

Essay

Not peer-reviewed version

Applied Theory of Relativity into Human and Animal Biology and Psychology?

[Theodor-Nicolae Carp](#)*

Posted Date: 10 July 2024

doi: 10.20944/preprints202405.1192.v3

Keywords: human biology; animal biology; psychology; "fight-or-flight" effect; relativity; molecular clock; circadian rhythm; aging; time; space; philosophy; religion



Preprints.org is a free multidiscipline platform providing preprint service that is dedicated to making early versions of research outputs permanently available and citable. Preprints posted at Preprints.org appear in Web of Science, Crossref, Google Scholar, Scilit, Europe PMC.

Copyright: This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Essay

Applied Theory of Relativity into Human and Animal Biology and Psychology?

Carp Theodor-Nicolae

Independent Researcher; theodore.nicholas100@gmail.com

Abstract: It is often said in human society that it all starts from the mind, and this is true. The answer to the question “Why is it that pets require much fewer years to fully develop than humans?” could be headed to the Theory of Relativity and the perceived time according to the levels of instinct and rationality. It is perhaps no wonder that the French language translates the word “mind” as “l'esprit”, which also means “spirit” in the English language. Given that the Theory of Relativity applies to all physical matter, the theory applies to chemistry, biology and psychology as well. The level of instinct is proportional with the perceived speed of time and implicitly, to the speed of time itself for the whole organism, given that the nervous system coordinates all bodily functions. A pet may experience a few years as humans experience over a decade, making their perceived lifetime to be approximately equal to the human's. The same applies to the perception of space and its components. This aspect would emphasise upon the fact that all life on Earth shows the same degree of value with regards to uniqueness. Nevertheless, the values represented by the hierarchy of competences among living organisms at the same time differs based on species. Honour of uniqueness and hierarchy of competences represent two scientific concepts that never overcross. As a result, there is no evidence to suggest that scientific facts as such constitute a form of contradiction to philosophical and religious ideas, given that religion refers to animals as companions of humans. With regards to the clock of the living organism; there are three kinds of clocks in a living organism: the emotional clock, the cognitive clock and the molecular clock. These three categories actually constitute the temporal layers of our dimension, so they are in a relationship of interdependence. When one has a feeling that time is slower or quicker, they are not fully experiencing that change in the time speed, but only partially. And one can profoundly experience the change of perceived time speed when they experience profound feelings, which sweep them away from reality. Complete, deep mental focus can bring about this profound change in perception, which will make the individual feel as if they are in a different form of reality. When one is more instinctive, the person in cause perceives time as slower and sees more opportunities within the same frame of time and space. When one experiences the “Fight or flight” mode, the person in the cause finds themselves to be in danger and has two options; to try to prevail over the danger or to flee it. Whilst experiencing such a mode, people are much more alert and therefore, time passes more slowly and the physical space dilates. When people are relaxed, however, time and space become smaller, and when they are in a deep state of resting, they become very small. And where there is a smaller dimension, there is a greater speed, just as the circulating air gains speed when it crosses narrow passages.

Keywords: human biology; animal biology; psychology; “fight-or-flight” effect; relativity; molecular clock; circadian rhythm; aging; time; space; philosophy; religion

Content

All living organisms are made of cells, which represent the basic unit of all life on Earth. Philosophically speaking, the existence of animals has the purpose of human companionship, and not of abusive inferiority. Classes and species exist not for the purpose of subordination of life forms according to their category, but for the purpose of hierarchy and competence. Uniqueness and honor

does not eliminate the need for the emphasis upon hierarchy in the biological realm. The most fundamental coincidences that humans and animals share at the cellular level - namely, that both contain DNA chromosomes, ribosomes, mitochondria and a plasma membrane - may only emphasize such a fact (Carp T. et al., 2024). This detail places an ultimate emphasis upon the fact that all life forms have a Universally uniform value, and there is no evidence to imply that all domains of life have the same level of philosophical and functional hierarchy as a result of this. A possible application of the Theory of Relativity into the perceived length of life, possibly in all living organisms, also emphasizes upon the fact that life is a unique gift in the entire Universe and that there is no inferiority of its value, no matter if life is shared by the animal or the plant species, for example. Namely, there may be evidence to suggest that the perception of lifespan is relatively the same in all living organisms, as animals generally perceive time to be substantially slower than in humans. The same may apply to plants and animals respectively, if there were evidence to suggest that plants exhibit an extent of intelligence that is observed in animal species. This relativity of timespan perception among all living species may only place a firm emphasis upon the fact that all living organisms share an equal honorary level. Simultaneously, the concept of hierarchy does exist and apply into the biological sphere and there is significant evidence to suggest that humans are at the top of the hierarchy of life on Earth (Carp T., 2024).

