

NOOSPHERE

IN A NEW TIME



KARLA MONIQUE KLÖPSCH

Author's Note

Produced as the final project for the graduate program in Spirituality and Consciousness Studies at the Pontifical Catholic University of Rio Grande do Sul (2024), this article was born from the intersection of academic inquiry and lived experience.

Initially published in issue no. 20 of Khronos – Journal of the History of Science of USP (Brazil, March 2026), this work is a pioneer in introducing information about the Law of Time into the field of scientific research, in addition to being one of the very few articles in Portuguese dedicated to the Noosphere to this day. The text you will find here is the original English translation of the Portuguese version registered on NS37.5.28, White Lunar Mirror (12.12.2024). It is important to note that the literal quotations were translated based on the Brazilian editions of the books.

Since the noosphere is a layer in permanent formation, we are the neurons, points of light in synergy that give shape to this living tissue in continuous expansion. May this article serve reflection and the broadening of knowledge so that we may participate actively and consciously in this ongoing process.

Acknowledgments

This work was developed with deep respect, love, and dedication, having been embraced by the Sincronário da Paz since its conception. I am very grateful to André Staehler for opening the portals of the Nova Terra and for making the publication of this edition possible.

I am deeply grateful to the Red Queen, whose attention, care, and support were essential in allowing this English edition to follow its flow.

I am grateful for the courage of the thinkers who underpin this work — Teilhard de Chardin, Vladimir Vernadsky, and José Argüelles — whose visions open paths toward an understanding of consciousness and time as evolutionary forces, as well as of the noosphere as a latent expression of this transformation.

My gratitude also goes to the friends and study groups that keep the experience of natural time alive, expanding this field beyond theory.

I thank my family, the primordial source of unconditional love and inspiration for the experience of living in this now.

I thank God, my Higher Self, and all the beings of light who took part in this creation.

Abstract

This study approaches the Noosphere as an evolutionary paradigm formulated by Teilhard de Chardin, Vladimir Vernadsky, and Edouard Leroy, and later amplified by José Argüelles. The noosphere, the "thinking layer" of the Earth, emerges from the interconnection between conscious human collectivity and the planet. The work emphasizes the relevance of this concept for re-signifying humanity's relationship with its own nature, suggesting that a global expansion of consciousness is fundamental to building the *Times to Come*.

Keywords: Noosphere; Evolution; Consciousness; Planetary transition, New time

Contents

1. INTRODUCTION	4
1.1 What the Noosphere Is	5
1.1.1. Noosphere – Historical Roots and Concept	5
1.1.2. Teilhard de Chardin and the Noosphere	7
1.1.3. Vladimir Vernadsky and the Noosphere	14
1.1.4. José Argüelles and the Noosphere	19
1.2 A Paradigm For a New Layer	25
1.2.1. Crisis and the Recognition of New Paradigms	25
1.2.2 A Noospheric Vision	27
1.2.3. Utopia and Transformation	29
1.3 Time As a Synchronizing Factor of the Noosphere	31
1.3.1 The Mayan Factor	33
1.3.2. The Law of Time	35
1.3.3. A Manifest for the Noosphere	41
2. THEORETICAL FRAMEWORK	43
3. METHODOLOGY	44
4. RESULTS AND DISCUSSION	45
5. FINAL CONSIDERATIONS	48
REFERENCES	50

INTRODUCTION

In recent years, the worsening of environmental and social crises has drawn attention to the urgency of a profound transformation in the relationships between humanity and the Earth. The current scenario, characterized by the failure to meet climate mitigation targets, makes clear that the necessary changes go beyond the political and economic decisions of world leaders. In view of this, terms such as “ecological spirituality,” “new humanism,” and “planetary transition” emerge, suggesting a re-signification of the model of existing on the planet. The world faces a call to act in a unified and integrated way. This mobilization requires a review of prevailing paradigms, opening paths toward a new collective orientation.

From this perspective, the Noosphere arises as a central evolutionary structure for a full understanding of the role of the human being in the world. Introduced in 1926 by the scientists Teilhard de Chardin, Vladimir Vernadsky, and Edouard Leroy, and later deepened by José Argüelles, the term *noosphere* represents a new geological era that develops from the birth of human thought. After the biosphere, the mental envelope, the noosphere. In 2026 the concept will turn one hundred years old, playing a fundamental role in the culture of Russian scientific thought, while in the West it remains almost unknown.

Considering this reality, the work sets the following objectives: to investigate the historical and conceptual roots of the noosphere, identifying its different lines of understanding; to review the contemporary anthropological paradigm and explore the challenges that accompany a shift in vision; and to study a theoretical model that contributes to a transformation toward a more conscious society. To achieve these objectives, the article is organized into three main sections. The first section addresses the origins and the concept, highlighting the contributions of Teilhard de Chardin, Vladimir Vernadsky, and José Argüelles. The second part explores the contrast between the Noosphere and the Anthropocene, assessing their implications. Finally, the third section, through the studies of José Argüelles, addresses time and consciousness as central elements in the activation of the noosphere.

By means of a qualitative bibliographic review, this work seeks to illuminate the legacy of its originators and broaden the understanding of the noosphere in a scenario of growing complexity. The research proposes an integrative study, promoting a sustainable and holistic perspective, fundamental to the survival and evolution of humanity.

1.1 *What the Noosphere Is*

Derived from the Greek, *noos* means “mind” and *sphaire* means “sphere”. Noosphere is the term used to represent the thinking layer of the Earth. Just as the lithosphere designates the solid surface and the biosphere comprises all the living substance of the planet, the noosphere corresponds to the layer created by human thought.

The Noosphere also represents a vision that outlines the next evolutionary stage, in which collective consciousness redefines the relationship between humanity and planet. This approach encourages a review of current models, highlighting the need to rethink the role of the human being in the cosmos, not as a mere component of the Universe, but as the active agent in the construction of the future.

With the aim of understanding the strands that underpin the concept, this section explores its historical roots, addressing the contributions of Teilhard de Chardin, Vladimir Vernadsky, and José Argüelles.

1.1.1 *Noosphere – Historical Roots and Concepts*

The formulation of the concept of *noosphere* arises from the encounter among three central thinkers of the early twentieth century: the geochemist Vladimir Vernadsky, the paleontologist and Jesuit Teilhard de Chardin, and the philosopher and mathematician Edouard Le Roy. The point of convergence of this encounter occurs in Paris, in 1922, when Vernadsky (1863–1945) begins to lecture on geochemistry and the biosphere at the Sorbonne. In this same academic environment moved Teilhard de Chardin (1881–1955) and Edouard Le Roy (1870–1954).

Alongside his activities at the Sorbonne, Vernadsky was carrying out research at the Marie Curie Radium Institute¹ (Magalhães, 2017, p. 153), a context in which, according to Argüelles (2006, p.46), Vernadsky came to meet the then President

¹ Marie Curie (1867-1934) - Physicist and chemist, Polish, a pioneer in the study of radioactivity, founded her Institute in 1909, together with the University of Paris. Marie Curie was the first woman to win the Nobel Prize, the only woman to have won it twice, and the only person to have won it in two different scientific fields.

of the International Commission on Intellectual Cooperation of the League of Nations, the philosopher Henri Bergson². From this set of shared references — the Sorbonne, the Marie Curie Institute, and Bergsonian thought — Vernadsky, Teilhard, and Le Roy began to meet frequently, jointly consolidating the elaboration of the theory of the noosphere (Vidal, 2023, our translation; Lucarelli, 2019, ch.1).

Le Roy is recognized as the first to publish the term *noosphere*, in 1927³. However, the oldest record found is Teilhard's unpublished essay, titled *L'Hominisation*, of May 6, 1925 (Vidal, 2023; Hamilton and Grinevald, 2015). According to Hamilton and Grinevald (2015, our translation), Le Roy draws on discussions held with Teilhard and Vernadsky, and incorporates elements of the essay *L'Hominisation* into the foundation of his work. According to Jaseckova and Vartiak (2023, our translation), Le Roy defines the *noosphere* as the phase of the Earth's evolution in which Homo Sapiens enters the scene (hominization). Although he was the first to publish the term *noosphere* and played an important role in the initial introduction of the concept into the intellectual field of the time, the theoretical development and conceptual deepening of the noosphere came to be concentrated mainly in the formulations of Teilhard and Vernadsky. Thus, Le Roy should be recognized for his inaugural contribution and for the first publication of the term, even though his participation in the subsequent development of the concept did not continue.

Hamilton and Grinevald (2015, our translation) state that Le Roy's publication - inspired by Teilhardian principles and by the essay "*L'Hominisation*" on biosphere and noosphere, which also incorporates elements of the work of Eduard Suess⁴ (*La Face de La Terre*) – led Vernadsky to officially adopt the term in his studies, though with a distinct interpretation: Vernadsky brings the paradigm of the noosphere as the dawn of the last of many stages in the evolution of the biosphere, accomplished through human action and transformation, through biogeochemical transformation, including the transmutation of its elements (Hamilton; Grinevald, 2015, our translation, apud Vernadsky, 1945, 2005)⁵. Vernadsky attributes the evocation of the noosphere to the wholeness and evolution

² Henri Bergson (1859-1941) – French philosopher and diplomat, winner of the Nobel Prize in Literature in 1927. Bergson's philosophy constitutes one of the principal matrices of the works of Le Roy and Teilhard, guiding their reflections on time, consciousness, and evolution and acting as an element of conceptual mediation between these thinkers.

³ LE ROY, Édouard. *L'Exigence idéaliste et le fait de l'évolution: conférences faites au Collège de France en 1925-1926*. Paris: Boivin, 1927

⁴ Eduard Suess (1831-1914) - Austrian geologist, born in London, coined the term "biosphere".

⁵ VERNADSKY, W. I. *The Biosphere and the Noosphere*. *American Scientist*, v. 33, n. 1, p. 1-12, 194; VERNADSKY, V. I. *Some words about the Noosphere*. *21st Century Science & Technology*, Spring 2005. Russian original from 1943. See also: VERNADSKY, 1945

of the biosphere itself, processed by human scientific thought. According to Magalhães (2017, p.155), Vernadsky did not have time to finish his elaboration of the noosphere, but left notes on “certain conditions that would guide the passage of humanity as a whole to that level”.

Teilhard, in turn, deepens the idea throughout his life, especially in his masterpiece *The Phenomenon of Man* (1938, published posthumously) and also in a forceful 1947 essay titled *The Formation of the Noösphere* (Vidal, 2023, our translation). Teilhard elaborates an evolutionist theory that integrates science and religion, describing the Evolution of the cosmos as a unified movement that advances toward the *Omega Point* (God). This movement encompasses everything from atoms, particles, and matter to life, culture, and technology (Vidal, 2021, our translation).

From the 1980s onward, José Argüelles, Ph.D. in aesthetics and art history and a scholar of the Mayan science of time, expands and disseminates the studies of Teilhard and Vernadsky, interpreting the noosphere as the planetary mind that emerges from consciousness synchronized with natural time.

Teilhard de Chardin, Vladimir Vernadsky, and José Argüelles understood the world and the cosmos in a singular way and, through their perspectives, developed concepts historically unexplored before, challenging the human being’s understanding of his own mind. Despite distinct points, in all of them: the noosphere - the sphere of thought, still unreached by the molds of modern science.

1.1.2 *Teilhard de Chardin and the Noosphere*

Having recognized and isolated, in the history of Evolution, the new era of a Noogenesis⁶, we are forced, correlatively, to distinguish, in the majestic ordering of the telluric folds, a support proportioned to the operation, that is to say, one more membrane. Around the spark of the first reflective consciousnesses, the advances of a circle of fire. The point of ignition has widened. The fire gains ground. Finally, the incandescence covers the whole planet. A single interpretation, a

⁶ “*Noogenesis*, from the Greek *nous*, “spirit”, “psyche”, and *genesis*, “generation”, “origin”, “formation”, a Teilhardian neologism, designates the movement of the Universe as it – through a process of gradual concentration of its elements into ever more ordered and better-centred systems – leads to the emergence of a Noosphere, at a high point in the drift of complexity-consciousness. Noogenesis is also a refinement or fuller definition of “Psychogenesis”. (Teilhard de Chardin, 1995, p.211)

single name befits this great phenomenon. Exactly as extensive, but much more coherent still, as we shall see, than all the preceding layers, it is truly a new layer, the “thinking layer,” which, after having germinated at the close of the Tertiary, has since spread out above the world of Plants and Animals: outside and above the Biosphere, a *Noosphere*.

(...)

Notwithstanding the relief and harmony it introduces into things, this perspective disconcerts us for the moment because it contradicts the illusion and the habits that lead us to measure events by their material face. And it also seems disproportionate to us because, immersed ourselves in the human as a fish in the sea, we emerge from it only with difficulty, through the spirit, to appreciate its specificity and its breadth. But let us observe a little more closely around us: this sudden deluge of cerebrality; this biological invasion of a new animal type that gradually eliminates or subjugates every form of life that is not human; this irresistible tide of fields and factories; this immense and growing edifice of matter and of ideas... All these signs, which we look at daily without trying to understand, are they not crying out to us that something, on the Earth, has changed “planetarily”? (Teilhard de Chardin, 1995, p. 197)

Marie-Joseph Pierre Teilhard de Chardin was born in 1881 in a castle near Clermont-Ferrand, France. From a noble, patriarchal, traditionally Catholic and conservative family, he was the fourth of eleven children. His father, a distant relative of Blaise Pascal⁷, his mother, Berthe-Adele, a great-niece of Voltaire⁸. From his parents he inherited a love of God and of nature, passions that guided his entire work and life and resulted in a unique scientific legacy, one that carries the courage of an evolutionist philosophy capable of uniting science and religion (Lucarelli, 2019, ch.1).

