

# The Concept of the Soul of Multiverse as a Genuine Supporter of Wildlife and Biodiversity on Earth

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This work used the cosmological neuroscientific concept of Soul of Multiverse for placing the problem of wildlife and biodiversity protection into a new philosophical environment where religious, scientific and philosophical approaches are in harmony. It resulted in the thought that the obligation of protecting wildlife and biodiversity on Earth, just as the sanctity of caring for all human lives, originated in cosmic laws set in the divine blueprints of the Soul of Multiverse. These laws seem to relay that in the 21st century the time has come on Earth to stop killing animals for food, to stop overhunting and overfishing, to stop industrial activities responsible for deforestation, desertification, air pollution and climate change, and to run animal experiments for science and medicine only in the extremely limited, most justified cases and only until new technologies make them no longer necessary. The conclusion was that to achieve these goals, new global governing mechanisms are needed. Specifically, the establishment of a Government of Earth, the next step of the political process that started with the United Nations in the first place, may be necessary to solve the global problems of wildlife and biodiversity protection since meaningful solutions for global problems require global governing mechanisms.

*Keywords:* biodiversity, cosmic laws, food industry, animal experiments, Government of Earth

## Introduction

The dramatic speech of UN Secretary General Antonio Guterres at the UN Biodiversity Conference—COP15—on December 6, 2022, (available at <https://www.un.org/sg/en/content/sg/speeches/2022-12-06/secretary-generals-remarks-the-un-biodiversity-conference-%E2%80%94-cop15>) called for humankind’s conscience to understand the significance of loss of wildlife and biodiversity on Earth and “stop this orgy of destruction”, as he said. He pointed out that “deforestation and desertification are creating wastelands of once thriving ecosystems” while “ocean degradation is accelerating the destruction of life-sustaining coral reefs” and plants, mammals, birds, reptiles, amphibians, fish and invertebrates—are all at risk.” Indeed, in the United States 97 animal or plant species were found extinct by 2019 (Greenwald et al., 2019, p. 3).

The question is how to proceed the most effectively to restore the harmony between humans and the rest of lifeforms on the planet. In his above speech, Antonio Guterres identified the following 3 concrete actions. First, the governments must re-purpose subsidies and tax breaks toward green solution and must protect the right of Indigenous peoples, who are the most effective guardians of wildlife and biodiversity.

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Second, the private sector must recognize that profit and the protection of nature must go hand in hand—business and investors must be allies of nature, not enemies. And third, developed countries must provide bold financial support for the countries of the Global South as the key custodians of the world’s wildlife and biodiversity.

It must be realized that the current religious, scientific and philosophical concepts do not form a coherent system for explaining and supporting this specific UN effort.

On one hand, the Abrahamic religions of almost 60% of humankind, as they originated in ancient times and in the Early Middle Ages, lack the clear guidance for the relation between humans and the rest of Earth’s lifeforms. According to the Book of Genesis,

God created mankind in his own image...male and female he created them... and said to them: Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground.

Indeed, animal sacrifice, qurban, is legal for Muslims during the days of Eid al-Adha, while the rites of the horse sacrifice Ashvamedha are justified in Hinduism’s Rig-Veda and Mahabharata.

On the other hand, animal experimentation has always been important for biological sciences. Everything we know about how the cardiovascular system works started with William Harvey’s animal experiments in the 17th century. The 1936 winners of the Nobel Prize in Physiology or Medicine, Henry Dale and Otto Loewi, used frogs and cats in their experiments to reveal the chemical bases of signaling in the nervous system. And the 2014 Nobel laureates John O’Keefe, Edvard Moser and May-Britt Moser discovered the key mechanisms of spatial information processing in brain by recording neuronal electrical activity in the hippocampus and entorhinal cortex of freely-moving rats.

The reader must know that I myself run many animal experiments to realize my dream of finding cure for such untreatable brain disorders as Alzheimer’s disease, severe strokes and intractable epilepsies (Kral & Ludvig, 2013; Ludvig et al., 2015). Although these experiments followed the spirit and guidelines of the World Medical Association’s Declaration of Helsinki adopted in 1964 and were done in the possibly most humane ways, I have become more and more conflicted about the moral aspects of these studies and looked for solutions—as discussed later in this paper.