There ought to be a differentiation between the concept of hierarchy and the one of honor; else, the fallacy of relativism and of misleading ideologies, such as anarchy, may sadly be reached as a result of misinformation, which has a highly "infectious" nature in human society. It is neither true that there is complete equality between all living organisms, nor is it true that humans are superior in honor to animals and plants and that any non-human living species ought to show a degree of slavery in their relationship with humans. Hierarchy stands for true leadership, that does not violate the laws of science and Universal free-will, that is approved by all participating members with life. Honor stands for unconditional respect and support for the gift of life in the Universe; it supports equality for all members with unique life in them. In truth, hierarchy and honor live in a perfectly harmonious relationship with one another, and the fundamentals of molecular biology ultimately demonstrate statements as such. An important sign that the above arguments display a significant degree of relevance to the existing biological phenomena is the fact that the molecular clock and the circadian rhythm in animals generally differs significantly from the ones of humans. Namely, the perceived duration of daytime in animals is longer than the perceived duration of daytime in humans, given the fact that animals eat and rest more frequently per day than humans. This aspect automatically indicates that animals perceive their physically shorter lifespan (i.e., 10-15 years) as much longer than humans would perceive the physical number of years that such organisms would perceptually experience. Likewise, perception of time may represent the main bridge between the Theory of Relativity in Physics and Biology, via Psychology. One example of demonstration that physics represents the foundational layer of the science of life could be represented by the potential fact that certain planetary and stellar alignments in relation to the Earth may play a major roles of stimulation or inhibition respectively, behind significant changes in environmental and even geophysical changes, as well as in human health, psychology and social behaviour, given that significant planetary and stellar alignments result in significant changes with regards to the gravitational and electromagnetic influences toward the Earth (Ranguelov B., 2024). Recent preliminary scientific research has indicated a possible statistical link between such astronomic events and increased possibility of earthquakes in geographical areas where newer or older faults have existed in the crust underneath. It was observed that Eastern Orthodox Christian religious belief is associated with phenomena recorded in the astronomical plane, which suggests that astrophysics represents the foundation of all material science surrounding mankind and other life forms on Earth (Nikolaidēs, E., 2011). Additionally, it was indicated that the entire evolutionary process of life on Earth was heavily dependent upon astronomical events (Antonello E., 2013). In short, substantial changes that are of astrophysical nature may sooner or later result in an unprecedented disruption of all or much of life on Earth.

It has been suggested that intelligence breaks the barrier of time, and the more intelligent one is, the more quickly their perceived speed of time is, and the greater their speed of time is indeed. Nonetheless, an aspect as such does not imply that non-human living organisms die more quickly, but that their physical life is longer as well. Intelligence prolongs physical life, but it is wisdom that also prolongs the perceived length of life. As a result, it may also be that the degree of intelligence is proportional with the perceived speed of time. Adaptation to a higher complexity of knowledge and tasks leads to an increased perceived speed of time through the bridge of automation. It is perhaps through adaptation to such changes that people become more accustomed to more complex matters of reality resulting from increased levels of intelligence and knowledge, given that an increased perceived speed of time is generally associated with the decrease of the felt intensity of negative feelings of fear and agony. In short, the perception of an increased speed of time may in turn attenuate feelings of suffering resulting from various types of changes in human society and her surrounding environment. Furthermore, wisdom represents the bridge that connects intelligence with love. But, as we know that real intelligence consists of wisdom as a main element, one may say that it prolongs both physical life and the perceived duration of the physical life. Additionally, it was suggested that there are several existing epigenetic factors that influence the development of intelligence in all life forms, meaning that specific environmental factors and conditions may favor or limit intelligence (Carp T., 2024). As a result, there may be a substantial implication upon quantum physics-bound phenomena and micro-phenomena, given that the Theory of Relativity seems to have substantial applications into biology, via human and animal psychology. Overall, the applications of the Theory of Relativity into psychology is much more complex than we think, but nevertheless, it is a set of puzzles that deserves to be assembled. In addition to the previous argument; whilst it is currently well-known that Albert Einstein came up with the Theory of Relativity, it is possible that he was not the first to discover signs of the relativity of time. A few decades before Albert Einstein proved the validity of the Theory of Relativity, Mihai Eminescu, a Romanian poet, published a composition called "The Evening Star", in which he suggested time had different manners of running in the same physical realm.