According to Lucarelli (2019, ch.1), Teilhard was a dedicated scholar, studious and observant. He studied letters, philosophy, and elementary mathematics at the University of Clermont-Ferrand. He obtained certificates in geology, natural sciences, botany, zoology, and anthropology from the Sorbonne. He became a master and a doctor and taught paleontology and geology at the Catholic Institute of Paris.

Devoted to the Society of Jesus since the age of 18, Teilhard faced significant

⁷ Blaise Pascal (1623-1662) - French mathematician, philosopher, and theologian.

⁸ Voltaire (1694-1778) - French Enlightenment historian and philosopher.

changes in his trajectory due to the expulsion of the Jesuits from France in 1901, being advised to go to England to continue his geological and theological studies, which were temporarily interrupted by the First World War (1914-1918). Although exempted from military service in 1902, he volunteered during the war, serving at the *front* and aiding victims in French military campaigns.

After the end of the war, Teilhard continued to produce works reflecting his evolutionist thinking. These writings provoked reactions among conservative bishops of the Church, who reported to the Vatican requesting that he be silenced. Faced with the Vatican's resistance to accepting his theories, Teilhard lost his chair at the Catholic Institute of Paris and was instructed to limit his publications to the scientific field. It is during this period that Teilhard embarks on what would become his twenty-three years of exile in the East⁹, where he makes one of his most significant discoveries. Together with his team, Teilhard finds, on Christmas night, the first skull (adult and intact) of a *Sinanthropus*, a *Homo faber* of the Red Lands, which came to be identified as the first inhabitant of China, currently classified as *Homo erectus pekinensis* (Lucarelli, 2019 apud Sesé, 2005)¹⁰.

Between 1938 and 1940, in Beijing, Teilhard writes¹¹ *The Phenomenon of Man*, published only after his death and considered his masterpiece.

Among the numerous essays he wrote in which he sought, from different angles or on particular aspects, to express his views on the cosmic event, *The Phenomenon of Man* occupies an important and, without doubt, central place, by reason not only of its length but also of its fundamental scope (Teilhard de Chardin, 1995, p.17, preface by N.M. Wildiers).

As an “*Introduction to an explanation of the World*”, Teilhard, through a hyper-physical vision, establishes Man as the center of analysis, seeking a “coherent order between consequents and antecedents,” discovering among the elements of the Universe “not a system of ontological and causal relations, but an experimental law of recurrence that expresses their successive appearance in the course of Time” (Teilhard de Chardin, 1995, p.19). Teilhard relies on the “theories that pile up one upon another”,

⁹ While residing in China, Teilhard carried out several expeditions, including research trips to Ethiopia, India, Burma, the Island of Java and South Africa, Mongolia. Even in the context of his exile from the Church, Teilhard divided his life into seasons between China and France, owing to his academic career (Lucarelli, 2019, ch.1).

¹⁰ SESÉ, Bernard. Pierre Teilhard de Chardin, 2005, p.72

¹¹ Remarks on the date of writing: Teilhard de Chardin, 1995, p.359.

producing “characters that necessarily reappear in any of the proposed explanations of the Universe. It is of this definitive ‘imposition’ that expresses conditions inherent to every natural transformation” that Teilhard endeavors to speak in the general study of *The Phenomenon of Man* (Teilhard de Chardin, 1995, p.41). Teilhard refers to his book as a scientific dissertation and as:

“(…) a memoir of geology or paleontology, it represents, in my thinking, a *scientific contribution* for the use of Science: an effort to order our physical knowledge of the world better, opening to Man a place *coherent to the very end*, in Biology” (Teilhard de Chardin, 1995, p. 376).

In the work, Teilhard follows the line of Evolution in the Cosmos, from Pre-life to Beyond-life, passing through Life and Thought, contemplating from the atom to the star, the infinitely complex, the *Within* and the *Without* of things. The phenomenon of consciousness, already contained in the grain of matter, defined as the “*Within of Things*”, represents the “*Stuff of the Universe*.” With the “noiseless” emergence of Homo Sapiens, this consciousness grows more complex, acquiring *Reflection* and creates, through thought, a new layer on the Earth: the noosphere. Evolution continues to advance toward the *Omega Point* (God), which, by radiating, arouses and maintains at the maximum degree of convergence the unanimity of the world’s reflective particles (Teilhard de Chardin, 1995, p.300). From the “Nothing of the past to the All of the future,” Teilhard analyzes Man no longer as a static center, but as the “axis and arrow of Evolution,” who, through his power of *Reflection*, emerges as the “key figure of the universal epic” (Teilhard de Chardin, 1995, p.28, back cover).

To grasp the truly cosmic breadth of the human Phenomenon, it was necessary that we follow its roots, through Life, back to the first enfoldings of the Earth upon itself. But if we wish to understand the specific nature and divine the secret of Man, there is no other method than to observe what Reflection has already given, and what it announces, *for the future* (Teilhard de Chardin, 1995, p.202).

Throughout his work, Teilhard develops and defines principles, laws, and concepts that progressively branch out and reveal themselves ever more. Regarding the noosphere, according to Cerdán (2020, our translation), the three great stages that synthesize the step of Reflection and its implementation are: geogenesis, biogenesis, and

anthropogenesis. All of them are presided over by three great fundamental laws that mutually complement one another: the law of complexity-consciousness, the law of convergence, and the law of personalization, which direct Evolution toward the formation of a human phylum, in which Thought is transformed into a physical energy capable of renewing the Earth.

The change of biological state attained by the awakening of Thought does not correspond simply to a critical point crossed by the individual, or even by the Species. Vaster than that, it affects life itself in its organic totality, - and, consequently, it marks a transformation that affects the state of the entire planet.

(...)

Beneath the pulsations of geochemistry, of geotectonics, of geobiology, one single underlying process, always recognizable: that which, after having materialized in the first cells, was prolonged in the building of nervous systems. Geogenesis, we said, emigrating into a Biogenesis, which in the end is nothing other than a Psychogenesis (Teilhard de Chardin, 1995, p. 196).

Life has long geological periods at its disposal to develop, and Humanity, observed in its thinking form, is still young, almost newborn. On the other hand, Thought, this energy in full expansion, demonstrates, in just a few centuries, a promise of an entirely new biological cycle. An acceleration, a blossoming of the forces of Evolution (Teilhard de Chardin, 1995, p.319).

In truth, for an imaginary geologist who might come, a very long time from now, to inspect our fossilized globe, the most astonishing of the revolutions undergone by the Earth would be situated, beyond any possible doubt, at the beginning of what has, with full reason, been called the Psychozoic. And at this very moment, for any Extraterrestrial capable of analyzing both psychically and physically the sidereal radiations, the first characteristic of our planet would certainly be the fact that it would appear to him not blue, from its seas, or green, from its forests, - but phosphorescent with Thought.

What could be more revealing for our modern Science than to perceive that all the precious, all the active, all the progressive originally contained in the cosmic fragment from which our world emerged is now centered on the “crown” of a Noosphere (Teilhard de Chardin, 1995, p. 198).

Teilhard de Chardin, in the 1947 essay “The Formation of the Noösphere”, approximately ten years after the writing of *The Phenomenon of Man* (1938), states that he bases his arguments on the broadest zoological and biological foundations in order to develop a coherent vision of the “Thinking Earth,” in which he believes we can find, without distortions but still incorporating corrections required by a change of order, the whole process of Life and vitalization (Teilhard de Chardin, 1947, our translation). In the first part of the essay, Teilhard discusses the birth and zoological structure of the noosphere; in part two, the anatomy; in part three, the physiology, and he concludes by affirming that, for reasons of continuity and homogeneity, the final collective phase of human evolution establishes a kind of focal point at the heart of the reflective apparatus as a whole. If we admit this, the whole of human history appears as a progress between two critical points: from the lowest point of elementary consciousness to the final point, to the noospheric point of Reflection (Teilhard de Chardin, 1947, our translation).

Consequently, situated among things in their true dimensions, the historical step of Reflection is far more important than any zoological division, whether the one that marks the origin of the Tetrapods or that of the Metazoa themselves. Among the rungs successively crossed by Evolution, the birth of Thought follows directly, and is comparable only, in order of magnitude, to the condensation of terrestrial chemistry or to the appearance of Life itself” (Teilhard de Chardin, 1995, p.197).

Currently, some authors attribute a prophetic vision to Teilhard, associating the advent of internet globalization with the manifestation of the noosphere. For Vidal (2023, our translation), the noosphere is conceived as a planetary superorganism that encompasses not only humanity, but also the geosphere, the biosphere, and the technosphere. Strobel (2023, our translation) complements this view by describing the noosphere as a super-organization of matter, made possible by socialization and collective cooperation. Only through collective cooperation will humanity be able to fully activate the development of the noosphere. This process does not occur through individualistic attitudes, but through the participation of all in the elevation of universal consciousness. Teilhard believes that the noosphere belongs not only to the Universe and to humans, but to the Humans of the future who, through their effort

to build the noosphere, will find the soul of the earth (Strobel, 2023, our translation, apud Stevens-Arroyo, 2011)¹².

Here bursts forth the disproportion that falsifies every classification of the living world (and, indirectly, every construction of the physical world) in which Man figures logically as nothing more than a new genus or a new family. An error of perspective that disfigures and decrowns the universal Phenomenon! To give Man his true place in Nature, it is not enough to open in the framework of Systematics a supplementary section, - not even an Order, not even one more Branch... Through hominization, despite the insignificance of the anatomical leap, a new Age begins. The Earth “changes its skin.” Better still, it finds its soul (Teilhard de Chardin, 1995, p. 197).

At the age of 73, on April 10, 1955, Teilhard died in New York, on an Easter Sunday. Teilhard devoted his life to God and to the natural sciences. A pilgrim, a “*globe-trotter*”. They were years of travels, research, excavations, and discoveries important to paleontology and geology, whose results brought great recognition from the scientific community, such as the rank of officer in the French Legion of Honor¹³, being “considered, in the domains of geology and paleontology, a glory of French science.” Teilhard also took part in the Natural History Museum of New York, was an Adviser to the Geological Survey of China, general supervisor of the Chinese Geological Society, was awarded the Viquesnel prize by the Geological Society of France, was Director of Research at the National Center for Scientific Research in Paris and, by the American Museum, was included in a select group of significant geologists of the world, whose purpose was to make decisions regarding the geological research carried out on planet Earth. Philosopher, theologian, paleontologist, geologist, poet, mystic, and scientist. There were 365 works in various fields, among which 150 were strictly scientific. During his lifetime, publications of Teilhard’s work remained within the scientific sphere. The publications involving mysticism, philosophy, evolution, and science, today more widely recognized but *anteriori* refuted and prohibited by the Church, such as *The Phenomenon of Man*, were all published *post mortem*, thanks to his secretary Jeanne-Marie Mortier, who created the Pierre Teilhard de Chardin Foundation in 1964, together with the patronage of Queen Marie-José of Belgium (Lucarelli, 2019, ch. 1).

¹² STEVENS-ARROYO, A. M. *Fire and Force: Civilization as Noosphere in the Works of Teilhard de Chardin. Dialogue and Universalism*, v. 21, n. 1, p. 53-65, 1959.

¹³ The most important French honorary distinction.

1.1.3 Vladimir Vernadsky and the Noosphere

Man, through his work and his conscious attitude toward life, is reshaping a terrestrial envelope, the geological domain of life, the biosphere. He is transforming it into a new geological state, the noosphere.

He creates in the biosphere new biogeochemical processes that did not exist before. A planetary phenomenon, the biogeochemical history of the chemical elements has changed remarkably.

An immense new form of biogeochemical energy is represented by the technological work of man, complexly guided by his thought. It is interesting that the increase, in the course of time, of machinery in the structure of human society also takes place in geometric progression, exactly like the reproduction of any kind of living matter, including man.

Statesmen should be aware of the present elemental process of transition from the biosphere to the noosphere. The fundamental property of biogeochemical energy is clearly revealed in the growth of the free energy of the biosphere with the progress of geological time, especially in its transition to the noosphere (Argüelles, 2006, p.50 apud Vernadsky)¹⁴

Vladimir Ivanovich Vernadsky (1863-1945) was born in Saint Petersburg. His father, a professor of political economy, his mother, a music teacher. Strongly influenced by his father and also by his uncle, who introduced him to philosophy and to the works of Darwin, Buffon, and Lamarck, he graduated in natural sciences from the University of Saint Petersburg, being a student, among various scientists, of Mendeleev¹⁵ (creator of the periodic table), Dokuchaev¹⁶ (founder of Pedology), Butlerov¹⁷ (founder of the school of organic chemists), I.M. Sechenov¹⁸ (father of Russian Physiology). In examining who

¹⁴ VERNADSKY, V. I. *Problems in Biogeochemistry II. Transactions of the Connecticut Academy of Arts and Sciences*, New Haven: Yale University Press, 1944. p. 487-488, 498.

¹⁵ Dmitri Ivanovich Mendeleev (1834-1907), Russian scientist, chemist, creator of the first version of the periodic table.

¹⁶ Vasily Dokuchaev (1846-1903), Russian scientist, geologist, chemist, founder of Pedology – the Science of Soil. Dokuchaev is a major name in Russian science. In Brazil, in 2022, the State University of Maranhão inaugurated the Dokuchaev Museum of Soils, Minerals, and Rocks.

