or soul within each individual, as well as with the deeper meanings and intentions behind outward actions and phenomena. It emphasizes the importance of self-awareness and connection to the divine. In the context of the biological universe theory, Pnimiyut aligns with the hidden biological patterns throughout the universe. These biological patterns represent the core essence of all systems, processes, and objects in the universe, just as the "divine spark" resides within each being. Moreover, the theory suggests that the models provided by the physiology of living organisms, such as the human body, can help reveal these hidden biological patterns which permeate all of creation in the universe. Thus, Pnimiyut resonates with the idea that there is an inner essence or biological pattern within reality waiting to be unveiled.

For example, one way to recognize and understand Pnimiyut is by looking at a coffee cup. By recognizing the biological patterns of a red blood cell within the coffee cup, we can understand that, just like a red blood cell, the purpose of the coffee cup is to carry and distribute its contents. Another example is music creation. By revealing and understanding the Pnimiyut in music creation, we can recognize and understand the biological patterns of protein creation. The music produced from instruments, which are inputted by fingers, corresponds to the proteins produced from ribosomes, which are inputted by RNA strands. The act of realizing these bio-functional correspondences to these traditionally non-biological domains is the process of revealing Pnimiyut.

In regards to Earth, recognizing and understanding the Pnimiyut involves recognizing the biological patterns in the various functional components of Earth's physiology. For instance, we can observe the melting and freezing of Antarctica and the Arctic Ocean currents to see the biological patterns (bio-functions) of a heart and circulatory system. Similarly, the wind carrying nutrients to the oceans and rainforests in the Sahara Desert and the Haboob correspond to the biological patterns of the digestive system. The trees and plants on Earth can be seen as representing the biological patterns of lungs, while the Earth's magnetosphere and atmosphere can be seen as representing the biological patterns of skin. Seeing these biological patterns in the Earth's geological and ecological processes is the act of revealing and understanding Pnimiyut in Earth.

When it comes to our universe, recognizing and understanding the Pnimiyut means recognizing the biological patterns that are hidden in the patterns of the universe. This can include seeing the biological patterns of the cytoskeleton in cells or the neurological networks in the brain mirrored in the galaxy clusters in our universe. Additionally, the forces surrounding microtubules and microfilaments in cellular mitosis can be seen in the forces surrounding black holes in our universe.

Revealing and understanding Pnimiyut in human society is recognizing and understanding the cellular economic order and properties that govern cellular interactions, and how these principles also apply to the socioeconomic order and properties of human society. Revealing and understanding Pnimiyut is innovating in the field of Biomimicry. Biomimicry is the process of uncovering Pnimiyut in the world around us, to make more efficient human innovation and to find sustainable solutions to human problems.

#### Chitzoniyut: Understanding the External Manifestations Which Hide Biology's Patterns

This term translates to "external dimension" or "outer shell." In contrast to Pnimiyut, Chitzoniyut refers to the external, physical, or superficial aspects of reality. It represents the outer manifestations, forms, and appearances that conceal the inner essence or spiritual truths. Chitzoniyut encompasses the material world, physical bodies, and observable phenomena. While these external aspects are necessary for existence and play a role in spiritual growth, they are considered secondary to the deeper, inner dimension represented by Pnimiyut. In the context of the biological universe theory, Chitzoniyut can be viewed as the external expressions of the hidden biological patterns—Chitzoniyut are the "shadows" of biology's patterns projected on Plato's Cave Wall and viewed and interpreted by humanity as anything but biological. Only those knowledgable of biology's patterns and the ability to structurally map correspondences from the biological domain to a target domain can see through the veil of Chitzoniyut to realize the Pnimiyut.

Chitzoniyut represents the multitude of alternative interpretations which the visible forms and phenomena in the universe may be understood, as opposed to seeing the true underlying biological pattern inherent of that particular thing. For example, the Chitzoniyut of a coffee cup is perceiving a coffee cup as coffee cup or in any manner which conceals its inherent biological pattern of a red blood cell. The inherent biological pattern in the coffee cup—or the inherent function of the coffee cup as it relates to biology's patterns, which are inherent to all of creation, are correspondent to the pattern of red blood cells. Red blood cells contain the patterns which define the nature of the coffee cup reveal the Pnimiyut of the coffee cup.

The Chizoniyut of the coffee cup is seeing a coffee cup as a coffee cup and not seeing the inherent biological function/purpose of a coffee cup which is associated to a red blood cell.