"The Evening Star set in motion. Her wings were growing
In the heavens,
And paths of millennia were crossing
In the same moments as such.
A heaven of stars is underneath;
Above her, there is a heaven of stars -
A continuous lightning seemingly was flashing
Wandering through them."

There is another written composition published by the poet, called "Poor Dionis", that contains a passage with a suggestion that time is relative:

"It is known that in such a moment we must separate forever; as, in desired spaces, the day will be as a century, and when you will return, you will not find Ruben anymore, but another man, analogous with me, but whom you will find more easily."

Interestingly, human intuition seems to commonly precede great scientific discoveries, given that it is always instinct and "gut-feeling" that pushes scientists to perform specific investigations into less known topics. This aspect also indicates that philosophy plays a rather major driving role in scientific research, despite its evident autonomy in Academia and also in the clinical arenas. Nevertheless, as the word implies, autonomy does not mean complete separation, but rather an individual role that is bound by the free will-related laws and phenomena of the Universe. The differentiation between the meaning of "autonomy" and the one of "independence" may have been as greatly confused as the differentiation between the meaning of "correlation" with the one of "causation". Although it is Albert Einstein who performed the scientific discovery of the Theory of Relativity, philosophical credit ought to be given also to the writers and poets who suggested in their literature that there is such a concept as Relativity within the spatial-temporal dimension of the Universe. And finally, the evident existence of Relativity in the Universe, alongside the recent

discovery that the Universe is de-facto not real in location, which is possibly a partial result of the initial discovery of Relativity, may suggest that realms outside of the Universe might exist, therefore giving room to religious belief after all. Analogously, time and space are real and not simultaneously, given that time, space and location are the three interdependent elements of physical reality. Interestingly enough, time is truly an illusion, as Albert Einstein stated and, simultaneously, it is not an illusion, as the very elements that time include do bring and also influence outcomes that are both physical and philosophical in nature. This analogy may show that the events occurring in the real world have an evidential effect in the philosophical arenas, whilst the philosophical concepts and guidelines remain unchanged over the millennia.

Furthermore, it seems that the perception of time speed in humans and, analogously, in animals, differs based upon the state of health. Given that negative feelings of agony are widely associated with disease, people and animals experiencing diverse forms of illness tend to experience time as slower, as long as their psychological state is drawn toward the state of illness. If the psychological state of the ill individual is rather not in accordance with the suffering of the body, then the perception of time speed will generally not be significantly altered toward the slower end. According to Eastern Orthodox Christian Philosophy, Heaven and Hell represent two infinite ends of the perception of time speed. Namely, Heaven seems to be located above the infinite cap of the speedy perception of time, which is associated with absolute joy, whilst Hell seems to be located underneath the infinite bottom of the lengthy perception of time, which is associated with absolute suffering. Given this point of observation, the rationale behind everlasting joy or everlasting pain that are unaccompanied by boredom and exhaustion respectively, may be understood more easily by the physical mind. It may be interesting to note that agony and joy represent two lines of emotion that seem to cross beyond the level of physical consciousness, given that, when a person faints for a few minutes as a result of agony, they would feel the physical duration of a few minutes as hours, and simultaneously, if a person enters a state of coma and their organism enter a state of general recovery, they would perceive the weeks or months of coma as days or in a few remote cases even hours, given the fact that people in a state of recovery are more capable of experiencing states of relaxation and joy. Such perceptions demonstrate that states of the human soul may exist, according to principles written in religious and material domains of philosophy. The Theory of Relativity may represent a whole or a principal segment of the bridge between the seen and the unseen world, the finite and the infinite. The barrier of infinity is located between the physical and the metaphysical worlds. As a result, the validity of the Theory of Relativity may actually support scientists in finding evident arguments for the existence of God.