¹⁷ Aleksandr Butlerov (1828 – 1886), Russian scientist, chemist, creator of the Theory of Chemical Structure, founder of the school of Organic Chemists, and, among numerous great achievements, a crater on the Moon was named in his honour, the Butlerov crater.

¹⁸ Ivan Mikhaylovich Sechenov (1829-1905), Russian scientist, “father of Russian physiology.”

his teachers were, we can understand that Vernadsky not only received classes, but also experienced and took part in a scientific revolution (Edmunds; Bogush, 2012, our translation). Vernadsky went through periods of study in Europe, earned his doctorate, and taught mineralogy and crystallography at the University of Moscow. His field research was fundamental to the creation of the aluminum industry and to the economic development of the Soviet Union. Between 1917 and 1921, Vernadsky created the Academy of Sciences of Ukraine and, in 1922, the Radium Institute in Saint Petersburg. Vernadsky was married and had two children. With openly leftist thinking, he had a significant political journey. He was a deputy of the new Russian parliament and fought against the undemocratic tsarist treatment given to universities. Founder of the discipline of biogeochemistry, Vernadsky published 416 scientific works, spoke more than 20 languages, and is considered one of the most eminent Soviet scientists (Magalhães, 2017; Edmunds and Bogush, 2012, our translation).

“Vernadsky’s place and role in Russian science is virtually equal to that of Einstein in the science of the West” (Argüelles, 2006, p.44; Edmunds and Bogush, 2012, our translation). Even with a scientific legacy fundamental (and emerging) for understanding planet Earth as an interconnected system, his works are slow to be translated. *The Biosphere* (1926), considered Vernadsky’s masterpiece, in which the author deepens the concept initiated by Eduard Suess (the creator of the term “biosphere”), received a French translation in 1929, an English translation in 1997, and, in Portuguese, was translated recently, in 2019, by Editora Dantes. In Brazil, few are the articles that deal with Vernadsky. The main article in Portuguese used as a reference for this work is the translation of the first chapter of Vernadsky’s unfinished work - *Scientific Thought as a Planetary Phenomenon*¹⁹ – carried out by Ana Torrejais and Gildo Magalhães, published in the journal *Khronos/USP* in 2017. According to Argüelles (2006, p.44), this unfamiliarity with Vernadsky’s work is a consequence of the great division of human relations (East/West) generated by the Cold War and also of Western science’s fascination with scientific materialism. Vernadsky presents “an organically integrative biogeological worldview, and it is the basis of what in Russian science was called *cosmism*”²⁰ (Argüelles, 2006, p.44). Vernadsky’s work has now come to be considered one of the pioneering works of the last century, for it defines the biosphere through a

¹⁹ The text was published in full in Russian in 1991 and translated into English in 1997. The English translation is the official text used by the undergraduate and graduate programs of the Department of History of the Faculty of Philosophy, Letters, and Human Sciences at USP. (Magalhães, 2017, p.155).

²⁰ On Russian Cosmism, see the bibliographic references; GUÉRCIO, Maria Rita.

unifying and holistic concept at a time when reductionism was the driving motivation of scientific research (Edmunds; Bogush, 2012, our translation).

It is important to note that Vernadsky's legacy is widely recognized in Russia and Ukraine, reflecting his scientific and cultural importance. In Ukraine, the Ministry of Education and Science maintains a research station in Antarctica, called "*Vernadsky Station*" and a research vessel, an icebreaker, called "*Noosphere*". The country's National Library bears his name, "*Vernadsky National Library of Ukraine*". In Moscow, his impact is celebrated by the Museum of Geology and by the "*Vernadsky Institute of Geochemistry and Analytical Chemistry*". His name is also present in a metro station, an avenue, mountains, mines, coins, and even a crater on the Moon was named in his honor (Edmunds; Bogush, 2012, our translation).

Vernadsky published assiduously in various studies (mainly between 1920 and 1930) in the areas of mineralogy, crystallography, geology, radiology, geochemistry, biogeochemistry, chemistry, biochemistry, pedology, hydrology, meteoritics, history of science, and philosophy, but the central purpose of his life was the study of the Biosphere and of the geochemical functions of Living Matter (Edmunds; Bogush, 2012, our translation).

Living Matter, even though it constitutes about tenths of a percent of the total volume of matter in the biosphere, is what plays the principal role in the transformation of the geosphere, through its biogeochemical functions (Pylypenko and Ivashchenko, 2022, our translation, apud Vernadsky 1987²¹, p.220; Magalhães and Torrejais, 2017, p.159). These biogeochemical functions "are the result of the natural manifestation of billions of living indivisibles, which reveal themselves together in certain chemical processes, which can be classified into five groups: 1) gaseous functions; 2) concentration functions; 3) oxidation-reduction functions; 4) biochemical functions, and 5) human biogeochemical functions – Homo Sapiens (Pylypenko and Ivashchenko, 2022, our translation, apud Vernadsky 1987, p.222). The biosphere, as the terrestrial envelope that surrounds the entirety of the globe, is conditioned by this living matter that populates it. "There is an uninterrupted exchange of matter and energy between the inert, abiotic part of the biosphere, its inert natural bodies, and living matter". Over time, this *biogenic flux of atoms* (evidenced by the processes of respiration, nutrition, reproduction, etc.) manifests itself through the *regular equilibrium* of

²¹ VERNADSKY, V. I. *Chemical Structure of the Earth's Biosphere and Its Surroundings*. Moscow: Nauka, 1987.

change, always in search of stability (Magalhães; Torrejais, 2017, p.158).

When in Paris (as per section 1.1.1), Vernadsky devotes himself to the concept of noosphere, developing his own study over the last years of his life. Between 1937 and 1938, Vernadsky writes “*Scientific Thought as a Planetary Phenomenon*”, which would become his complete theory of the noosphere, but the draft was interrupted by the difficulties of the Second World War (1939-1945) (Magalhães, 2017, p.155). Here is a passage of his original words:

Man like every living organism is inseparably linked with a certain geological envelope of our planet (the Biosphere), which is sharply different from others and whose structure is defined by its original organisation. With the evolution of species, the reflection of living matter in the environment is sharply changed. So the evolution process is transferred to the natural abiotic and biotic matter: in soils, surface and groundwaters, coal, bitumen, limestones, organogenic ores, etc. Evolution of species passes to the evolution of the Biosphere. However an intensive increase of influence of one species, civilised mankind, on the change of the Biosphere can be observed over the last thousand years. Thus, the evolutionary process receives special geological significance due to the fact that it has created a new geological force— scientific thought of social mankind.’(Edmunds; Bogush, 2012 apud Vernadsky, 1977)²²

In our own rendering: man, like every living organism, is directly linked to a geological layer of the planet (the Biosphere), which is completely different from the other layers and whose structure is defined by its original organization. The interaction of living matter with its environment changes radically with the evolution of species. Thus, the evolutionary process is transferred to natural abiotic and biotic matter: in soils, surface and groundwaters, coal, bitumen, limestones, organogenic ores, etc. The evolution of species becomes the evolution of the biosphere. However, over the last thousand years we can observe an increase in the influence of one specific species on the transformation of the biosphere, civilized humanity. With this, the evolutionary process acquires a special geological significance owing to the fact that it has created a new geological force – the scientific thought of social man.

²² VERNADSKY, V. I. *Scientific Thought as a Planetary Phenomenon (Incomplete Edition)*. Moscow: Nauka, 1977. (In Russian).

Vernadsky brings the primacy of life as a geological force, demonstrating that life makes geology, being not merely a geological force, but rather *the* geological force (Edmunds; Bogush, 2012, our translation). And life, as the principal existing geological force, has created another new geological force, scientific thought.

In the history of scientific thought, of scientific knowledge and its historical development, a new aspect, previously unrecognized, is revealed. This history must not be considered only as the history of human science. At the same time, it is the history of the creation of a new geological force in the biosphere – *the force of scientific thought*, something that was not previously available in the biosphere. This is the history of the manifestation of a new geological factor, a new expression of the organized state of the biosphere. This factor formed spontaneously, as a natural phenomenon, over several tens of thousands of years. This history is not fortuitous, like any natural phenomenon: it is regular, in the course of the time-dependent paleontological process in which the brain of *homo sapiens* was created, along with the social environment in which (consequently, as a related natural process) scientific thought, this new consciously directed geological force, is being created. (Magalhães; Torrejais, 2017, p.166).

In 1941, during the Second World War, Vernadsky was evacuated together with his family from Moscow to Kazakhstan, returning only in 1943. In 1944, he writes “*A few words about Noosphere*”, considering that the biosphere, under the influence of industrialization and scientific thought, was gradually changing stage, becoming the sphere of reason, the noosphere (Edmunds; Bogush, 2012, our translation). Vernadsky died in 1945, in Moscow

Thus, for Vernadsky, with the emergence of the human species it is the biosphere itself (which includes everything from the geological layers of the rocks to the upper parts of the stratosphere) that is continuously evolving, and not only the species contained within it. For Vernadsky, it is the internal organization of the biosphere that dictates evolution. Consequently, creative human thought, or as he calls it, “scientific” thought, is seen as a new “geological force” in the biosphere, qualitatively different from the physicochemical and biological forces. This is what came to give the biosphere the distinct character of “noosphere,” or sphere of reason, through

the phenomenon of human knowledge. (Magalhães, 2017, p.155)

Vernadsky demonstrates that the noosphere emerges as the next step in the evolution of the biosphere, where human thought, previously unavailable, becomes a new geological force, playing a crucial role in the biogenic transformation of atoms, ultimately creating the noosphere.

The noosphere is a new geological phenomenon on our planet. The emergence of each new layer on planet Earth transforms the complexity of the previous form of existence. For the first time, man becomes the greatest existing geological force. The civilized world forms a thin layer of intelligent organisms and their sphere of activity. The noosphere is a historical epoch in the annals of the Earth's crust (Pylypenko; Ivashchenko, 2022, our translation).

1.1.4 José Argüelles and the Noosphere

If the biosphere, as an integral system, is tending toward a total transformation of the whole integral system into a state known as noosphere, a fact perceived by Vernadsky during his lifetime and, his two unanswered questions being the questions about time and consciousness, both materially intangible dimensions, does it not then seem correct that the resolution of these two questions will indeed foster the manifestation of the noosphere which, after all, is the mental envelope of the Earth? (Argüelles, 2006, p.60)

The son of a Mexican father and a German-American mother, José Argüelles (1939-2011) was born in Rochester, Minnesota, and spent his childhood in Mexico. A Doctor of aesthetics and art history, he graduated from the University of Chicago and lectured at various institutions and universities, including Princeton University, the University of California, the University of Colorado, the University of San Francisco, the San Francisco Art Institute, the Naropa, among others. Scientist, writer, artist, seer, visionary. His literary works received translations into various languages. His paintings were exhibited in museums and art galleries, and his murals can still be seen in the psychology department of the University of California, Davis, and at *The Evergreen State College*, in Olympia, Washington (Argüelles, 2005, ch.1; 2006, preface).

As a scholar of comparative religion and world thought, Argüelles made significant

contributions to research on the *I Ching*. Among his instructors is Chögyam Trungpa Rinpoche, a Tibetan Buddhist master, a central figure in the introduction of Vajrayana Buddhism to the West. Recognized as one of the creators of the Earth Day concept and founder of the *Whole Earth Festival*, Argüelles received a special commendation from the State of California for his contribution to art and culture. In August 1987, Argüelles carried out the planetary event called the Harmonic Convergence²³, for which he summoned thousands of people to take part in a synchronized global collective meditation for peace on the planet (*Law of Time*, 2024). In conjunction with the Harmonic Convergence, Argüelles launched *The Mayan Factor: Path Beyond Technology*, his literary work that earned him great international recognition. In this work, Argüelles synthesizes his many years of study of Mayan science, describing historically and mathematically a system of numerical and cyclical intersections among the *Tzolkin* - the pre-Columbian Mayan calendar, the *I Ching* and other elements of Buddhism, shamanism, and ancestral cultures, which together culminate, among many discoveries, in the decoding of the Law of Time, a concept to be explored in the final section.

The true “end of science”, the much-anticipated radical change, means the renunciation of the idea of continuous progress. Or, at least, a renunciation long enough to discover whether there cannot exist non-physical or non-materialist sciences that wholly transcend the notion of progress – and non-progress. Clearly, the myth of scientific progress and technological superiority could receive no greater blow than the discovery that a more advanced science existed before the emergence of the myth of progress, practiced by a people who, by modern assessment, were still in the Stone Age. More specifically, I am referring to a system of thought virtually disdained by all the proponents of the “new science.” This system of thought is the science known to and practiced by an ancient people called the Maya (Argüelles, 2005, p.17).

In 2002, Argüelles received recognition from nine indigenous elders atop the Pyramid of the Sun, in Teotihuacan, Mexico, for regenerating traditional knowledge and awakening humanity to the meaning of a new time. In 2003, he was publicly recognized by the archbishop of the Coptic Orthodox Church of Saint Petersburg, Russia, as

²³ <https://www.washingtonpost.com/archive/lifestyle/1987/08/17/o-hum-all-ye-faithful-harmonic-convergence-ushers-in-a-new-age/a2bf1095-6436-4e2e-abd8-ca37655662dc/>

the bearer of the Mayan prophecy. In 2010, in Mexico, Argüelles was decorated with the Nicholas Roerich Peace Medal²⁴ for his lifelong work and effort to promote peace through culture (Argüelles, 2006, preface; *Law of Time*; South, 2020b, ch.6). José Argüelles, brother of the poet Ivan Argüelles, had two children from his first marriage. He traveled his Mayan journey, first, together with his second wife, Lloydine Burris Argüelles, and later, with Stephanie South, the Red Queen²⁵, his biographer, successor, and guardian of his legacy, with whom he remained until the end of his days. Argüelles died in March 2011, in Australia (*Law of Time*, 2024).

