

Why Does the Physical Body Die?

Ayao Zanou*

Department of Medical Sciences, University of Washington, Seattle, United States

Corresponding Author*

Ayao Zanou
Department of Medical Sciences,
University of Washington,
Seattle, United States,
Tel: 5133710981
E-mail: ayaozanou@yahoo.com

Copyright: © 2022 Zanou A. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: June 13, 2022, Manuscript No. JBTW-22-66557;
Editor assigned: June 15, 2022, PreQC No. JBTW-22-66557 (PQ);
Reviewed: June 29, 2022, QC No. JBTW-22-66557; **Revised:** September 28, 2022, Manuscript No. CEP-22-63738 (R);
Published: October 05, 2022, DOI: 10.4172/2322-3308.11.6.001

Abstract

This article deals with quantum biology and elucidates the mystery of death. Science does not study why living organisms die but instead how they die. We define Information and show how the functional information system behind the manifestation of life could be degraded by internal chaos in the body. Finally, we expose the two fundamental ways living organisms die.

Keywords: Functional information system • Darwinian evolution • Synthesis and degradation • Life and existence • Loss of consciousness • Quantum biology • Mitochondria • Entropy

Introduction

As surprising as that could sound, science does not know why the physical body of living organisms dies. The simple questions are the most challenging to answer in science. Scientists understand how living beings lose consciousness permanently, what we commonly call death, but they don't grasp why this phenomenon occurs. It is so because consciousness is still a considerable debate, and science struggles to define life. Moreover, science cannot dissociate the body from the energy that pilots it; we treat the physical body and its vital energy as one unique entity [1-3].

The testimony of the neurosurgeon Eben Alexander let us believe that the vital energy and the body are not a single entity. The scientific investigations of the psychiatrists Raymond Moody and Jim B. Tucker corroborate the neurosurgeon's experience. The body and its vital energy are similar to an object and its subject. It is like a boat and a pilot; science struggles to understand the pilot.

To Nasa Scientists, life is a self-sustaining chemical system capable of Darwinian evolution. This definition is still vague because the Darwinian evolution got into a precarious state since Francis Crick and James Watson unraveled the mystery of the DNA molecules. The discovery of the structure of the molecules that explains how hereditary Information encodes DNA replication changes the situation. The information bearing properties in our cells upend scientific materialism; there is no functional information capability system without an intelligent agent behind.

Nasa's definition is problematic because Darwinian evolution is supposed to be random. Today, we know the Information that encodes life on earth is not random. For

instance, the four types of nucleotide bases found in the DNA molecule don't arrange anyhow; they pair with each other following some specific order. Adenine always pairs with thymine, and cytosine pairs with guanine; there is no way around it. This phenomenon already excludes chance and randomness. Moreover, the Darwinian mechanism cannot explain the origin of the genetic information found in the cells. And Nasa's definition excludes consciousness; meanwhile, consciousness is fundamental [5,6].

Literature Review

By observing nature carefully, we have come to define life in this material world as any dissipative system with consciousness, capable of self-organization within a boundary fence, possessing the following characteristics: Metabolism, homeostasis, reproduction, response to stimuli, and adaptation; the list is not exhaustive. Living organisms are conscious in this sense that they can alter their behavior in front of a new situation; they can compute new parameters and adapt to changes. Consciousness comes first.

Nobody can understand death without grasping the concept of life. To explain life, we need to comprehend consciousness. To elucidate the mystery of consciousness, one must necessarily peep into the immaterial realm. And finally, to have a glimpse of the immaterial realm, we must understand what information is. The information behind the manifestation of life on earth must come from somewhere. Darwin's research never answers this question, thereby casting doubt on Nasa's definition of life. The British naturalist had always prayed that future scientific discoveries support his theory, but sadly, Crick and Watson destroyed his hope [7-11].

This paper will elucidate the mystery of death, but first, we will differentiate the immaterial realm from the material world to expose the relationship between life and existence. We will define Information and glance at consciousness. Finally, we will explain death and discuss the two fundamental ways all living organisms die on earth.