Given the data above, it is possible that the primary, short-term factors influencing the perception of time speed are the emotions implicating joy and suffering, whilst the secondary, long-term factors as such are states of mind implicating intelligence and wisdom. Emotional states calibrate the states of mind, and as a result, they ultimately present the highest level of influence upon the extent of increase of perceived human lifespan. Potential modern-day problems of human society involve a disproportionate relationship between an increase of intelligence and an increase of wisdom. Whilst the first has been recorded to be sharp in nature, the second has been recorded to barely exist at all, exposing a potential overemphasis upon automation. Furthermore, an increased level of human disease, as well as disproportionate evolutionary relationships between human immunity and microbial agents and the existing process of technological dominance over human psychology and emotional intelligence, have caused a physical and psychological decrease of the average human lifespan. Increased levels of human disease have involved elevated demands for metabolic energy consumption, which is associated with increased rates of reactive oxygen species synthesis and a faster process of human aging. Psychologically speaking, a gradual separation of humans from their natural origins and even from each other, resulting from such an overemphasis upon automation and technological catalysis of an increasing number of important human tasks, has led to a further decrease of the human lifespan at the level of psychological and emotional perception. It could be that the end of such a subtle process of human robotisation will involve a perceived human lifespan that does not exceed a few decades, with the levels of academic intelligence, emotional

intelligence and wisdom becoming extremely disproportionate. In other words, human life would seem to pass as quickly as a high-speed train crossing a station and ultimately even completely “sucked out” of each individual member of urban society. The temporal distance between young and elderly years of human age could seem to be equivalent to the physical distance performed by underground trains between different stations on the Northern Line, in London’s metropolitan Zone 1. Perhaps in a similar manner, natural phenomena have experienced increased rates and frequencies of changes, simultaneously reaching higher records of extremes, with the four seasons of the world areas with a temperate climate seemingly and gradually mixing into one. With regards to human philosophy, the end of such a process would involve an isolation of the human soul from the human flesh; an imprisonment of the human being, away from the natural origins and away from the Divine. Humans would then undergo a process of natural de-selection, given that they would perceive the physical duration of their already shortened lifespan of 60 years due to physical illness, as 20 to 30 years, whilst animals with a physical duration of lifespan of 10 to 20 years would continue to perceive their lifespan as humans would normally perceive 70-80 years. As a result, humans could experience mass extinction due to wrong perception of intelligence, given that living intelligence requires a substantial extent of wisdom, as well as a joint relationship between intellectual and emotional districts of intelligence.

It is possible that unprecedented events occurring in the cosmos may have contributed to the unprecedented changes in human society and her surrounding natural environment. Namely, astronomical phenomena that include increased electromagnetic and gravitational influences toward the Earth, caused by substantial planetary and stellar geometric alignments in relation to the Earth, as well as by collisions between neighbouring planetary systems or even galaxies, led to the development of increasing pressures exercised upon the natural environment of the Earth. Furthermore, the recent increase in the frequency of people randomly reaching numeric and geometrical coincidences of perfect equality and symmetry respectively, which many people deem as “angel numbers” or “divine messages”, may be a sign that such astronomical events have been occurring recently. People and animals randomly reaching such symmetries may be a result of a physical bridge of communication between psychology and astrophysics, given that planetary and stellar geometrical configurations also implicate similar rates of equality and symmetry. There is existing scientific evidence to suggest that cosmic phenomena presenting unprecedented influences upon the Earth are associated with increased probabilities that disorders of climatic, meteorological, natural, geological, social, economic and military natures will occur. Likewise, the increasing number of people randomly reaching numeric and/or geometrical “coincidences” of equality may represent a transmission of electromagnetic and gravitational influences by the human psyche, regarding fluctuations in the space that particularly involves areas of planet Earth that are specifically wide in nature. Scientific projections concerning unprecedented climate change, higher risks of an onset of unprecedented geological disasters, as well as of future epidemics and pandemics and an onset of World War III, may represent part of the results caused by such influences from the cosmic space exercised upon various parts of the Earth. Some hypotheses even implicate a link between an exponentially increasing speed of perceived human lifespan with a hypothesised future discovery of a proximal black hole that would swallow the solar system, alongside the light emerging from the Sun. Perhaps, right before the entire solar system would be swallowed in the black hole, the sun would explode and its fire would spread throughout the entire planetary system, reaching the Earth and ultimately destroying it by burning. Such a scenario would fit prophecies mentioned in the New Testament, in which it is stated that the Earth will be consumed by fire. Given that black holes are known to attract light itself, it is possible that black holes attract time itself, and such would explain why everything on a planet would become faster, that phenomena would become more intense, that all categories of the natural environment would mix with each other, that fluctuations of such phenomena would become increasingly powerful and frequent. A black hole approaching a given planetary system would explain why any categories differentiating elements contained within the planetary system would accelerate and simultaneously start a process of amalgamation, becoming one, before disappearing altogether inside the black hole. It is yet unknown how powerful influences

of black holes are and how many light years they can cover. Given that it has been scientifically demonstrated that they attract light itself, there can be no exact scientific projection regarding how far black holes can cover in their gravitational push. At the present time, it should not be completely ruled out that black holes may even slightly influence planetary systems located thousands of light years away. Nonetheless, even the slightest influence of a black hole may bring the astronomical target to a place where it can present a higher exercise of gravitational influence. It could even be that black holes favour an increase of frequency and extent of astronomical events of major significance, including alignments of voluminous cosmic bodies and collisions between various planetary systems. It is essential to mention that the above analysis is completely hypothetical in nature and categorically not aimed to raise sentiments of panic, but aimed to bring awareness to the astronomical scientific community so projections and implementations of precautionary measures may be considered in rather earlier stages.