At the same time, wildlife protection and biodiversity have never been an important subject of philosophy. Bertrand Russell’s or A.C. Grayling’s widely read books on the history of philosophy (Russell, 1945; Grayling, 2019) do not even have the words “animal” or “animals” in the subject index. Aristotle discussed animals in his writings just to examine their inferiority to humans, Kierkegaard didn’t deal with the subject at all, and Sartre’s 818-page book, *Being and Nothingness*—originally published in France in 1943—lacks any animal-related passage (Sartre, 1993).

Though Immanuel Kant took seriously the moral aspects of human behavior with animals and often lectured on this topic from the early 1760s through 1794. According to his students’ conscientious notes, he argued that

...when anatomists take living animals to experiment on, that is certainly cruelty, though there it is employed for a good purpose... because animals are regarded as man’s instruments it is acceptable though never so in sport... Thus, our duties to animals are indirectly duties to humanity. (G. L. Collins’ notes, see Kant, 1997, p. 213)

The philosopher felt that

... hard-heartedness towards animals is not in accordance with the law of reason, and it is at least unsuitable use of means. Any action whereby we torment animals or let them suffer distress, or otherwise treat them without love, is demeaning to ourselves. (J. F. Vigilantius' notes, see Kant 1997, p. 434)

Two hundred years later, these arguments were not just rediscovered but rethought with originality and taken to an entirely new level by Peter Singer, who fully abandoned Kant's concept that animals are "man's instruments" and therefore "our duties to animals are indirectly duties to humanity" (Singer, 1975; 2023). The below recognition by Singer is as dramatic as all true insights into humankind's conflicted road to perfectness are:

We humans have the power to continue to oppress the species forever... Will our tyranny continue proving that morality counts for nothing when it clashes with self-interest? ... Or will we rise to the challenge and prove our capacity for genuine altruism by ending our ruthless exploitation of the species over which we have power...because we recognize that our position is morally indefensible? (Singer, 2023)

The objective of this article is to use cosmological neuroscience (Ludvig, 2022; 2023; 2024a; 2024b) for placing the problem of wildlife and biodiversity protection into a new philosophical environment where religious, scientific and philosophical approaches are in harmony, as they should be, while Antonio Guterres' and Peter Singer's calls are both translated into a reasonable intellectual framework aiming to help restoring and nurturing the coexistence of human and non-human lifeforms on Earth.

### **Cosmological Neuroscience on the Soul of Multiverse and Its Relation to Life on Earth**

Cosmological neuroscience suggests that just as the guided complexity of matter and energy in the unique space-time of each human brain generates the host's Soul, the infinite complexity of the Multiverse, a more likely embodiment of the allness of existence than a single Universe, must also have a Soul.

This Soul of Multiverse, imagined before as Holy Spirit and other analogous religious concepts, may inspire the transmission of life to nodes of space-time, like Earth, where life is destined to appear in its imperfect grandeur with the chance of evolving from the Last Universal Common Ancestors into intelligent life governed first by the simple animal Soul then the highly sophisticated human Soul with all of its potentials (Ludvig, 2022; 2024a).

The potentials of the human Soul include the generation of the Noospheric Human Soul, the digital advancement of Teilhard de Chardin's noosphere (Teilhard de Chardin, 1959, Chapter 7 ["A Great Event Foreshadowed: The Planetization of Mankind"], section 2), as well as the proposed Government of Earth to care as fairly for every human life as for the rest of life on Earth (Ludvig, 2024b). It is this care for all lives on this planet by a future Government of Earth that would mediate with due reverence the Soul of Multiverse's guidance to approach life as a divine product (Figure 1).