The immaterial realm and the material world

The immaterial realm is an unknown realm that escapes physicists. Science does not know what it is, but scientists have an idea about it. Most physicists label it "nothingness." John Archibald Wheeler called it "insubstantial nothingness," while the British Nobel laureate Paul Dirac would say the realm of anti-matter since he distinguished a demarcation line that set the frontier of matter and called it the nodal singularity. Sir Penrose would call it the realm of the immortal observer, while Plato labeled it the realm of forms or ideas. Religious people know it as the spiritual realm to distinguish it from the physical world [12].

Discussion

The recent development in physics allows us to believe the insubstantial nothingness moved from a ground state to an excited state and degenerated because of the breaking of symmetry. It exploded or inflated, giving birth to the material universe as the Higgs field appeared to provide immaterial particles with mass. So, the immaterial realm begets the material world.

The immaterial world is difficult to prove; we notice its manifestation only. According to science, the manifestation occurred in two phases: Material and living existence. Material existence appeared first; it happened 13.8 billion years ago, followed by living existence, which occurred 3.8 billion years ago.

The immaterial realm is the realm of insubstantial nothingness; it has neither space nor time; meanwhile, the material universe has present, past, and future. This means the moment the sapiens made the cognitive revolution and the time the creation was a

single cell in the primordial soup are unique sequences in the algorithm. Life is similar to a shipbuilder who has everything set up in his computer before building his ship. While he can visualize parts of the vessel in his computer, the eventual construction takes time and unfolds in space time.

According to Karl Popper, we cannot prove a theory is correct, but we can disprove it. If the immaterial realm does not exist, matter will be fundamental; hence energy is equal to mass. Unfortunately, energy is not equal to mass because Einstein's formula said $E=MC^2$, meaning mass is energy conversion. The manifestation of energy is mass, and light is not material.

Moreover, if energy is the same as mass, living organism's bodies would live forever because the law says energy can neither be created nor destroyed. This definition of energy escapes the material world because the material universe is transient; it has a beginning, and it will end. Therefore, energy cannot originate from the universe. If energy (life) is eternal and matter (body) is temporal, where does the energy go when the body dies?

Life and existence

Life emanates from the immaterial realm. We still don't know what it is, but we know how it manifests. In the same way physicists don't know what energy is but study its manifestations, life and existence are similar to energy and matter. The first law of thermodynamics says energy can neither be created nor destroyed; it can only be transformed from one form to another. Life is eternal, but its manifestation is finite.

The manifestation of life is called existence and its arches over birth or binary fission and death. According to science, life sprouted on earth 3.8 billion years ago and evolved from a single cell to today's complex biodiversity. Since the purpose of life is multiplication and growth, consciousness must be behind it. As we will see later, consciousness is a concatenation of Information and order. Science teaches us that all living organisms have information in their cells that encodes life.

According to the Japanese Nobel laureate, life is maintained by a tightly controlled balance between synthesis and degradation. Like Erwin Schrodinger saw life as a struggle against entropy and identified entropy positive and entropy negative as an entangled system, the work of Ohsumi exposed a similar entangled system as synthesis/degradation. To stay alive, the organism must eat, drink, and breathe to counteract the effect of entropy positive, as stated by Schrodinger.

Therefore, two fundamental elements characterize life on earth: the entangled system synthesis/degradation and a boundary fence. The individual's life is hinged on these two elements we broadly study in our paper "In Search of Aliens".

Existence and life are comparable to a tree and its root. While the tree is visible to us, the root is not; however, we know the root begets the tree. What is underground cannot be seen, therefore, indescribable. We can study the tree and manipulate it as we please. Hence the study of existence falls into the domain of science.

What is information?