Argüelles's scientific studies, throughout his life, gradually merged with his spiritual journey, which began at the age of fourteen. When he descends the stairs of the Pyramid of the Sun, "astonished and marveling at the grandeur of the city of Teotihuacan," he makes a vow to himself: "whatever happened here, I am going to know – not just as a foreigner or as an archaeologist, but as a true knower, a seer" (Argüelles, 2005, p.26). In his own words, from that moment on, his life was devoted to a knowledge not merely *about* things, but to a knowledge that comes from *within* things. And in this context it is important to highlight that, due to the Spanish invasion, much of the historical record of the ancient Mesoamerican civilizations was destroyed, leaving scarce physical evidence of this cultural heritage. In counterpoint, Argüelles, in his Mayan trajectory named Valum Votan²⁶, took up the mantle of the prophecy of the Chilam Balam tradition²⁷ receiving transmissions and channelings that allowed the discovery and deepening of the mathematical and astronomical codes left by the Maya (Argüelles, 2006, p.17).

The question of being a "prophetic messenger" is delicate to many people. However, as the Qur'an says, "In truth We are ever

²⁴ <https://roerich.org.br/pacto-roerich/>

²⁵ "Red Queen" designates an archetypal force of energy. Red represents the colour of initiation, while "Queen" refers to the feminine matrix (South, 2020b, p. 67). This name is also associated with the tombs of Pacal Votan (603-683 A.D.) - one of the greatest rulers of the Maya civilization – and of the Red Queen, discovered, respectively, in 1952 and 1994. The first tomb was found by the archaeologist Alberto Ruz Lhullier, and the second, under the leadership of the archaeologist Arnoldo González Cruz. The tomb of Pacal Votan, unique for its pyramid style resembling the Egyptian ones, is located in Palenque/Mexico, in the Temple of the Inscriptions. This discovery is considered one of the most significant in Maya archaeology, as it reveals a richly decorated sarcophagus and detailed inscriptions related to Maya cosmology and history. The tomb of the Red Queen, in turn, situated near the tomb of Pacal Votan, in Temple XIII, takes this name owing to the intense red colouring that covers her bones and the interior of the tomb (South, 2020b, ch.4).

²⁶ Valum Votan (José Argüelles), "bearer of the prophetic lineage of the galactic Maya" (South, 2020b, p.48). "The galactic Maya are planetary navigators and mappers of the greater psychic field of the Earth, the solar system, and the galaxy beyond. They are a telepathic culture" (South, 2020b, p.58).

²⁷ "On the prophetic tradition of Chilam Balam, see *The Book of Chilam Balam of Chumayel*, edited and translated by Ralph L. Roys (Norman, Okla: University of Oklahoma Press, 1967) (Argüelles, 2006, p.18, footnote).

sending messengers..." (44:5). Messengers are often self-revealed and confirmed only by God. In my case, I was able to trace from the origins of the prophetic lineage of the Chilam Balam to Pacal Votan, from whom I received direct transmissions. The method of transmission is similar to the terma tradition of Tibet. *Terma*, or “*hidden treasure*”, is left by a magician or prophet to be “discovered” at a precise moment, much later in time, by a person designated for that task (Argüelles, 2006, p.18, footnote)²⁸.

From the beginning of his research, Argüelles says he was motivated by an intuitive awareness of the intrinsic wholeness of human beings and by the knowledge that “this wholeness is a reflection of the Earth, of the solar system, and of the cosmos itself as a whole” (Argüelles, 2006, p.15). His works form a growing *continuum* of knowledge – a sequence that reveals and complements itself, resulting in a body of works that deal with cosmic history, the knowledge of time and of consciousness. Argüelles became the decoder of the Law of Time - whose “conceptions of time surpass anything that the Western imagination can conceive” (Argüelles, 2006, p.16) - and an important activist of the noosphere.

In 1996 and 2006, Argüelles convened the first and second Planetary Congress of Biospheric Rights, events that took place in Brasília/BR. In 2009, as a member of the Spiritual-Ecological Assembly of the Noosphere, in Moscow, he launched the first World Forum of the Noosphere²⁹, an event that evolved into a series of synchronized bioregional congresses (Argüelles, 2012, p.26, our translation). Launched in 2012, after his death, *Manifiesto por la noosfera* was the first comprehensive book on the noosphere to be published in the West (Argüelles, 2012, p.31), still without a translation into Portuguese.

Despite his important contribution to the history of the noosphere, the academic references to José Argüelles remain discreet, generally associated with the context of the *New Age* movement (Vidal, 2023; Cerdán, 2020; Hubbes, 2021; our translation). This discretion may be attributed to the fact that his work challenges the prevailing scientific structures, often not fitting into the dominant models. Nevertheless, Argüelles gave voice to and amplified the studies of Teilhard and Vernadsky, his work being

²⁸ For *Terma*, see Tulku Thondup Rinpoche, *Hidden Teachings of Tibet: An Explanation of the Terma Tradition of Tibetan Buddhism*, Boston: Wisdom Publication, 1997. (Argüelles, 2006, p.18, footnote)

²⁹ <https://www.noosphereforum.org/main.html>

fundamental to the deepening and dissemination of the concept of noosphere.

Argüelles, in his book *Time and the Technosphere – The Law of Time in Human Affairs* (2006), presents the Law of Time through an analysis of September 11, *the Inevitable Event*, explaining, through his lens, the “dynamics of the biosphere in its process of transformation into the noosphere” (Argüelles, 2006, p.31). In this context, Argüelles examines the process of rupture of the technosphere³⁰, which, according to him, occurs through the understanding of time and consciousness.

In the first place, let us say that the noosphere had already existed ever since life was established on Earth. In this sense, the noosphere is the sum of the mental interactions of all life. (...) Being a whole-system function of the Earth and fundamental to the functioning of the biosphere as a combination of cycles in which the organic and the inorganic interact in an established order of chemical transmutations, the noosphere must also be the mental coordinating field or program of this complex of vital interactions. It must, therefore, be a feature of the evolution of the biosphere that the noosphere remain unconscious until a significant moment is reached – the climax of the cycle of biogeochemical combustion, the promulgation of the biosphere-noosphere transition.

As the mental field of the Earth, this transition must be an act of collective self-reflection that brings the noosphere into an active consciousness. Defined as the mental envelope of the Earth, the noosphere can only enter conscious manifestation through a collective self-reflection, proposed by the change of calendar. And further, as the mental envelope of the Earth, above and in discontinuity with the biosphere, the noosphere – mental sphere – can only mean one thing: the advent of universal telepathy among human beings (Argüelles, 2006, p.155).

The change of calendar cited by Argüelles refers to the alteration of the current macro-organizing system of society, the Gregorian calendar, which generates an artificial

³⁰ “Global sphere of technology; an artificial stage between the biosphere and the noosphere, representing the apex – the biogeochemical combustion – of the acceleration of the biogenic migration of atoms that precipitate the crisis in the biosphere as a prelude to the advent of the noosphere; characterized by the exponential curves of the human population, of the machine, and of money at the expense of biospheric integrity and stability; defined as the specific 56-year cycle (two Gregorian cycles of 28 years), 1945-2001, in which war and terrorism are the governing aspects; the complete manifestation of the 12:60 order of time, concluded with the Inevitable Event on 11 September 2001” (Argüelles, 2006, p.291).

mechanistic frequency called “12:60,” to the synchronary of 13 moons, which synchronizes humanity with the frequency of natural time “13:20.” This knowledge originates from the Law of Time and will be explored at the end of the work.

At this point it is important to understand that, for Argüelles, the noosphere represents the planetization of consciousness. According to him, the activation of the noosphere is essential to lead planet Earth beyond the crisis generated by the technosphere, toward the equilibrium of the biosphere and the expansion of human consciousness, which, in this scenario, acts as the very regulating mechanism of the noosphere. Considering that the development of the mind and the expansion of consciousness are the paths to a higher degree of knowledge and communication (Argüelles, 2005, p.35), Argüelles argues that a genuine globalization of consciousness through the science of time can only be applied from a radical rupture of the historical continuum (Argüelles, 2006, p.37). According to Argüelles, the evolution of consciousness is inseparable from time, and the evolution of time is inseparable from consciousness (Argüelles, 2006, p.75).

In the evolution of time as consciousness, the discovery of the Law of Time is a product of the crisis of a consciousness incapable of sustaining itself in the environment of the technosphere. This is because that environment is a pure function of artificial time 12:60. Even though the extensions of the senses and technological capacity give the human being in the biosphere a holistic perspective of seeing the whole Earth from space, consciousness is continuously subordinated to the care and maintenance of the machine (or of its vital fluid, money), and thus cannot maintain a sustained state of elevated perception or continuous consciousness (Argüelles, 2006, p.76).

For Argüelles, the noosphere “is the field of planetary consciousness in which human beings must participate and complete their evolution” (Argüelles, 2006, p.156). It is through conscious and meditative minds, connected to natural time, that the noosphere can be activated.

1.2

A Paradigm For a New Layer

In order to understand the current scenario and the challenges involved in major structural transformations, indispensable for humanity to advance toward a future coherent with its evolutionary potential, this section will carry out, in the first part, a review of the current anthropological paradigm. In the second part, it will bring an academic view that describes the noosphere as the “*Third Story*,” a concept in which values raise the sustainability of the common home, situating human civilization as a superorganism, an active source of power capable of leading the world, through its synergistic relationships, toward directions other than extinction. In the end, the counterpoints are analyzed and the opening is promoted for an integrative and systemic view of the noosphere, emphasizing the importance of a collective alignment that transcends the anthropocentric and mechanistic paradigm.

1.2.1 Crisis and the Recognition of New Paradigms

In the introduction to *The Phenomenon of Man*, by Teilhard de Chardin, Prof. Dr. of philosophy José Luiz Archanjo, also the translator of the work, opens the paragraphs of the 1995 Brazilian edition already speaking of a time of crisis. The century was the twentieth.

Even though we are champions when it comes to crises, it is possible to look back and identify that, in other times, other worlds – less vast than ours, but no less “universal” in themselves – also faced difficult and grave phases in the evolution of things, of facts, of ideas. The Trojan War, the Hegemony of Macedonia, the Advent of Christianity, the Fall of the Roman Empire, the Invasion of the Barbarians and then of the Arabs, the Spread of Islam, the Adventure of the Crusades, the Great Navigations, Discoveries, and Inventions... also forced Man to restructure and to re-know his Universe. (Teilhard de Chardin, 1995, p.3)

VUCA. That is how the world came to be recognized by the American military, after the end of the Cold War (1947-1991). VUCA is the acronym for volatile (*volatile*), uncertain (*uncertain*), complex (*complex*), and ambiguous (*ambiguous*).

In 2020, the North American anthropologist Jamais Cascio used another acronym to define the world scenario: BANI, that is, brittle (*brittle*), anxious (*anxious*), nonlinear (*nonlinear*), and incomprehensible (*incomprehensible*) (VUCA X BANI, 2022). Acronyms that express the state of a world in crisis, visible, for example, in the psychological effects of climate change.

In 2021, a global-level study was published in the journal *The Lancet* carried out with 10 thousand young people (16-25 years old), proving that more than half, 59%, were extremely worried about the climate crisis and 84% were at least moderately worried. More than 50% reported feelings of sadness, anxiety, anger, powerlessness, and guilt, and more than 45% confirmed that such feelings negatively affect daily life. The lack of forceful governmental actions capable of providing protection to the environment in accordance with the mitigation needs declared by the research reinforces the feeling of collective anxiety. More than 83% said that people have failed in caring for the planet and 75% believe that the future is frightening (Hickman et al., 2021, our translation).

Faced with this scenario, some theorists claim that a mixture of goodwill, technology, geoengineering, and innovation would be enough to land softly in a new ecological capitalism, capable of containing the crisis without major sacrifices, and, at the other extreme, some believe that nothing will be enough except a radical anthropological turn, a change of the productive system and of the values upon which we lead our lives today (Cerdán, 2020, our translation).

According to Argüelles, the crisis calls for a “change of pattern of an authentically radical nature” (Argüelles, 2005, p.17) and a “mental structure adequate to examine the clues that can in some way divert the planet from the course of extinction onto the path of transformation” (Argüelles, 2005, p.22). Argüelles (2006), citing an unpublished essay by the Russian scientist Maria Maroushkina, argues that the global crisis is deeply rooted in the Newtonian-Cartesian paradigm:

Underlying the technocratic materialist civilization is the Newtonian-Cartesian paradigm formed in the Middle Ages, whose laws of gravity and motion are the central point, as well as the logical principles of evidence laid down by Descartes. This stratum of “permanent” belief, a cultural metaprogram, blocks every possible human attempt at the conquest of mechanization. It is this metaprogram, grounded in the simple and unexamined apparatus of the clock, and orchestrated by the equally unexamined effects

of an irregular calendar, that keeps the consciousness of the human being unchanging and without true solutions to its problems. As the problems worsen, the confusion of consciousness – which is truly in a state of crisis – only deepens ever further (Argüelles, 2006, p.64).