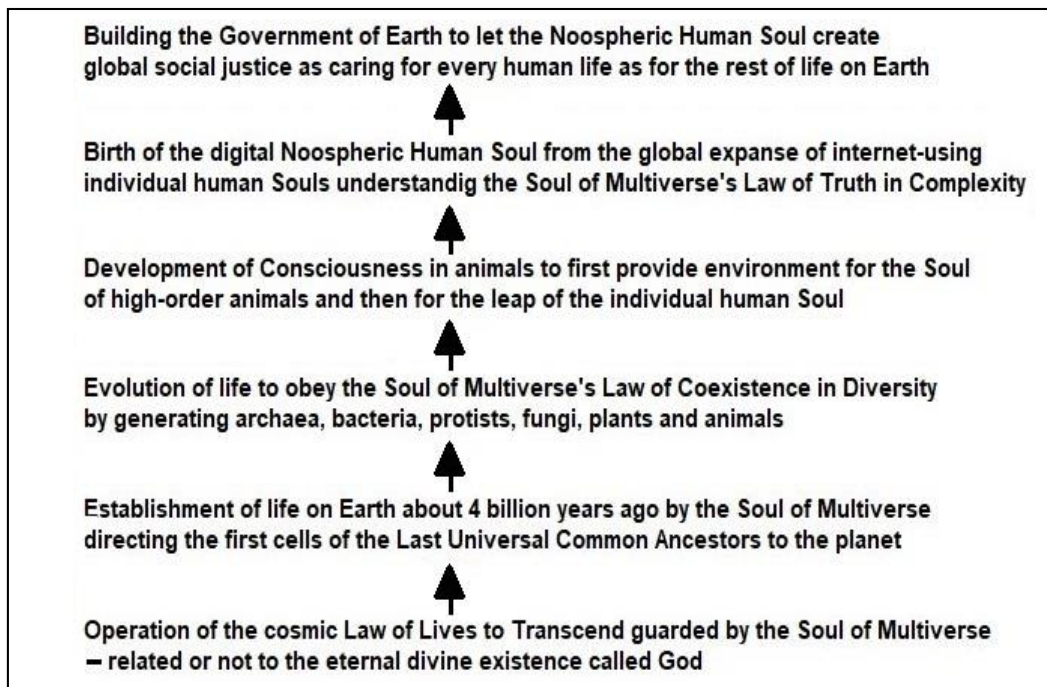


Figure 1. Cosmological neuroscientific view on the possible divine origin and coexistence of human and non-human lifeforms on Earth.

### **The Natural Support of the Soul of Multiverse for All Lifeforms**

As summarized in Figure 1, life on Earth was probably originated in the first ocean about 4 billion years ago with the appearance of the first cells of the Last Universal Common Ancestors (Glansdorff et al., 2008). These cells were more likely “transmitted to the earth by intelligent beings on another planet” (Crick & Orgel, 1973) than formed spontaneously by abiogenesis. In fact, this transmission of life to Earth was not unlikely a God-inspired move executed by the Soul of Multiverse, though once on Earth these first cells did initiate the course of biological evolution as described by Darwin and Wallace in their historic works (Darwin, 1859; Wallace, 1870).

Importantly, due to the likely cosmic laws of Coexistence in Diversity and Lives to Transcend (Ludvig, 2023), this evolution necessarily produced the astonishingly diverse lifeforms of archaea, bacteria, protists, fungi, plants and animals. The hominin lineage that branched out of the animals’ Primate order about 7 million years ago later transcended to the species *Homo sapiens* about 300,000 years ago. The unique characteristic of high-order animals is that their brain generates Consciousness, the neural environment of the simple Animal Soul that ultimately evolved to the incomparably more sophisticated Human Soul. In fact, this Human Soul is now building a globalized, digital Soul, the Noospheric Human Soul. Which one day may be able to establish the Government of Earth for caring for all human lives and for all lifeforms on Earth with dedication (Ludvig, 2024a; 2024b).

Thus, the obligation of protecting wildlife and biodiversity on Earth, just as the sanctity of caring for all human lives, seemingly originated in cosmic laws set in divine blueprints, providing the truest justification for UN Secretary General Guterres’ call for wildlife and biodiversity protection mentioned in the Introduction. But this weighty obligation cannot be fulfilled without responding to as weighty challenges. Some of them are discussed in the next chapter.

### **The Challenges of Reconciling the Soul of Multiverse’s Guidance for Life With the Demands of Humanity**

Peter Singer didn’t let us ignore that “the Food and Agricultural Organization of the United Nations estimates that more than 83 billion birds and mammals are slaughtered for food each year” (Singer, 2023, p. 109). These slaughters are against everything the content of Figure 1 tries to relay, that we humans (1) belong to the large home of diverse lifeforms on Earth, (2) are descendants of that home’s animal kingdom, (3) have developed our civilization with the help of not just other animals but also plants and fungi, in fact, (4) the air we breathe was made by the oxygen-releasing cyanobacteria over at least 300 million years starting 2.4 billion years ago. It is true, that from using the first stone axes about 2 million years ago by the *Homo erectus*, hunting, fishing, and animal-exploiting agriculture were essential for the evolution that created the *Homo sapiens* and its civilization. But in the 21st century, slaughtering of animals for meat is no longer an absolute dietary necessity, as plant-based diets have been proved to be equally healthy. May I place the conclusions of 4 credible scientific studies on the effects of plant-based—vegan or less strict vegetarian—diets on human health:

It is the position of the American Dietetic Association that appropriately planned vegetarian diets, including total vegetarian or vegan diets, are healthful, nutritionally adequate, and may provide health benefits in the prevention and treatment of certain diseases. Well-planned vegetarian diets are appropriate for individuals during all stages of the life cycle, including pregnancy, lactation, infancy, childhood, and adolescence, and for athletes. A vegetarian diet is defined as one that does not include meat (including fowl) or seafood, or products containing those foods. (Craig et al., 2009, Abstract)

...plant-based diets typically reduce the risk of developing numerous chronic diseases over the lifespan and require fewer natural resources for production compared to meat-containing diets. As such, plant-based diets appear to be viable options for adequately supporting athletic performance while concurrently contributing to overall physical and environmental health. (Lynch et al., 2018, Abstract)

Prudent plant-based dietary patterns which also allow small intakes of red meat, fish and dairy products have demonstrated significant improvements in health status as well. At this time an optimal dietary intake for health status is unknown. Plant-based diets contain a host of food and nutrients known to have independent health benefits. While vegetarian diets have not shown any adverse effects on health, restrictive and monotonous vegetarian diets may result in nutrient deficiencies with deleterious effects on health. (McEvoy et al., 2012, Abstract)

Vegetarians in the EPIC-Oxford study have a relatively low risk of IHD, diabetes, diverticular disease, kidney stones, cataracts and possibly some cancers, but a relatively high risk of stroke (principally haemorrhagic stroke) and bone fractures, in comparison with meat-eaters..... Overall, the health of people following plant-based diets appears to be generally good, with advantages but also some risks... (Key et al., 2022, Abstract)

Clearly, a worldwide movement for the voluntary choice of at least the vegetarian-type plant-based diet—the known diet of such medal-winning Olympian athletes as the swimmer Murray Rose, the runner and long jumper Carl Lewis, the tennis player Novak Djokovic or the figure skater Meagan Duhamel—would make sense medically, would stop the no longer justified mass-murder of animals for food, and would harmonize the human Soul with the divine Soul that permeates the cosmos. This paper added one more person to the world of vegetarians: the author himself.

But, as emphasized in the Introduction, medical, scientific and industrial animal experiments also contribute to the range of exploitation of animals by humans. In 2018, 15 million animals were used in experiments in the US, 50 million in China, 15 million in Japan and 10 million in the EU (Singer, 2023, pp. 31-32). True, without animal experiments it would have been impossible for life sciences to succeed and advance humankind’s biological knowledge while laying the groundwork for modern medicine. Yet, humankind paid for these

intellectual advances a colossal price, the price of causing suffering and often death to many animals, not less violating the divine sanctity of life, the cosmic Law of Coexistence in Diversity than the soldiers of food industry.

As also disclosed in the Introduction, the author of this article himself run many experiments using rats and monkeys, however innocent his objectives were: to learn about how the brain works and use the revealed information for treating otherwise untreatable neurological and psychiatric disorders. I did my best to do these experiments with causing as little discomfort to the animals as possible. Thus, I was the one who developed methods for the first time to study potentially therapeutic brain implants in monkeys who were not restricted in a chair as in all other monkey neuroscience studies before, but were free to move and live their life in a large area, often socializing with other monkeys (e.g., Ludvig et al., 2015). On one hand, I knew that this was scientifically necessary, because the safety and efficacy of potentially therapeutic brain implants for otherwise incurable brain disorders are impossible to determine with using *in vitro* preparations or computer simulations. On the other hand, I increasingly realized the conflict between my medically justified studies and the moral aspects of these experiments.