Information is a set of codes or data arranged in an understandable order to serve a meaning or a purpose. The information that encodes life on earth has a meaning and a purpose. The purpose is multiplication and growth; the meaning is love. Notice that purpose always connotes a goal while meaning is the means to reach that goal. Purpose accomplishes while meaning intends. Thus, the Information all living organisms carry in their DNA causes them to multiply and grow. To reach that goal, they fall in love, copulate, and reproduce. The German philosopher Arthur Schopenhauer said the will to life inveigles us to make babies. However, not all living organisms need a partner; unicellular organisms divide when the environment is favorable. Some multicellular beings reproduce through parthenogenesis. In all cases, the purpose of life is clear and neat: life tends to multiply and grow; only the meaning varies.

Information always denotes an author because the codes are arranged in a specific order to make sense. Data that compose information behind the manifestation of life are not random. Adenine cannot link with cytosine; it always connects with

thymine, and guanine hooks with cytosine. For that cause, the codes that make human information are not set randomly. These four nucleotide bases function like alphabetic characters to encode protein synthesis in the cells. For instance, during the development of the fetus, the functional code that changes the proto-genital cells to female sex anatomy is not the same as the one that produces male sex anatomy. Sex differentiation is not a random process. If it were, why do babies come out males or females? The probability of giving birth to a baby boy or girl is fifty-fifty with slight discrepancies, known as intersex. A predictable event cannot be random.

There are various types of Information. Some categories of information are random, while some are not. For instance, a meteorologist collects random "information" in the clouds to make predictions, but the information we deal with in consciousness is not accidental data. These sets of data encode the existence of living organisms; the Information behind life on planet earth is called functional Information. The energy behind the manifestation of life is a conscious agent made of a concatenation of information and order. The projection of that consciousness into the physical body is confronted with entropy. Therefore, information props order while disorder impedes the process; both order and disorder from an entangled system, which balance maintains life in the body.

Contrary to popular belief and the teaching of Darwinians, random mutation amends our genetic material, but they are wrong; random mutation, on the contrary, degrades our genome; that's why we die. If the Information that governs natural phenomena is not accidental, why do Darwinians want the Information behind living organisms to be random? Planets in the solar system obey specific laws. Is the gravitational law random? Why do we expect natural selection to be undirected? As Murray Eden expressed himself during the 1966 Wistar Symposium, I quote:

"No currently existing formal language can tolerate random change in the symbol sequences, which express its sentences. Meaning is almost invariably destroyed."

The body dies because synthesis can no longer cope with degradation in the body. As we age, the loss of information and error during DNA replication increase, causing faulty gene expressions and inefficient protein synthesis. The same functional Information regulates the activities of mitochondria, and it is taught these organelles produce ATP through aerobic respiration. Oxygen is still in the newborn's body after the accouchement, yet the baby is unconscious until he takes the first breath. A group of Italian biologists published a paper showing anaerobic respiration could supplement deficiencies in the energy supply in the short term. Do newborns need to take the first breath before mitochondria supply energy to organs of the body? Notice that the powerhouses were operational while the infant was still in the womb. Mitochondria were abundantly present in the oocyte cytoplasm before fertilization and remained functional throughout gestation. Why do they stop working just after delivery?

Even if we admit life is all about synthetic organic chemistry as the origin of life researchers purport, these mitochondria will not be functional without information. Information appears to be the primary element scientists have long neglected in biology. Without information, life as we know it is impossible, and we have to ask if life itself is not information. Our investigation finds that consciousness, the generator of life, is nothing more than the concatenation of Information and Order.

What is death?

Death is a permanent loss of consciousness. It occurs when the entangled system synthesis/degradation loses balance in significant organs of the body, especially the brain and the cardiovascular system. The online dictionary defines death as the inevitable, permanent, irreversible cessation of all biological functions that sustain an organism. We define death as the loss of information that maintains the balance between synthesis and degradation within a boundary fence.

To grasp death, we must study sleep. As we can notice, sleep, syncope, and death are kin. While sleep and syncope are transient losses of consciousness, death is a permanent loss. Sleep and

syncope are protection mechanisms; they shut the body systems down to avoid irreversible damage, leading to a permanent loss of consciousness.