In the article *From Anthropocene to Noosphere: The Great Acceleration*, Shoshitaishvili (2021, our translation) describes the *Great Acceleration* as a period of radical changes in the relationship of the human collective with planet Earth. This historical transition gains momentum, mainly, after the end of the Second World War. He interprets this period through two anthropological paradigms; the Anthropocene and the Noosphere, affirming that the Anthropocene tends to generate catastrophic perspectives regarding life on Earth and challenges the understanding of our capacities as a species on a global scale, and that the Noosphere, by representing the mind, culture, hope, the designation of a typology of conscious humanity, emerging from technological and cultural interconnection, may occasionally appear utopian (Shoshitaishvili, 2021, our translation). The expression “Anthropocene” was proposed in the article “*Geology of mankind*” (2000), by the Chemistry Nobel laureate Paul Crutzen, who described it as a new self-destructive geological force (Cerdán, 2020, our translation).

The fact is that moments of crisis drive the recognition of new models of civilization. The development of a noospheric and holistic vision of the world is essential to formulate concrete strategies that address the global problems of our time (Jaseckova; Vartiak, 2023, our translation). In *The Mayan Factor*, Argüelles reflects: “What makes us so certain that scientific materialism is the best technique for wresting answers from a cosmos that is infinitely more vast and mysterious than the rational mind can conceive?” (Argüelles, 2005, p.16).

1.2.2 A Noospheric Vision

Recently, the interdisciplinary research group at the University of Brussels³¹, which devotes itself to seeking scientific foundations for the theory of the noosphere, and for this purpose integrates, among various disciplines, neuroscience, anthropology, psychology, astrophysics, and sustainability, published the article “*The Third Story of the Universe*:

³¹ <https://clea.research.vub.be/research/human-energy-project>

An Evolutionary Worldview for the Noosphere”, in which the authors argue that the crises generated by a VUCA world have deteriorated people’s sense of coherence, hindering the perception that the world can be comprehensible, manageable, and meaningful (Heylighen; Beigi; Vidal, 2024, our translation).

Heylighen, Beigi, and Vidal (2024) consider that, historically, comprehensive narratives have played a crucial role in offering a sense of coherence, positioning human existence within a broader and more integrated view of the universe. In this sense, they distinguish three categories of worldviews. The *First Story*, based on traditional religion and guided mainly by the Bible, sees the world as the creation and governance of divinities, offering clear meaning and values, but with limitations in dealing with contemporary complexity. The *Second Story*, centered on traditional materialist science, considers the universe to be a mechanical and predictable system, useful for understanding and solving practical problems, but devoid of values and purpose. The *Third Story*, in turn, emerges as a scientific vision that interprets the universe as a self-organized system, evolving toward greater complexity and consciousness. This progress is observed in cosmological evolution, which advances from the emergence of space-time, particles, cells, organisms, minds, and societies (Heylighen; Beigi; Vidal, 2024, our translation).

Inspired by Teilhard de Chardin’s law of complexity-consciousness, the *Third Story* proposes that more complex and conscious systems emerge as they adapt to their environments through synergistic interactions. Unlike reductionist interpretations, it values cooperative relations ("win-win") rather than conflictual ones ("lose-lose"), promoting synergies that increase collective fitness and sustainability. Examples of this synergy are present from stable atoms and molecules to ecosystems and human societies (Heylighen; Beigi; Vidal, 2024, our translation).

The authors highlight the self-organizing perspective of the *Third Story* - the noosphere - as the most advanced level of evolution, where human civilization functions as a global superorganism. This narrative combines the clarity of purpose and values of the *First Story* with the predictive and technological capacities of the *Second Story*, offering an integrating vision that connects individuals to a greater whole. Thus, for the authors, the *Third Story* proposes a future-oriented worldview, anchored in ethics, values, and a purpose that transcends the limitations of the previous perspectives (Heylighen; Beigi; Vidal, 2024, our translation).

1.2.3 Utopia and Transformation

Recognizing the universe proves essential to situating and interpreting the world in which we live. VUCA world, climate crisis, Anthropocene, *Great Acceleration*, terms that characterize a period marked by profound and destructive human impacts on planet Earth.

In this scenario of global challenges, overcoming the limits of the Newtonian-Cartesian paradigm, the noosphere arises as the harbinger of a new era of studies that unites science and spirituality. The “*Third Story*” (Heylighen; Beigi; Vidal, 2024, our translation), grounded in collaboration, ethical innovation, and the overcoming of reductionist views, proposes this integration. This approach promotes synergistic interactions among individuals, communities, and the planet, offering an evolutionary narrative that points to paths for planetary regeneration and equilibrium.

However, it is important to note that, throughout the research, counterpoints to the concept of noosphere become evident. According to Jaseckova, Konvit, and Vartiak (2022, our translation), the noosphere has been the target of substantial criticism since its formulation. Among the main objections, the utopian character attributed to the idea stands out, considered by some authors as “scientifically untenable” (Jaseckova et al., 2022, our translation, apud Viner, 1995). Frequently compared to sociopolitical utopias, the noosphere is criticized for ignoring the dialectic of life and adopting an excessively optimistic view of noogenesis (Jaseckova et al., 2022, our translation, apud Kuttyrev, 1996; Stilmark, 2001).

Complementing this critique, Pylypchuk (2024) observes that, in many recent publications, the noosphere has been treated less as a material phenomenon and more as an “emanation of the mind.” This idealist approach, according to the author, develops exaggerated expectations about the potential moral and ethical benefits of the noosphere (Pylypchuk, 2024, our translation). Such idealizations raise doubts about its practical viability in the face of contemporary environmental and social complexities (Jaseckova et al., 2022, our translation).

Despite the counterpoints, Teilhard de Chardin reminds us that the necessary transformation requires not only external changes, but an inner and collective metamorphosis.

It is impossible to accede to a fundamentally new environment without passing through the inner trances of a metamorphosis. Is

not the child terrified when it opens its eyes for the first time?... To adapt to lines and horizons immeasurably enlarged, our spirit must renounce the comfort of the narrowness of vision that is familiar to it. It must recreate an equilibrium for everything that it had wisely ordered in the depths of its small within. Dazzlement upon emerging from an obscure confinement. Emotion upon suddenly emerging at the top of the tower. Vertigo and disorientation... The whole psychology of modern disquiet is linked to its abrupt confrontation with Space-Time (Teilhard de Chardin, 1995, p.248).

Teilhard also emphasizes that there is an essentially human mission in building the times to come, recognizing the need for a transformation. “There is, therefore, a task or mission, essentially human, to be assumed, in this eye of the hurricane, in this moment of crisis in which we find ourselves: to build the Times to Come” (Teilhard de Chardin, 195, p.7). And he adds: “We can only activate a greater degree of freedom by joining and associating ourselves with others, through an appropriate path” (Teilhard de Chardin, 1947, our translation).

Unique in this respect among all the energies of the Universe, Consciousness is a magnitude about which it is inconceivable, even contradictory, to suppose that it could culminate or curve back upon itself. Critical points along the way, as many as one likes. But a halt or a reversal, impossible: and this for the simple reason that every increase of inner vision is essentially the germ of a new vision that includes all the others and that carries still farther (Teilhard de Chardin, 1995, p. 251).

The transition to a noospheric paradigm demands courage to transcend limits, recognizing that the Anthropocene represents not only a milestone of negative impacts, but also an opportunity to restructure the relationship between humanity and planet. Despite the criticisms that attribute a utopian character to the noosphere, it re-emerges as an invitation to transformation, pointing to the need for an inner and collective metamorphosis. As Teilhard teaches, human progress requires breaking away from narrow visions, embracing the disquiet and the vastness of enlarged horizons. The challenge of building the times to come lies in the capacity to gather a collective consciousness that promotes synergistic collaborations and reveals the evolutionary potential of humanity, leading it toward a new stage of its existence in the cosmos.

1.3

Time As a Synchronizing Factor of the Noosphere

In this section, while highlighting the importance of investigating a model that catalyzes a planetary transition, the Law of Time will be analyzed as an essential element in the synchronization of humanity with the noosphere. From this perspective, the Law of Time proposes a broadened vision of collective consciousness, detached from anthropocentric paradigms. As Argüelles (2006, p. 23) stresses, "the noosphere is a condition of non-anthropocentric consciousness," pointing to a new stage that transcends the traditional limits of human perception.

The discovery of the Law of Time defines the point between the two stages of the noosphere described by Pierre Teilhard de Chardin: "The first stage was the elaboration of lower organisms, up to and including man, by the application of irrational combinations of elementary sources of energy received or released by the planet. The second stage is the super-evolution of man, individually and collectively, through the use of refined forms of energy scientifically subordinated and applied within the womb of the noosphere, thanks to the efforts of all the men who work reflectively and unanimously upon themselves... To become a planetary humanity is to acquire new physical powers that allow matter to be super-organized. And, more important still, is it possible that, by the direct convergence of its members, it might be capable of, by resonance, releasing psychic powers whose existence is still unsuspected? (Argüelles 2006, p.76 apud Teilhard, 1959, p.183)³².

The analysis is based on the principles of the work of José Argüelles and is structured into three main parts alongside this introduction: initially, it addresses the historical roots that underpin the studies of José Argüelles; next, it examines the Law of Time and its role in the synchronization of the universe; finally, it investigates how time and consciousness act jointly in the activation of the noosphere.

³² Pierre Teilhard de Chardin, *The Future Of Man* (New York: Harper & Row, 1959), 183. (Argüelles, 2006, p.77).

In a few words, time is such a vast and important topic in the orientation of human consciousness, within the realm of the biosphere, that we can declare it to be of the utmost importance in all human relationships. In fact, the cosmic order, of which the biosphere is the dynamic regulating mechanism on planet Earth, is itself the expression of time as the agent of universal manifestation. However, as Vernadsky observed in 1944, while we define space by its own metric and geometric systems, applying those same standards to time, we neither define nor know anything about time. The cause of this dilemma seems to lie in the fact that, whereas space is perceptible as a sensory medium – we can see it, touch it, hear through it – and is therefore evidently measurable, the same does not happen with time. Time is in the mind and, therefore, is inseparable from the question of consciousness. In fact, you cannot know or experience time without being conscious (Argüelles, 2006, p.63).

It is important to understand, still as a preamble, that time and consciousness are interdisciplinary concepts, explored by fields such as physics, philosophy, psychology, and neuroscience, each bringing unique and complementary perspectives to their understanding. Since the fifth century B.C., Greek philosophers such as Plato and Aristotle have devoted themselves to examining time, highlighting its complexity and multiple dimensions. These thinkers introduced the distinctions between *Kairos*, a qualitative approach that values the opportune and meaningful instant, where possibility and action converge, and *Chronos*, which corresponds to linear, measurable, and sequential time, used to organize events objectively. These initial reflections opened paths to a deeper analysis of the nature of time, connecting it not only to the organization of life but also to human experience and its relationship with the cosmos (Falcão, 2017).

In terms of neuroscience, to conclude the preamble, it is relevant to point out that, according to Kent and Wittmann (2021, our translation), the consciousness of time is still a developing area, with various open questions before a unified neural model is reached. Contemporary theories of consciousness frequently focus on brief, discrete "functional moments," ignoring the continuous and broader dimension of conscious experience, described as the "experienced moment." Few approaches consider time as a dynamic flow that fully accompanies conscious experience. Deepening the study of the consciousness of time may not only highlight divergences among competing theories, but also reveal unexplored aspects of current models. It is possible that different perspectives on consciousness are complementary, provided that the distinct aspects of time

are considered. Should no theory manage to fully integrate the consciousness of time, new research opportunities may arise. An essential step, according to the authors, is to centralize subjective time as an object of study, since temporal perception, especially over longer durations, demonstrates a strong connection with the perception of the self over time. Research indicates that greater self-awareness corresponds to greater temporal consciousness, and vice versa. On the other hand, a disturbed sense of identity is generally accompanied by an equally disturbed perception of time (Kent and Wittmann, 2021, our translation apud Fuchs, 2013; Martin et al., 2014).

1.3.1 *The Mayan Factor*

Unlike Western science, which is based on the investigation of matter – hence scientific materialism – Mayan science is based on the mind as the foundation of the universe. The universe is mind, and the various properties of the mind can be described through the relations of whole numbers. For Mayan science, what we call *matter* represents different tones agglutinated as a harmonic frequency spectrum, perceptible to the touch. Like all other resonant experiences, matter can be represented by relations of whole numbers. As every mathematician knows, number in itself is a purely mental structure (Argüelles, 2005, p.58).

José Argüelles devoted his life to the study of the history and codes of Mayan science, plunging deeply into its history and its time systems. His particular interest in the *Tzolkin* was sparked by Tony Shearer, a scholar of Mesoamerican cultures. This encounter marked the beginning of a journey that would lead Argüelles to decode and reinterpret the *Tzolkin* as a universal synchronization matrix, connecting humanity, nature, and cosmos (*Law of Time*, 2024).

But who were the Maya? Anthropological dogma holds that the Maya were part of a great group of Amerindians who crossed the Bering Strait during the last Ice Age, about 12,000 years ago, and finally settled in the region that today corresponds to Central America. Argüelles affirms that “reading the late Mayan texts, such as the *Popol Vuh*, *The Book of Chilam Balam* and *The Annals of the Cakchiquels*, one can get the clear impression that the Maya really did come from afar” (Argüelles, 2005, p.19). He highlights this civilization as one of the greatest cultural expressions of the planet, with a vast quantity of ancient cities and temples scattered throughout the forests of Yucatán, in Mexico, and the mountains of Guatemala. The apogee of the Mayan civilization oc-

curred approximately between 200 and 830 A.D., before the abandonment of the main centers, an event still mysterious, despite theories suggesting plagues or droughts as causes for the sudden disappearance of this population (Argüelles, 2005, p.20).