Throughout the entire Universe, there is only one type of state that cannot be influenced in any way and that can never be touched by Relativity; unconditional love. It is known that unconditional love represents the energy that creates and shapes, whilst lack of love perverts matter and ultimately destroys the original shape of it. It can be hypothesized that energy cannot be created by anything, except unconditional love, and that light is in fact the primary energetic product of love. Despite the fact that light sustains all life forms, it did not create the Universe. The state of love created the Universal matter and light, it is more profound than the physical foundations of the matter, it exceeds the physical limits of time and it can only be understood through studies of philosophy, and not solely through the study of material science. Nonetheless, it is essential for one to hold a substantial knowledge level about material science to be more prone to better gain knowledge of philosophy. Material science and philosophy are like two geopolitical superpowers that need to be in a diplomatic relationship of peace in order for a state of scientific efficacy and progress to be successfully reached. Efforts to remove philosophy from material science will likely result in the scientific community failing in the processes of medical and environmental innovations to make the world a better living place, and could ultimately even result in the causation of more harm than good. Religious philosophy states that the human being represents the Icon of the divine Love, whilst material philosophy written by ancient Greek savants states that the human being represents a micro universe located within the macro universe, and that the order and shape of micro universe perfectly reflects the macro universe's. A Romanian Orthodox Priest, Father Ilie Cleopa, stated that humans represent the Icon of the Universe, manifesting God's love in the same manner that God manifested His love during the process of the Universal Creation, given that man was created in the image and likeness of God. Likewise, it could be that unconditional love will reverse the existing process of chaotic increase that has been observed throughout the Earth in the past several decades.

Conclusion

Intelligence, wisdom and the emotional state may represent three essential determining factors that influence the application of Relativity into biology and psychology. It may be that, the more a living being knows specific data and is able to assimilate, the faster they experience time itself. This potential aspect may highlight the relationship of interdependence between time, space and matter, just as the horizontal, vertical and oblique lines of three-dimensional geometrical structures display an evident relationship of interdependence. Perhaps, such phenomena reflect the interdependent relationship between the scientific disciplines of physics, chemistry and biology, with the foundational fourth dimension of mathematics, given that Science has also demonstrated the existence of the fourth dimension with the discovery of Relativity itself. The fourth dimension may represent a bridge between the seen and the unseen; between existence and non-existence, offering a suggestion to the existence of an extra-dimensional Author of life, Who is capable of bringing existence from non-existence. The recent discovery that the Universe is de facto not real in location could further point to the existence of a fourth dimension. By this analogy, one may eliminate the automatic implication that, if animals and humans perceive their duration of life as equal, it means that animals and humans are the same. This may represent an example of the fallacy that implicates

a relativization of analogy projection. It could be believed that the argument stating “Correlation does not imply causation” has a Universal nature; meaning that it crosses all the internal borders of Science. The human spoken word and sighting have also displayed colossal properties of physical modulation, meaning that verbal and non-verbal communication represent the principal mechanism of maintenance of the physical environment. Furthermore, misinterpretation of Scientific evidence resulting from agendas used against societal and religious hierarchy may sustain and promote toxic ideologies, which are widely anarchical in nature, as an extreme as such promotes excessive, toxic “equality”. The manner of communication shapes the dimensionality which all living organisms are projected into as a consequence of its quality, and the well-known phenomenon of tribalism may represent a byproduct of poor communication, which often leads to the development of negative emotions, such as hostility. Likewise, there may now be considerable scientific reasons to suggest, not only that humans and animals experience time differently, but that their individually perceived average life duration on Earth is relatively the same.