Chaos in the body systems has a threshold. As we can define it, a threshold in science is a minimum value or the lowest point a stimulus receives a response. Entropy in the body fluctuates between the minimum and maximum values, where the entangled system of synthesis and degradation could maintain its balance. Entropy is low in the morning after a restful night and increases throughout the day to reach a higher value at the end of the day; hence we drop off.

If we identify the function of entropy as S , the formula provided by Ludwig Boltzmann is: $S = K \log(D)$; where K =Boltzmann's constant, \log =Logarithm and D =Disorder.

This function is defined within a specific domain, which we label $\min(S)$; $\max(S)$. Death occurs when the entropy steps out of its domain of definition; it can be below $\min(S)$ or above $\max(S)$. The human body is equipped with a mechanism to prevent such occurrence; therefore, the mind shuts the body systems down whenever the value of entropy is approaching the limit of minimum or maximum values.

For instance, when the individual receives an uppercut or a blow on his head, S will suddenly surge in the body that the mind will shut it down to avoid irreversible damage to the body systems. That mechanism of protection is known as syncope or fainting. During sexual intercourse, when the individual reaches orgasm, a cocktail of happy hormone will flush the body, causing the entropy-hormone to withdraw from the system. As the value of S drops, sleep will follow if the individual makes room for it.

This mechanism of protection is similar to an electric fuse. The role of a fuse in an electric circuit is to protect the wire systems and the appliance. Sleep and syncope have the same functions: They prevent irreversible damage of the body systems that could lead to death. When the body systems shut down, the mind can proceed to the restoration. The mind refurbishes the system and reboots it; this phenomenon occurs to humans every night.

The job of the mind is to maintain the entropy of the body within its domain of definition. For that cause, the mind continually monitors the entangled system synthesis/degradation. Since life is mostly characterized by the entangled system and the boundary fence, the mind maintains the system's equilibrium within the boundary fence. Whenever the fence is breached, the system is threatened. For instance, a cut in the skin causes a hemorrhage, destabilizing homeostasis and leading to death if left untreated. The individual will never die as long as the entangled system is maintained and the boundary fence preserved. Unfortunately, as we age, entropy increases in the body; the mind struggles to cope with degradation, which becomes overwhelming, and the body systems cave in. We die at old age because the body systems cannot cope with degradation.

The body dies in two fundamental ways: Sudden loss of synchronicity and gradual loss of synchronicity. All traumatic events that involve a drastic surge of entropy past the maximum value of S will lead to an instantaneous dissolution of the body systems. Gunshots, car accidents, high falls, allergic reactions are examples of a sudden loss of synchronicity. Plants mostly die in this way, when humans hew or uproot them. There is one particular case medical doctor's label "sudden infant death syndrome"; the cause of death is generally unknown. Sometimes, the malaise leading to the demise might be progressive, but since the infant cannot voice his concern, the mother cannot seek medical attention but only considers the tragedy. Thus, sudden infant death syndrome can result from a sudden or progressive loss of synchronicity.

With a gradual loss of synchronicity, the mind manages the entangled system as best as it can, but at the end, degradation prevails over synthesis, and the system disentangles. Gradual loss of synchronicity includes aging and illnesses and is the most common way humans die.

We die because synthesis can no longer keep up with degradation in the body, whether in the short term or the long run. All things considered, death in humans (also mammals) always passes through the cardiovascular system; the pump must first be disrupted and fail for death to occur. When it

happens, two conditions show up: hypotension and hypertension. These two conditions perfuse the brain poorly, causing homeostasis to falter.

While hearts and brains are important factors to be considered to pronounce death in humans, several species don't rely on the cardiovascular system. In general, death (also sleep) has less to do with the heart and the brain. It depends solely on the entangled system synthesis/degradation and the boundary fence, the two elements that characterize life on earth. If death (also sleep) had to rely on the brain and heart, some brainless and heartless sea creatures would live forever. While brainless organisms' sleep is still debated, it is evident that all living creatures die, and some expirations pass through the breach of the boundary fence, which ultimately causes the entangled system synthesis/degradation to disentangle.