Likewise, the Chitzoniyut of music is perceiving and understanding music in any way that is not associated with the biological patterns that are inherent to music and its creation, such as those biological patterns associated with protein production from ribosomes. Music produced from instruments has the Pnimiyut of proteins produced from ribosomes. The input of the fingers code the instrument into producing the related music, just as the inputed RNA code the ribosome into producing the related proteins. Perhaps this is why music is so soothing to us, and uplifting, and power to the human condition, as music is analogous of creation's most important and fundamental processes. Perceiving the Chitzoniyut in any thing is an individual's non-biological perception of any thing in reality. While understanding the biological patterns corresponding to any thing in reality is unveiling and understanding a thing's Pnimiyut.

Additionally, the Chitzoniyut of Antarctica is perceiving Antarctica as a continent covered in ice or in any other superficial understanding, however not by understanding its true biological context, which is similar to that of a heart pumping blood through a circulatory system. Recognizing and understanding the biological patterns of a heart in the melting and freezing of Antarctica is revealing and understanding the Pnimiyut of Antarctica. Not being able to see these biological patterns inherent to Antarctica and interpreting Antarctica relative to its Chitzoniyut.

Finally, perceiving the Chitzoniyut of human society is perceiving society in any way which conceals its inherent biological accordance to that of cellular society. The Pnimiyut of Human society is the biological patterns which correspond to the order and properties of cellular society. Human society inherently behaves accordant to the order and properties of cellular society relative to the order and properties of cellular society relative to the order and properties of cellular society relative to the order and properties of cellular society relative to the order and properties of cellular society of cellular societies—specifically the cellular society which compose the human body, as it epitomizes a society of living organisms which organize itself relative to the principles and properties and order of Life. The society of cells comprising the human body represents the most sovereign society relative to its Chitzoniyut. Understanding human society in any other way is interpreting human society relative to its Chitzoniyut. Understanding the Chitzoniyut of society includes, but is not limited to understanding it in the context of money, business, work, economics, law, family, love, sports, religion, spirituality, nationalism, art/music, friends, travel, etc. However, understanding these terms relative to biology's patterns, reveals the Pnimiyut of these concepts of human society and allows one to see this deeper biological truth which permeates the nature of reality.

The Pnimiyut of human concepts such of governance, language, love, cooperation, duty, reason, order, war, economics, law, etc. can all be revealed and understood through understanding those concepts relative to the context of cellular societies. The reason why human society must interpret its human concepts relative to the context of cellular society, is because cellular society has already defined those concepts for us, as cellular society is the most sovereign order of society of living things which has organized itself relative to the order, principles and properties of Life—Life's Order being the most important and supreme, sovereign frame of reference which all living things must interpret reality from. Cellular society, through its evolution from the cellular wilderness to the complex cellular-economic

systems which comprise its society in the human body, have already defined these terms to perfection. We must look to their society for guidance in understanding the biological nature of our society.

To interpret reality in any other way other than the biological patterns (Pnimiyut) which establish and sustain life and which hinder and destroy life, is the act of understanding reality relative to Chitzoniyut (it is *not* eating from the "Tree of Life," but rather "eating from the tree of good and evil," or from the "tree of Israel and Palestine," or the "tree of Bob and Margret," or the "Tree of work and play", or the "tree of family," or the "tree of money," or the "tree of perversion"). By interpreting reality relative to the Chitzoniyut and *not* by its Pnimiyut, one runs the risk of operating out of harmony with the biological order and principles necessary for the success of life; One runs the risk of not being able to properly control our own destiny in order to ensure the life of Ourselves, our Family, our Community, and all Life and its potential.

The theory of a *biological framework for a mathematical universe* proposes a shift in focus from Chitzoniyut to Pnimiyut, from external manifestations which hide biology's patterns in the world around us to understanding the underlying biological patterns which reveal the biological truth pertaining to those things in reality, in order to enhance our comprehension of reality and to better organize ourselves and our community in reality—to be in harmony with the patterns of Life—to "eat from the Tree of Life."

## The Integration of Concepts:

The incorporation of Pnimiyut and Chitzoniyut within the framework of a biological universe hypothesis unveils intriguing parallels that suggest an alignment between mystical teachings and scientific understanding. Both concepts emphasize the presence of hidden essences and the relationship between internal and external aspects of existence. Pnimiyut, in our theory, represents the hidden biological patterns underlying all systems, processes, and objects, while Chitzoniyut corresponds to their external manifestations, such as interpreting biology's "shadows" projected on Plato's "Cave Wall." By recognizing these parallels, we can draw insights into the interconnectedness between spiritual truths and scientific observations.