Is there a way to reconcile the scientific and medical need of animal experiments and their violation of the divine laws referred to in Figure 1? Maybe not, maybe all animal experimentations must be stopped—exactly as Peter Singer argues. But isn't the search for safe therapies for incurable human disorders as worthy an objective as wildlife and biodiversity protection are? Can't both be done in the right way? What about restricting animal experimentation to the absolutely necessary studies with the clear potential of revolutionary advances for medicine and life sciences, at least until such studies can indeed be replaced with new technologies? What about doing these extremely important animal experiments with the requirements of zero tolerance for causing pain in maximally comfortable experimental environment and letting the animals live a full post-experimental life in dedicated natural sanctuaries? What about a new funding system that allows the Principal Investigator to distribute the same amount of money for wildlife and biodiversity protection as was awarded for his or her animal study? These changes would not just be consistent with the 1964 Declaration of Helsinki that forbade Nazi-type clinical trials (medical tests in human subjects without the supportive data of preceding safety/efficacy experiments in animals), but would decrease the absolute number of animal experiments to as low as 10% of the current total number—and just until these animal studies can be replaced by some new technology.

It must be added, that perhaps due to the Law of Coexistence in Diversity (Figure 1), evolution produced animals which maintain their lives with actions deadly to humans. For example, mosquitos have been responsible for more than 2 million human deaths since 2000, mostly in sub-Saharan Africa but also in Southeast Asia (Winegard, 2020). Therefore, this paper's above arguments for the absolute necessity of wildlife and biodiversity protection across the planet must also be seen in the clarity of the Law of Truth in Complexity (Figure 1), which permits the human race to develop the most creative methods for defending itself from real dangers from the animal world—without causing unwanted environmental contaminations.

In closing, I believe the challenges of wildlife and biodiversity protection on Earth—not just the discussed animal killings by the food industry and the unjustified range of animal experimentation but also the international practices of overhunting and overfishing, as well as the unceasing environmental disasters of deforestation, desertification, air pollution and climate change—must be responded with an orchestrated international effort beyond the capacity of the UN.

In a recent paper (Ludvig, 2024b), I suggested that

...the increasing difficulty of controlling the related high-tech military conflicts, human-made environmental crises, and the abnormal migrations of abused people now make it inevitable to leave behind the competitive international chaos rooted in humankind's animal past and turn to the cooperative social spirit recommended by Aristotle, Lao Tzu, Jesus, Dante, H. G. Wells, Martin Luther King Jr., John Lennon, Nicholas Hagger, and others to finally translate their aspirations into actions via establishing the Government of Earth for the decent and free. (Philosophy Study, Jan.-Feb. 2024, p. 1)

Since global problems—and wildlife and biodiversity protections are global problems with no national borders—must be solved by global actions, the establishment of such a Government of Earth cannot be postponed too long. Only such an internationally acting government, the next phase of the political process that built the UN in the first place, can translate the meaning of the cosmic laws indicated in Figure 1 and let humankind continue its evolution in a living and non-living planetary environment worthy of the species' origin and destiny.

But it must not be missed either, that these fundamental improvements in humankind's global habits must be led by exclusively voluntary actions by all of those in the food industry, other relevant industries and life sciences who agree with these improvements, while all related policies should be run by the best reason and empathy that do not let anyone to lose his or her decent livelihood and aims in life. Should this vision be realized one day, the decorated wall of the main hall of the Government of Earth's Council on Global Environment would be embossed with the world-renowned primatologist Jane Goodall's call for all of us (Figure 2).

**"Above all, we shall work to protect and restore the natural world, seeking ways to heal the wounds we have inflicted, and ways to live in great harmony with Mother Nature, as well as with each other."**

**— Jane Goodall**

Figure 2. Jane Goodall's concluding remarks in her book "Reason for Hope: A Spiritual Journey" (Goodall with Berman, 1999).

## Conclusion

The objective of this article was to use cosmological neuroscience for placing the problem of wildlife and biodiversity protection into a new philosophical environment where religious, scientific and philosophical approaches are in harmony and form a reasonable intellectual framework aiming to restore and nurture the coexistence of human and non-human lifeforms on Earth. It was suggested that the obligation of protecting wildlife and biodiversity on Earth, just as the sanctity of caring for all human lives, originated in cosmic laws set in divine blueprints. These divine blueprints seem to relay that in the 21st century the time has come on Earth to stop killing animals for food, to stop overhunting and overfishing, to stop industrial activities responsible for deforestation, desertification, air pollution and climate change, and to run animal experiments for science and medicine only in the extremely limited, most justified cases and only until new technologies make them no longer necessary. According to the article, these fundamental improvements in humankind's global habits may not be possible to achieve without the establishment of the Government of Earth, as meaningful solutions for global problems require a global governing system.

### Conflict of Interest

There was no conflict of interest in this work.

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