When death is finally pronounced in humans, the entangled system synthesis/degradation has already lost balance in the cardiovascular system. The heart stops beating, the brain shuts down in the following minutes, and the blood begins to pool at the back as the individual lies supine. In other words, the spirit has left the body, the mind collapses, and the soul vanishes. Consciousness extends past death.

Conclusion

Death is a permanent loss of consciousness; it occurs when synthesis and degradation lose balance in the body systems. The body stays alive because protein synthesis efficiently compensates daily for cell degradation. Functional Information is needed to produce all the body systems' proteins to maintain consciousness. The origin of these data sets that keep cells machinery running is still an enigma for scientists. Information is fundamental; it is ubiquitous. Both material and living existence unfold based on information. Scientists remained stalwart supporters of materialism until Francis Crick and James Watson unraveled the mystery of DNA. Since that day, there has been a paradigm shift.

However, science still does not know why we die; in lieu, it studies how we die. Telomeres shortening do not explain why people die in car accidents. As long as scientists continue neglecting functional information behind natural phenomena to treat energy and matter, life and existence, subject and object as the same entity, the understanding of death will slip through their hands. The expression of energy is matter because it takes energy to move matter. The manifestation of life is existence, which always spreads between birth and death. Something drives the physical body, and when that energy departs, the body dies. Through the information stored in the DNA, the subject makes the object alive.

Death is an invitation nobody can decline. Each living organism on earth will receive this call sooner or later, and it will come in two different ways. Without considering the sudden loss of synchronicity, we can delay the call by maintaining a tightly controlled balance between synthesis and degradation. As long as synthesis in the body systems can cope with degradation, we are good to see another sunrise.

The body dies because the entangled system that maintains the vital energy disentangles. Life is much more than the synthetic organic chemistry the materialist scientists have been shoveling in our throats. If life is solely based on the activities of the mitochondria, why do babies die when they fail to pick up the first breath? Are mitochondria inside the first breath? Do they vanish in the body after death is pronounced? Babies were alive in the womb with functioning mitochondria; if life is solely about chemistry, why do those who fail to breathe never live on mitochondria energy? Here are some fundamental questions we must ask to broaden the horizon of our vision.

References

- Alexander, E. "Proof of Heaven: A Neurosurgeon's Journey into the Afterlife". *Simon and Schuster*. (2012).
- Al-Khalili, J. "How Quantum Biology Might Explain Life's Biggest Questions". (2015).
- Al Khalili, J. & Lilliu, S. "Quantum Biology". *Nature Physics*. 9 (2020):10-18.

4. Axe, D. "Estimating the Prevalence of Protein Sequences Adopting Functional Enzyme Folds." *J Mol Biol.* 341.5 (2004):1295-315.
5. Axe, D. "The Case against a Darwinian Origin of Protein Folds". *Bio-Complexity.* (2010).
6. Benner, S. "Defining Life". *Orig Life Evol Biosph.* 32.4 (2010):387-393.
7. Goldenberg, J.L., et al. Dying to be thin: The effects of mortality salience and body mass index on restricted eating among women. *Pers Soc Psychol Bull.* 31.10 (2005):1400-1412.
8. Zavalov PO. Physical oceanography of the dying Aral Sea. *Springer Sci Rev.* 2007.
9. Beunen, G., et al. Chronological and biological age as related to physical fitness in boys 12 to 19 years. *Ann Hum Biol.* 8.4 (1981):321-331.
10. Chen, E.M. Is There a Doctrine of Physical Immortality in the Tao Te Ching?. *History of Religions.* 12.3 (1973):231-249.
11. Hilário, A.P. Making sense of a changed physical body: Why gender matters at end of life. *J Aging Stud.* 33 (2015):58-66.
12. Dies, R.R., & Greenberg, B. Effects of physical contact in an encounter group context. *J Consult Clin Psychol.* 44.3 (1976):400.