References

1. Carp, T.-N. Did the Natural Selection of Humans and of Animals Occur during a “Pregnancy” of Time, Space, Matter and Life?. Preprints 2024, 2024020034. <https://doi.org/10.20944/preprints202402.0034.v7>
2. Gomez C. R. (2018). Time Is Brain: The Stroke Theory of Relativity. *Journal of stroke and cerebrovascular diseases : the official journal of National Stroke Association*, 27(8), 2214–2227. <https://doi.org/10.1016/j.jstrokecerebrovasdis.2018.04.001>
3. Klemra, P., & Doubal, S. (2006). A new approach to the concept and computation of biological age. *Mechanisms of ageing and development*, 127(3), 240–248. <https://doi.org/10.1016/j.mad.2005.10.004>
4. Laubichler, M. D., Stadler, P. F., Prohaska, S. J., & Nowick, K. (2015). The relativity of biological function. *Theory in biosciences = Theorie in den Biowissenschaften*, 134(3-4), 143–147. <https://doi.org/10.1007/s12064-015-0215-5>
5. Torday, J. S., & Miller, W. B., Jr (2016). Biologic relativity: Who is the observer and what is observed?. *Progress in biophysics and molecular biology*, 121(1), 29–34. <https://doi.org/10.1016/j.pbiomolbio.2016.03.001>
6. Torday, J. S., & Miller, W. B. (2016). The Unicellular State as a Point Source in a Quantum Biological System. *Biology*, 5(2), 25. <https://doi.org/10.3390/biology5020025>
7. Green D. (2017). Time and relativity in therapeutic rehabilitation. *Developmental medicine and child neurology*, 59(2), 112. <https://doi.org/10.1111/dmcn.13334>
8. Torday J. S. (2018). A diachronic evolutionary biologic perspective: Reconsidering the role of the eukaryotic unicell offers a ‘Timeless’ biology. *Progress in biophysics and molecular biology*, 140, 103–106. <https://doi.org/10.1016/j.pbiomolbio.2018.04.013>
9. Green, D., & Payne, S. (2018). Understanding Organisational Ability and Self-Regulation in Children with Developmental Coordination Disorder. *Current developmental disorders reports*, 5(1), 34–42. <https://doi.org/10.1007/s40474-018-0129-2>
10. Borghi, A. M., & Mazzuca, C. (2023). Grounded Cognition, Linguistic Relativity, and Abstract Concepts. *Topics in cognitive science*, 15(4), 662–667. <https://doi.org/10.1111/tops.12663>
11. Babayev, E. S., & Allahverdiyeva, A. A. (2007). Effects of geomagnetic activity variations on the physiological and psychological state of functionally healthy humans: some results of Azerbaijani studies. *Advances in Space Research*, 40(12), 1941–1951. <https://doi.org/10.1016/j.asr.2007.02.099>
12. Mukherjee, S. (2008). Cosmic influence on the sun-earth environment. *Sensors*, 8(12), 7736–7752. <https://doi.org/10.3390/s8127736>
13. Iwaniszewski, S. (1991). Astronomy as a cultural system. *Interdisciplinarni izsledvaniya*, 18, 282–288.
14. Antonello, E. (2013). On the Possibility of an Astronomical Perspective in the Study of Human Evolution. *arXiv preprint arXiv:1312.1561*. <https://doi.org/10.48550/arXiv.1312.1561>
15. Gheonjian, L. A. (2022). On the Place and Role of Astronomy and Astrophysics in the Emerging New Model of Education. *Communications of the Byurakan Astrophysical Observatory (ComBAO)*, 69, 187–192. <http://93.187.165.86/Content/359471/187-192.pdf>
16. Sotala, K., & Gloor, L. (2017). Superintelligence as a cause or cure for risks of astronomical suffering. *Informatica*, 41(4). <https://www.informatica.si/index.php/informatica/article/view/1877>
17. Nikolaidēs, E. (2011). Science and Eastern Orthodoxy: From the Greek Fathers to the Age of Globalization. JHU Press. ISBN-13: 978-1-4214-0298-7
18. Ranguelov, B. (2024). Earthquake “doublets”-case studies for Kresna-Kroupnik (Bulgaria-M7. 8) and Gaziantep–Kahramanmaraş (Turkey-M7. 8). *Earthquake*, 2(1), 1882–1882. <https://doi.org/10.59429/ear.v2i1.1882>

19. EL MOUDDEN, T. A. R. I. K., Amnai, M., Choukri, A., Fakhri, Y., & Gherabi, N. The Influence of the Planet's Positions on Earthquakes Events: New Evidence Using Built Data. *Available at SSRN 4758279*. <https://dx.doi.org/10.2139/ssrn.4758279>
20. Mostafa, H. (2023). Enhancing Volcanology Prediction Capabilities through Machine Learning and Data Analysis.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.