For Argüelles, there is a curious resonance between the Maya of Central America and the traditions of the East, particularly in India, where the term *maya* holds great philosophical importance, meaning both “origin of the world” and “world of illusion.” In Sanskrit, *maya* is associated with concepts such as “great,” “measure,” “magic,” and “mother,” and he points out that it is no coincidence that Maya is the name of the mother of the Buddha. In the Vedic scriptures, such as the *Mahabharata*, Maya also appears as a respected astronomer, magician, and architect, in addition to designating a tribe of navigators. Argüelles sees additional parallels with Egypt, where the term *mayet* symbolizes the universal order, and with Greek mythology, where Maia is one of the seven Pleiades, daughters of Atlas and Pleione, known as the brightest star of that constellation (Argüelles, 2005, p.18).

According to Argüelles, what distinguishes Mayan science from current science is that, due to the understanding of time/mind, Mayan science can be described as both pre- and post-scientific (Argüelles, 2005, p.18). In this sense, Argüelles highlights the precision of the mathematical and astronomical knowledge of the Maya: the Maya calculated the revolution of the Earth around the Sun to the third decimal place and possessed calendars that recorded cycles of lunation, eclipses, and synodic revolutions of the planets, such as Mercury, Venus, Mars, Jupiter, and Saturn. On some monuments, it is possible to find records of events dating back 400 million years, made on the basis of their vigesimal metric (Argüelles, 2005, p.18). According to Argüelles, the classic Maya showed with great skill and naturalness how our annual cycles correlate with the galactic harmonic pattern (Argüelles, 2005, p.78). Argüelles stresses that Mayan science is “a system that operates within a galactic structure” and that “a genuinely galactic frame of reference” today still remains within the field of what we call myth, art, or religion (Argüelles, 2005, p.54).

The studies of José Argüelles proved, throughout his trajectory, prophetic and fundamental to the understanding of cosmic history, of consciousness, and of time, the latter interpreted as the fourth dimension — the dimension of time, located in the mind. Through his studies and meditations on the Mayan harmonic codes, particularly the *Tzolkin*, Argüelles affirms that he can access what he calls the GM108X frequency, a “Galactic Mayan Mental Transmission” (South, 2020a, p.9). The GM108X is a “transmission circuit,” coming from “other star systems through the center of the galaxy,

Hunab Ku.³³” Rather than being a bloodline, as on Earth, the GM108X is a mental lineage (South, 2020b, p.57). According to Argüelles, this signal represents a spiritual and vibrational connection with the synchronicities of the galactic order, being a direct channel from the galactic mind to humanity. It was through the practice of natural time and the mental access of the GM108X frequency that he was able to translate and deepen the knowledge that will be explored below (South, 2020a, preface).

1.3.2 The Law of Time

From my experience with time, seeing and studying the human as part of a larger self-evolving fabric of the biosphere, I came to the conclusion that the human is living in a time apart from the rest of the biosphere – an artificial time whose climax and end are inevitable, for nothing artificial can resist the forces of truth. If the human being is living in an artificial time, the clock is an artifact whose measuring system has nothing to do with natural cycles; being a wholly abstract standard, then there must be something called natural time. I will go a little further still in affirming that not only does a natural time exist, but also a law governing natural time, and this is the Law of Time (Argüelles, 2006, p.28).

“Newton discovered gravity only 300 years ago, although it had always existed; so too is it with the Law of Time, which has always been in operation, even though it has only recently been discovered” (Argüelles, 2006, p.28). According to Argüelles, the Law of Time is a universal factor, described as a “governing principle of a higher self-existing consciousness that regulates the order of the Universe with respect to its living and non-living matter” (Argüelles, 2006, p.69). This principle operates independently of any culture or civilization, including the Mayan (Argüelles, 2006, p.81).

For Argüelles, time is the element responsible for universal harmony, for it “synchronizes everything continuously; from a single coherent whole of the micro to

³³ “Hunab Ku is generally translated as “Sole Giver of Movement and Measure”; it is the principle of life that lies beyond the Sun. In this respect, Hunab Ku is the name of the galactic core, not merely as a name, but as a description of purpose and activity as well. Movement corresponds to energy, the principle of life and the all-pervading consciousness, immanent in all phenomena. Rhythm refers to the principle of cadence, of periodicity and form, being responsible for the different limiting qualities that energy assumes through different transformations” (Argüelles, 2005, p. 54).

the levels of the macro” (Argüelles, 2006, p.69). Argüelles further reinforces that “it is the Law of Time that governs the totality of the biosphere and everything else in the Universe, according to principles that are only vaguely known to us, such as synchronicity and telepathic instantaneity” (Argüelles, 2006, p.28).

a) Natural Time – The 13:20 Frequency and The Tzolkin

According to Argüelles, the Law of Time is a primordial law of creation, whose universal synchronization constant is expressed by the frequency of “mathematical proportion, self-existing and intrinsically perfect: 13:20,” discovered through the studies of the sacred Mayan count of time (Argüelles, 2006, p.69). This 13:20 frequency represents thirteen vibratory tones and twenty luminous seals, which together form the synchronic matrix of 260 *kins*³⁴ (13x20), known as the *Tzolkin*. The *Tzolkin* operates as a periodic table of frequencies, rotating radially, day by day, *kin* by *kin*.

Argüelles stresses: “It is important that it be understood very clearly that the 13:20 frequency and the mathematical matrix³⁵ that defines the operations of this synchronization frequency (*Tzolkin*) are the pure mathematics of time apart from the metrics and geometries of three-dimensional space” (Argüelles, 2006, p.75).

We shall consider, next, the nature and meaning of the mathematics of the Law of Time and its origin with the mysterious civilization of the ancient Maya. The pattern or matrix of the 13:20 frequency, a structure of 13x20 (260) units, was the means of accommodating the basic “calendar” used by the ancient and present-day Maya: the *Tzolkin*, or sacred calendar, a set of 13 numbers and 20 seals that repeat their permutation sequences every 260 days. Although this 13x20 matrix accommodates the *Tzolkin*, it is not restricted to being only a calendar, as I have amply demonstrated in the *Mayan Factor*. The 13:20 frequency is the universal constant of time from whose mathematics the *Tzolkin* is derived. Based on the permutation

³⁴ *Kin* is the smallest measure of time, the smallest fractal of Maya mathematics. It represents a “number 1”, a day and also a galactic signature, that is, a joining of a seal with a tone. Maya mathematics is positional and vigesimal (as will be seen on p. 34) and there are names for different positional values, such as: *Kin* (1), *vinal* (20), *tun* (400), *katun* (8,000), *Baktun* (160,000). (Argüelles, 2005, p.26)

³⁵ Within the construct of the Law of Time there exist other matrices: the base matrix, the matrix of space, and the matrix of time.

table called *buk xok* in the Chilan Balam tradition, this matrix is a Harmonic Module, a fractal measure of radial time with multiple applications, analogous to the periodic table of the elements, but of the synchronic order. (Argüelles, 2006, p.79)

	1	21	41	61	81	101	121	141	161	181	201	221	241
	2	22	42	62	82	102	122	142	162	182	202	222	242
	3	23	43	63	83	103	123	143	163	183	203	223	243
	4	24	44	64	84	104	124	144	164	184	204	224	244
	5	25	45	65	85	105	125	145	165	185	205	225	245
	6	26	46	66	86	106	126	146	166	186	206	226	246
	7	27	47	67	87	107	127	147	167	187	207	227	247
	8	28	48	68	88	108	128	148	168	188	208	228	248
	9	29	49	69	89	109	129	149	169	189	209	229	249
	10	30	50	70	90	110	130	150	170	190	210	230	250
	11	31	51	71	91	111	131	151	171	191	211	231	251
	12	32	52	72	92	112	132	152	172	192	212	232	252
	13	33	53	73	93	113	133	153	173	193	213	233	253
	14	34	54	74	94	114	134	154	174	194	214	234	254
	15	35	55	75	95	115	135	155	175	195	215	235	255
	16	36	56	76	96	116	136	156	176	196	216	236	256
	17	37	57	77	97	117	137	157	177	197	217	237	257
	18	38	58	78	98	118	138	158	178	198	218	238	258
	19	39	59	79	99	119	139	159	179	199	219	239	259
	20	40	60	80	100	120	140	160	180	200	220	240	260

The *Tzolkin* is read from top to bottom, in vertical columns, from left to right. The 20 luminous seals are arranged on the left-hand side, while the vibrational permutation occurs in cycles ranging from 1 to 13. In Mayan notation, the number 1 is represented by a dot, and the number 5 by a bar (Argüelles, 2006, p.79; 2005, ch.4).

For example, seal 14, located in the first column, is represented by the notation of one dot (1). The previous seal, number 13, is represented by two bars (5+5) and three dots. The seal following 14, number 15, has the notation of two dots. Thus, the vibratory tones go on permuting through the seals, always from 1 to 13, forming the synchronic matrix of 260 *kins* (Argüelles, 2005, ch.2-4).

The unfoldings of the *Tzolkin* present an extensive structure of holonomic format,

connecting the three-dimensional and four-dimensional bodies to the planetary, galactic, and universal bodies. Seals and tones receive specific names, sets of 13 *kins* form *waves*, of 52 *kins* form *castles*, of 65 *kins* form *seasons*, and various other configurations. These connections allow studies on cycles, fractals, pulsars, harmonics, chromatics, archetypes of the seals and tones, in addition to oracles and prophecies, transforming the *Tzolkin* into a vast navigation map in time (Argüelles, 2005, ch.2-4).

What is most important, however, is to emphasize that, in its essence, the synchronic order (*Tzolkin*) represents a pure mathematics, known as "the mathematics of the fourth dimension" (Synchronary of Peace, 2024). As Argüelles observes: "The aim of Mayan mathematics was the understanding of the record of the galactic constant – the *Tzolkin* – in its *spin* of infinite fractal harmonics and permutations of harmonics" (Argüelles, 2005, p.76).

It is also surprising that the mathematics into which the Harmonic Module fits is a vigesimal (base 20) count, using a zero and a positional ordering system, which considers larger or more extensive values that advance more toward the binary exponential function than toward the decimal sequence. Very simply, this system exists in this way because it is the appropriate mathematics for time.

(...)

It is because of this mathematics and of its capacity to "download" the universal synchronization frequency 13:20 that the ancient Maya were able to build a complex system of "calendars" and a precise astronomical knowledge, not by reason of telescopes that they did not possess, but thanks to the nature of the mathematical system itself (Argüelles, 2006, p.79).

Argüelles affirms that it was the study of vigesimal mathematics and of its Harmonic Module 13:20 (*Tzolkin*) that led him to access the knowledge of the Law of Time, also represented in the equation $T(E) = Art$, that is, *Energy* factored by *Time* equals *Art*. The beauty of nature is an absolute manifestation of the mathematics of the fourth dimension (Argüelles, 2006, p.69).

In addition to representing a universal frequency, the Law of Time underlies a set of pragmatic, non-dogmatic knowledge and tools, geared toward practices of holonomic synchronization between the self and the cosmos, such as: the *Dreamspell*, *Telektonon* and *Synchronotron*. These practices promote, by means of meditation, the harmonization of the human mind with natural time, raising consciousness to expanded states of perception. The meditation techniques proposed by Argüelles range

from simple movements, such as being attentive to the breath and aware of the present moment, to more advanced practices, such as the meditation of the natural mind, of the cube, of the rainbow bridge, and *synchrogalactic yoga*. The latter is based on the connection with the daily synchronic codes of the cyclic order (13 moons of 28 days), of the *Tzolkin* (13:20), of the chakras, of the radial plasmas, of the ancient *Futhark* runes, of the *I Ching*, and of other codes of cosmic history (Synchronary of Peace; *Law of time*, 2024).

b) The Cyclic Order

The matrix of synchronic order (the joining of frequencies of light and sound - *Tzolkin*), operates together with the cyclic order (order of the natural cycles), represented by the synchronary of 13 moons of 28 days.

Seen from outer space, the Moon takes 28 days to orbit the Earth while completing a full rotation around its axis, and it turns 13 times on this axis while the Earth completes one orbit around the Sun. In the synchronary, one "moon" equals 28 days, organized into four weeks of seven days. Thirteen moons of 28 days, added to the "day out of time" (July 25), equal the 365 days of the Gregorian calendar. For the Law of Time, the twelve irregular Gregorian months are transformed into thirteen moons of 28 days, becoming a solar-lunar synchronary. The beginning of the "solar ring," that is, of the Mayan year, is defined by an astronomical phenomenon called the heliacal rising of Sirius³⁶, which takes place on July 26.