#### Implications and Insights:

By suggesting that the concepts of Pnimiyut and Chitzoniyut may have been signifying the ideas of a biological universe theory, we bridge the gap between mystical wisdom and scientific exploration. This integration deepens our comprehension of the universal and timeless nature of these teachings. It provides a more comprehensive understanding of the interrelationship between biological patterns, spiritual realities, and the motifs found across various religious and philosophical traditions. Furthermore, considering these mystical concepts as expressions of a biological universe theory enables us to reevaluate ancient texts and religious teachings. It invites us to perceive them in a more scientific light, uncovering the underlying meaning they may have carried throughout history.

#### The Lost Scientific Context:

Perennial wisdom refers to a perspective in philosophy and spirituality that holds the belief that all religious traditions have a shared, underlying truth or origin. According to this viewpoint, the knowledge and teachings found in both esoteric and exoteric aspects of many religions around the world, such as Hinduism, Buddhism, Christianity, Judaism, Islam, The Chinese Tradition, Japanese Shinto, and tribal religions have evolved from a single metaphysical truth, or science. This can be observed with overlapping conceptual themes across religions, which our research suggests stems from the concepts surrounding a biological framework for the universe. Perennial wisdom recognizes the interconnectedness of different belief systems and seeks to uncover the essence that unifies them all. Our research provides evidence that many of these ancient religious, philosophical and historical ideas were actually expressing ideas pertaining to a biological framework to the universe. However, due to the general public's lack of understanding of knowledge pertaining to physics, biology, and cosmology, during those times, the scientific context surrounding a biological framework to the universe was misinterpreted and understood metaphorically or spiritually. Scientific context to a people unknowing of science became "spiritual" to a people and was passed down through history as such. Fortunately, the literal text was preserved, taught, and passed down through time. This inspired individuals to explore the innards of the human physiology through medicine. The process of exploring biology allowed the discovery and documentation of its patterns throughout history, until the time when human society could educate itself of the supporting sciences of physics, cosmology and the natural world which would allow the ideas of a biological universe to become reconnected with the original interpretations by observing these biological patterns in the world around us.

### Conclusion:

The exploration of perennial wisdom, specifically the concepts of Pnimiyut and Chitzoniyut within Kabbalah, offers intriguing insights into the theory of a biological framework for a mathematical universe. These concepts align with the foundational principles of the theory, highlighting the hidden biological patterns within reality and the external manifestations that veil them. By recognizing the potential connection between mystical teachings and scientific understanding, we expand our comprehension of the interconnectedness of all things. This integration of ancient wisdom and modern scientific theory contributes to a deeper understanding of the biological nature of the universe and its implications for our perception of reality.



# The Biological Framework for a Mathematical Universe Hypothesis

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The mathematical universe hypothesis is a theory that the physical universe is not merely described by mathematics, but is mathematics, specifically a mathematical structure. Our research provides scientific and historical evidence that this mathematical structure of the universe is biological in nature, and; all things within the universe contain biological patterns which can be revealed and understood through mapping correspondences to the physiological patterns of living organisms. Living organisms are a result of this biological universe and culminate the universe's biological patterns. Our paper illustrates the relationship between biology's patterns and the nature of the universe by exploring various analogies—structurally mapping a red blood cell to a coffee cup; proteins produced from ribosomes to music produced from instruments; a beating heart to the melting and freezing of Antartica; the order and properties of cellular society to the order and properties of human society and; phenomena in cellular mitosis to phenomena in the universe, such as black holes, dark matter, dark energy, and the structure of the universe. Expanding on the notion of perennial wisdom, our research presents evidence that the concept of a biological universe was conveyed in ancient religious and philosophical text. However, it was mistakenly misinterpreted by the general population as they did not have an understanding of biology, physics, and the cosmos. As a result of this misinterpretation, metaphorical and spiritual understandings overshadowed the original scientific context of the biological universe's connection to its patterns in the human body. The implications of this theory are immense as it offers a holistic understanding of the interconnectedness between physics, science, religion, philosophy, law, economics, politics, and engineering; It serves as a comprehensive and unifying theory for all areas of knowledge. This theory is supported by meta-analyses of scientific, historical, and religious literature, as well as observations and first principles logic.

To read the full paper, please visit: BiologicalUniverse.org