³⁶ The annual heliacal rising of Sirius refers to when Sirius again becomes visible at 19.5° North latitude after having been hidden by the light of the Sun for about 70 days. (Synchronically, p.7)

EXAMPLE OF AN YEAR IN THE GREGORIAN CALENDAR

JANUARY	FEBRUARY	MARCH
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
APRIL	MAY	JUNE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
JULY	AUGUST	SEPTEMBER
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
OCTOBER	NOVEMBER	DECEMBER
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

TWELVE IRREGULAR MONTHS

PERPETUAL SINCROMETER OF 13 MOONS

MONTH 1	MONTH 2	MONTH 3
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
MONTH 4	MONTH 5	MONTH 6
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
MONTH 7	MONTH 8	MONTH 9
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
MONTH 10	MONTH 11	MONTH 12
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
MONTH 13		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28		

13 MONTHS/MOONS OF 28 DAYS EACH
-1 "DAY OUT OF TIME"
-365 DAYS OF THE SOLAR/LUNAR SINCROMETER.

+1 "DAY OUT OF TIME"
01/25
CELEBRATION OF PEACE THROUGH CULTURE, COMMEMORATED GLOBALLY

THIRTEEN PERFECT MOONS

Cyclic order - biospheric solar cycle (3rd dimension): 365 days of the year ordered into 13 moons (months) x 28 *kins* (days) + 1 day out of time.

Synchronic order – galactic cycle (4th dimension): 260 units of the *Tzolkin* (galactic time matrix) - 13 x 20.

The synchronary of 13 moons and 28 days, in combination with the permutation of the four-dimensional galactic cycle of 260 kins (*Tzolkin*), forms a Sirian cycle of 52 years, referring to the time it takes Sirius B to orbit Sirius A. Current science states that this cycle, seen from Earth, lasts on average 50 years; however, the 52-year cycle of Sirius was commemorated in sacred rituals in antiquity and is of the utmost importance to the Mayan science of time. Sirius is known as the sun behind the sun that transmits electromagnetic energies governing the flow, the forces, and the movements of different planets (Sincronicamente, p.7 apud Red Queen).

In the permutation between the *Tzolkin* and the cyclic order, taking any date as a starting point, over periods of 52 years there are no identical days. To exemplify, using the Gregorian calendar, a person born on 11/12/2024, in the synchronic order (*Tzolkin*), is passing through *Kin* 128, situated in the central column of the *Tzolkin*, titled *spectral*

star, where *star* is the name of the luminous seal and *spectral* is the name of the tone in permutation (tone 11 - two bars and one dot). This person will only relive this *Kin 128, spectral star*, on the day of their *52nd birthday* and then on their 104th birthday. This 52-year cycle is considered a *castle*, just like the 52-day cycle, just like the 52-thousand-year cycle, and so on. This is fractal time, going from the smallest measure - *kin* - to sets of cycles that multiply to infinity.

c) The Gregorian Calendar and Artificial Time

Through these and other decodings of Mayan knowledge, Argüelles affirms the existence of two distinct frequencies: that of natural time (13:20), as described previously, and that of artificial time. Artificial time is defined as the 12:60 frequency. The basic foundation of this premise is the recognition that society is macro-organized by a calendar not synchronized with the natural cycles of the planet (and of the galaxy), thus generating, over the years, an artificial frequency called 12:60. Twelve in reference to the Gregorian calendar³⁷, which divides the journey around the sun into twelve irregular months. Sixty, in reference to the mechanized clock, which organizes the space of time in a linear way. As the centuries passed organizing themselves in this manner, civilization gradually became mechanistic and artificial, and consequently, the human being gradually disconnected from his own nature (Argüelles, 2006, 2005).

1.3.3 A Manifest for the Noosphere

Argüelles discusses the various calendars existing throughout history, showing the connections and disconnections of their measures with nature. Argüelles makes clear that the 13:28 calendar (13 moons and 28 days - “cyclic order”) was also widely known and used in the Prehistory of places such as China, Polynesia, Neolithic Europe,

³⁷ “Gregorian calendar (Julian): The standard of the current world calendar, consisting of 12 irregularly numbered and obscurely named months following the system of seven-day weeks with the intercalation of a leap year, establishing cycles of 28 years; created with the calendar reform by Pope Gregory XIII (1572-1583) in 1582, which “corrected the Julian calendar (established by Julius Caesar, 45-44 B.C.), cutting ten days and refining the system of intercalation so that only centuries that are multiples of four are leap years; the supreme example of astronomical time measurement; the macro-organizing principle that established the 12:60 artificial timing frequency.” (Argüelles, 2006, p.284)

and the Middle East. Argüelles argues that “if time is a synchronization factor, then a calendar – as an instrument for measuring the count of time - should be constructed in such a way as to maximize the synchronization factor” and ponders that this can only be done “if the count of time is based on harmonic principles in conformity with the objective data of nature (Argüelles, 2006, p.95).

In this context, the noosphere is the condition of the human mind purified of the error of time. And if the noosphere is the mental envelope of the Earth, it can only be, through a unified state of mind, nothing less than the transformation of the hybrid planetary human into a genuinely spiritualized planetary being, the mind of the Earth – something that may seem a utopian phenomenon, from the perspective of the nightly news (Argüelles, 2006, p.31).

Argüelles defines the Law of Time as a universal synchronization frequency, expressed by the mathematical proportion 13:20, which is revealed through the sacred Mayan count of time. This frequency represents a matrix of thirteen tones and twenty seals, which together form the structure known as the *Tzolkin*, a structure that governs the synchronic order of time.

The natural frequency 13:20 contrasts with the artificial frequency 12:60, based on the Gregorian calendar and the mechanical clock. The artificial frequency 12:60 contributes to a mechanical and linear vision of the world, disconnecting the human being from his own nature and from universal harmony. In counterpoint, the synchronary 13:28 (13 moons and 28 days - “cyclic order”) operating together with the 13:20 frequency (*Tzolkin*) promotes the re-synchronization of humanity, expanding its consciousness, from the simple act of being present in the current moment to the practice of advanced meditation techniques. The connection with the 13:20 frequency activates the integration of the noosphere with the biosphere, aligning the human mind with the natural rhythm of the universe (Argüelles, 2005, 2006).

For Argüelles, the activation of the noosphere, the next evolutionary stage of humanity, will only be possible through conscious reconnection with natural time. In this context, the noosphere represents a state in which humanity transcends artificial time, connecting with the cosmic order and becoming a single, genuine planetary consciousness.

With the manifest, José Argüelles:

Tú no estás separado de mí, aunque pienses que lo estás. Eres uno conmigo. Tu mente y mi mente, la mente de la Tierra, son una sola mente. Y esta mente es la noosfera, la mente de la Tierra

que envuelve como un manto invisible la totalidad de mi cuerpo, penetrando en cada ser vivo, dotando a cada uno con un rayo del espectro de consciência viva que se extiende desde el centro de la galaxia hasta nuestro sol, hasta mí y hasta todos los que habitáis en mi superficie. Sois um único organismo planetário. Toda la vida es una, del mismo modo que yo soy un todo indivisible.

Para aquellos que tengan ojos para ver, oídos para oír y corazones que conocen desde el interior, ha llegado el tiempo de que escuchéis mi manifiesto por la noosfera. Escuchad y recitad conmigo:

Soy uno con la Tierra.

La Tierra y yo somos una sola mente.

(Argüelles, 2012, p.20)

2

THEORETICAL FRAMEWORK

According to Kaku (2015, p.17), echoing the reflections of the famous biologist Thomas Huxley, “the question of questions for humanity, the problem lying behind all others and also the most interesting, is the determination of man’s place in Nature and his relationship with the Cosmos.”

In 2026, the term *noosphere* will turn one hundred years old. The theories of Teilhard de Chardin, perhaps because of their complexity and/or because of his troubled history with the Church, in the West, still remain almost unknown to the general population. Nevertheless, over the years, the Church has come to recognize the importance of his work. Pope Francis (2015), in his encyclical *Laudato Si’*, speaks of fundamental attitudes that comprise Teilhard’s thought (*Laudato Si’*, 2015a, 2015b). Cerdán (2020, our translation) recalls contemporary theologians and Church leaders who recognize Teilhard’s legacy, such as the cardinals Avery Dulles and Christoph Schönborn and the Popes John Paul II and Benedict XVI.

Even though the noosphere is further from the reach of conventional science, it is a profound and omnipresent intuition that has inhabited the minds of scientists, philosophers, poets, and artists ever since the term first emerged in 1926. It is an evolutionist concept proposed by biochemical and paleontological studies. A multisystemic paradigm that unites prophecy and analysis of the current tendencies of the world (Argüelles, 2012, p.23, our translation).

In the introduction to Vernadsky's work "The Biosphere" (1926)³⁸, Jacques Grinevald says that Teilhard and Vernadsky were cosmic prophets of globalization. If Teilhard was a cosmic mystic, Vernadsky defined himself as a cosmic realist (Vidal, 2023, our translation). According to Vasconcelos and Mariani, 2023, "Teilhard de Chardin speaks of "critical points" that humanity crosses throughout its evolutionary history and that mark the emergence of new realities" (Vasconcelos; Mariani, 2023).

As we saw earlier, Shoshitaishvili (2021, our translation) presents the Noosphere as an anthropological paradigm in counterpoint to the Anthropocene. In Brussels, *the CLEA – Human Energy* devotes its research to the scientific grounding of the noosphere, bringing it forward as the "*Third Story*", a paradigm capable of uniting science and spirituality, promoting the synergy for the necessary changes of our planet.

Many are the articles, though few in the Portuguese language, that recall and reinforce the importance of the theory of Teilhard and Vernadsky for the moment in which we live. Vidal (2023, our translation) understands that the noosphere, despite offering a unique sense of hope and positivity for global integration, still remains little studied.

Teilhard de Chardin (1995, p.4) stresses that the certainty about the sphericity of the Earth or its movement around the Sun was widely defended and debated as a theory on the intellectual plane long before it was experimentally proven, whether by the great navigations or by spaceflights. And he adds "See or perish. This is the situation imposed by the mysterious gift of existence on everything that is an element of the Universe" (Teilhard de Chardin, 1995, p.25). "Man could not see himself completely outside Humanity; nor Humanity outside Life, nor Life outside the Universe" (Teilhard de Chardin, 1995, p.27).

3

METHODOLOGY

The methodology of this study follows a qualitative and bibliographic approach, characterized by its basic nature. The focus is on the exploration of concepts and on the theoretical survey, seeking to deepen the understanding of the noosphere and its relevance as an evolutionary paradigm in the current context. The research is based on references obtained through recent academic sources, preferably peer-reviewed, consulted at the Library of the Pontifical Catholic University of Rio Grande do Sul (PUCRS), in addition to digital platforms such as *Google Scholar*, *ResearchGate*, the CAPES

³⁸ Vernadsky, V.I. (1926). *The biosphere*. Copernicus, 1998.

Catalog of Theses and Dissertations, and Academia.edu, which offer broad access to contemporary studies on the topic.

To ensure comprehensive coverage of the topic, keywords in Portuguese and English were used, such as “noosphere,” “consciousness,” “time,” “law of time,” in addition to the names of the main authors who underpin the study: Teilhard de Chardin, Vladimir Vernadsky, and José Argüelles. This set of terms enabled the gathering of content related to the noosphere, making possible a detailed view of the approaches and interpretations proposed by different researchers and thinkers.

The investigation of the work of José Argüelles includes, in addition to the analysis of books, participation in courses offered by the Synchronary of Peace, a school dedicated to the studies of the Law of Time linked to the American foundation founded by José Argüelles - *Foundation for the Law of Time*. These courses provided a deepened understanding of Argüelles’s concepts, especially in relation to the role of the Law of Time in the development of the noosphere and in the alignment between consciousness and natural time.

The research initially aims at the knowledge of the noosphere from the authors who most stand out in the academic literature, exploring their contributions and the evolution of the approach over time. It then seeks to investigate the current position of the noosphere paradigm, verifying its application and relevance in contemporary debates on planetary consciousness, human evolution, and social transformation. In addition, according to the perspective of José Argüelles, the role of time as a synchronizing factor is addressed, emphasizing the importance of the resonance between natural time and collective consciousness for the full development of the noosphere.

4

RESULTS AND DISCUSSION

First, that *seeing* itself is the human condition. (...) because it consists in organizing ever more perfectly the lines of the Real around us (...) Then – recognizing that the Real is *genesis*, an evolutionary process – understanding that to know is also to be co-born, since, in our recognition of the World, the World itself is reborn for us who, in it, with it, and through it, go on being reborn and co-born as well (Teilhard de Chardin, 1995, p.7).

In the first section, with the aim of investigating the origins of the term *noosphere* and its different lines of understanding, the study revisited the biographies and contributions of Teilhard de Chardin, Vladimir Vernadsky, and José Argüelles. Through this analysis one can understand the *noosphere* as the new layer of the Earth, the thinking layer, a new geological stage accomplished through human thought.

Teilhard de Chardin correlates cosmic evolution and spirituality, positioning the human being as the axis of evolutionary transformation, whose apex culminates in the convergent movement of the reflective particles toward the *Omega Point* (God). Vernadsky, in turn, conceives the noosphere as the result of the biogeochemical manifestations of Living Matter, shaped by human scientific thought, which acts as a new geological force previously unavailable in the biosphere. José Argüelles, for his part, expands and disseminates these perspectives, introducing the Mayan science of time, highlighting consciousness synchronized with natural time as the regulating mechanism of the noosphere.

Authors such as Strobel (2023, our translation) and Vidal (2023, our translation) reinforce the role of collective synergies in the activation of the noosphere, highlighting it as a planetary superorganism. Strobel (2023, our translation) further argues that its full realization depends on global cooperation. Hamilton and Grinevald (2015, our translation) complement this view by highlighting that the transition from the biosphere to the noosphere, according to Vernadsky, occurs through a continuous biogeochemical transformation, catalyzed by human thought. Jaseckova and Vartiak (2023, our translation) emphasize the noosphere as an evolutionary milestone in which Homo Sapiens, through his reflective capacity, acts as the protagonist in the reorganization of the planet. Edmunds and Bogush (2012, our translation) add that Vernadsky's perception of the noosphere as a geological force is one of the greatest contributions to understanding the impact of human thought on planetary transformation.

In the second section, with the aim of understanding the anthropological paradigm and the challenges associated with the “biosphere-noosphere” transition, the study reviewed the Anthropocene through Cerdán (2020, our translation) and Shoshitaishvili (2021, our translation), analyzing how this paradigm contributes to the global crises that characterize the contemporary world through acronyms such as VUCA (volatile, uncertain, complex, and ambiguous) and BANI (brittle, anxious, nonlinear, and incomprehensible). Such characteristics reveal themselves, for example, in the popular anxiety caused by the lack of governmental action in relation to the climate crisis (Hickman et al., 2021).

Shoshitaishvili (2021, our translation) describes the Anthropocene, catalyzed by the *Great Acceleration*, as a self-destructive geological milestone that challenges our

understanding as a species and demands a reassessment of human capacities on a global scale. Cerdán (2020, our translation), in turn, highlights the extremes present in the discussions about a way out of the crisis. On one side are those who believe that a mixture of goodwill, technology, and innovation can solve the current problems through subtle changes. On the other are those who argue that only a radical anthropological turn, with profound changes in the productive systems and in cultural values, will be enough to transform humanity's relationship with the planet. According to Argüelles (2006), overcoming the Newtonian-Cartesian paradigm, rooted in scientific materialism, is essential for humanity to face the challenges imposed by a planetary transition. This paradigm, based on mechanistic principles, blocks the possibility of a true transformation, keeping human consciousness in a state of continuous crisis.

In counterpoint, the study shows that the noosphere is currently consolidating itself as a relevant theoretical approach in the academic milieu, through the analysis of Shoshitaishvili (2021), of Cerdán (2020), of the narrative titled the “*Third Story*” (Heylighen et al., 2024, our translation), created by the interdisciplinary research group at the University of Brussels, and also according to the study of Jaseckova and Vartiak (2023, our translation), which proposes a more harmonious relationship between humanity and planet Earth, between science and spirituality.

The analysis demonstrates that the different authorial contributions converge toward an integrating evolutionary vision; however, criticisms of the concept, such as its association with utopias and idealizations, pointed out by authors such as Jaseckova (2022, our translation) and Pylypchuk (2024, our translation), highlight the need for greater practical grounding, aligned with the complexities of the contemporary world. The transition of paradigms, in this context, requires not only socio-structural changes, but also a profound inner and collective metamorphosis, as proposed by Teilhard de Chardin.

In the third section, the study explored, based on the works of José Argüelles, a theoretical model originating from Mayan science, highlighting the central role of time as a synchronizing element of human consciousness, which in turn acts as the regulating mechanism of the noosphere. The section presented as a preamble the philosophical bases on time and included the neuroscientific contributions of Kent and Wittmann (2021, our translation), who associate temporal perception with identity, reinforcing Argüelles's view of the intrinsic relationship between time and consciousness.

The analysis addressed the origins of Argüelles's studies, introducing the principle of the Law of Time and the fundamental concepts of the *Tzolkin*, of natural time “13:20,” and of the synchronary of 13 moons and 28 days. These tools are proposed as alternatives

to the artificial standard "12:60," based on the mechanical clock and the Gregorian calendar, pointed out by Argüelles as one of the main causes of the crises and imbalances of humanity. The section concluded that re-synchronization with natural time is essential to activate the noosphere and promote a new evolutionary stage in which humanity connects through its consciousness and becomes a genuine planetary mind.

As a concept, according to the referenced authors, it is concluded that the noosphere demonstrates the potentiality contained in the human reflective apparatus, bringing thought forward as a geological force capable of generating transformations previously "unsuspected" and of creating one more layer on the Earth. As an evolutionary paradigm, even in the face of criticisms and challenges regarding its applicability, it presents a relevant interdisciplinary and holistic perspective that offers answers to global demands and promotes a conscious planetary transformation, grounded in the unity and the collectivity of meditative minds cooperating synergistically in the construction of a promising future.

Finally, the analysis highlights the centrality of reflection in the transition to a noospheric model, promoting human reconnection with the natural frequency of cosmic time and making possible a path for the expansion of collective consciousness, an essential condition for the full activation of the noosphere.

5

FINAL CONSIDERATIONS

The study reinforces the relevance of the noosphere as an essential approach to understanding the human role on Earth and in the cosmos, highlighting it as a new evolutionary stage in which thought and reflection act as a geological force.

The study also points out that contemporary instability highlights the importance of the noosphere as a path toward a planetary mobilization that goes beyond the traditional political, economic, and scientific approaches.

In analyzing these models, the understanding of the noosphere is broadened, positioning it as a conceptual structure capable of meeting the current demands for sustainability and cohesion. The need for a new paradigm is underscored by the authorial references throughout the work which, although with distinct points, converge in the view that human evolution implies a conscious resonance of the whole.

As objectives of the study, the following stand out: the analysis of the historical and conceptual roots of the noosphere, identifying its strands; the understanding of the

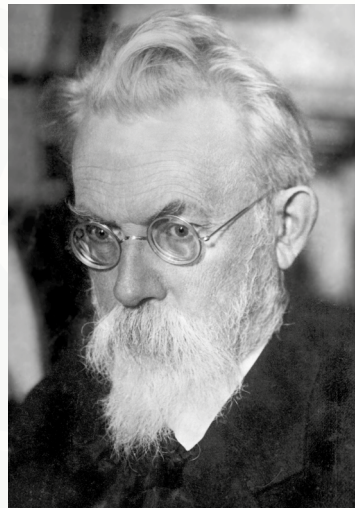
current anthropological paradigm and the challenges of a transition; and the study of a theoretical model that encourages a transition toward a more conscious society. Through a qualitative review, the work illuminates the legacy of the originators of the concept and emphasizes the contribution of José Argüelles, who proposes the Law of Time as a path to re-synchronization with "natural time," according to him an essential factor for the activation of the noosphere and the genuine integration of planetary consciousness.

As future perspectives, the theme suggests the deepening of studies on the Law of Time and its impact on collective health, as well as the implementation of practices based on natural time in educational and social contexts. Another promising path is the investigation of the integration between science and spirituality, broadening the debate around the noosphere as a paradigm that transcends anthropocentric approaches and offers a holistic vision for the construction of a "planetary humanity," conscious of the interdependence between individuals and the planet.

In the end, this knowledge illuminates prosperous and positive paths for those who seek. For those who follow the natural flow of existence, it is hoped that this knowledge will find them by other means such as films, theater plays, or other artistic and scientific forms that promote the dissemination of the culture of the mind. This article also presents itself as an invitation to a deeper reading of the authors addressed, whose ideas offer a vision of hope for the construction of a conscious and noospheric times to come.



TEILHARD DE CHARDIN
(1881-1985)



VLADIMIR VERNADSKI
(1863-1945)



JOSÉ ARGÜELLES
(1939 - 2011)

REFERENCES

ARGÜELLES, José. *Manifiesto por la noosfera: la siguiente etapa en la evolución de la consciencia humana*. Spain: Edaf, 2012. p. 205.

ARGÜELLES, José. *O fator Maia: um caminho além da tecnologia*. 13th. ed. São Paulo: Cultrix, 2005. p. 231.

ARGÜELLES, José. *O tempo e a tecnosfera: a Lei do Tempo nas relações humanas*. Translation: Silvia Apolonio, Susana Palaia. São Paulo: Madras, 2006. p. 301.

CERDÁN, Alfonso Esponera. *La noosfera teilhardiana, el antropoceno contemporáneo y la casa común según el Papa Francisco*. *Anales Valentinus: Nueva Serie: Revista de Filosofía y Teología*, Valencia, ano VII, n. 14, p. 329-346, 2020. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=8433965>. Accessed: Oct.7, 2025.

CHARDIN, Pierre Teilhard de. *The formation of the noösphere. The Library of Consciousness*, [s. l.], 1947. Available at: <https://www.organism.earth/library/document/formation-of-the-noosphere>. Accessed: Oct.7, 2025.

CHARDIN, Pierre Teilhard de. *O fenômeno humano*. Translation: José Luiz Archanjo. 14th. ed. São Paulo: Cultrix, 1995. p. 393.

CRUTZEN, Paul J. *Geology of mankind*. *Nature*, [s. l.], v. 415, n. 23, 3 jan. 2002. DOI: 10.1038/415023a.

EDMUNDS, W. M.; BOGUSH, A. A. *Geochemistry of natural waters – the legacy of V. I. Vernadsky and his students*. *Applied Geochemistry*, v. 27, n. 10, p. 1871–1886, 2012. DOI: 10.1016/j.apgeochem.2012.07.005.

FALCÃO, Pedro Braga. *Kairos e chronos: duas visões da língua grega sobre o tempo*. *Communio*, v. 33, n. 3, p. 287-294, 2017. Available at: https://www.academia.edu/108605168/Kairos_e_chronos_duas_vis%C3%B5es_da_l%C3%A9ngua_grega_sobre_o_tempo. Accessed: Oct. 07, 2025.

GUÉRCIO, Maria Rita. *O cosmismo russo: Konstantin Tsiolkovsky e as viagens espaciais*. *Khronos, Revista de História da Ciência*, n. 12, p. 110-126, dez. 2021. DOI:10.11606/issn.2447-2158.i12p1-17.

HAMILTON, Clive; GRINEVALD, Jacques. *Was the Anthropocene anticipated? The Anthropocene Review*, v. 2, n. 1, p. 59-72, 2015. DOI: 10.1177/2053019614567155.

HEYLIGHEN, Francis; BEIGI, Shima; VIDAL, Clément. *The third story of the universe: an evolutionary worldview for the noosphere. CLEA: Human Energy*, Vrije Universiteit Brussel, abr. 2024. Available at: https://cris.vub.be/ws/portalfiles/portal/110058395/Third_Story_working_paper.pdf. Accessed at: Oct.7, 2025.

HICKMAN, Caroline; MARKS, Elizabeth; PIHKALA, Panu; CLAYTON, Susan; LEWANDOWSKI, R. Erick; MAYALL, Elouise E.; WRAY, Britt; MELLOR, Catriona; SUSTEREN, Lise Van. *Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey. Lancet Planet Health*, [s. l.], v. 5, p. e863–e873, dez. 2021. DOI: 10.1016/S2542-5196(21)00278-3.

HUBBES, László Attila. *Recombinant revelations: 2012 in millenarian and New Age cyber-apocalypticism. Traditiones*, v. 50, n. 3, p. 75–97, 2021. DOI: 10.3986/Traditio2021500304.

JASEČKOVÁ, Galina; KONVIT, Milan; VARTIAK, Lukas. *Vernadsky's concept of the noosphere and its reflection in ethical and moral values of society. History of Science and Technology*, v. 12, n. 2, p. 231-248, 16 dez. 2022. DOI: 10.32703/2415-7422-2022-12-2-231-248.

JASEČKOVÁ, Galina; VARTIAK, Lukas. *Vernadsky's concept of the noosphere in a global management environment: searching for ways to exit global crises. International Journal of Social Science and Education Research Studies*, Bratislava, Slovakia, v. 3, n. 2, p. 328-331, fev. 2023. DOI: 10.55677/ijssers/V03I2Y2023-15.

KAKU, Michio. *O futuro da mente: a busca científica para entender, aprimorar e potencializar a mente*. Translation: Angela Lobo. 1st. ed. Rio de Janeiro: Rocco, 2015. p. 379.

KENT, Lachlan.; WITTMANN, Marc. *Time consciousness: the missing link in theories of consciousness. Neuroscience of Consciousness*, v. 7, n. 2, 2021. DOI: 10.1093/nc/niab011

LAUDATO SI': *a encíclica do Papa Francisco cita um sábio muçulmano e Teilhard de Chardin*. [s. l.], 25 jun. 2015a. Available at: <https://ihu.unisinos.br/categorias/169-noticias-2015/543921-laudato-si-a-enciclica-do-papa-francisco-cita-um-sabio-muculmano-e-teilhard-de-chardin>. Accessed at: Oct. 7, 2025.

LAUDATO SI': sobre o cuidado da casa comum. [s. l.], 2015b. Available at: https://www.vatican.va/content/francesco/pt/encyclicals/documents/papa-Francesco_20150524_enciclica-laudato-si.html. Accessed: Oct. 7, 2025.

LAW OF TIME. *History of the Law of Time*. [S.l.: s.n.], [20--]. Available at: <https://lawof-time.org/history/>. Accessed at: Oct. 07, 2025.

LUCARELLI, Vera Lúcia Moreira Alvez. *Ciência e espiritualidade no pensamento de Teilhard de Chardin. Dissertação (Mestrado em Ciências da Religião)* – Universidade Metodista de São Paulo – UMESP, São Bernardo do Campo, 2019. 125 f.

MAGALHÃES, Gildo; TORREJAIS, Ana. *O Pensamento Científico como Fenômeno Planetário - Vladimir Vernadsky. Khronos: Revista de História da Ciência*, USP - São Paulo, Brazil, n. 4, p. 153–166, 2017. DOI: 10.11606/khronos.v0i4.128883.

PYLYPCHUK, Oleh. *Whether the biosphere will turn into the noosphere?: Review of the monograph: L. A. Griffen. The last stage of the biosphere evolution: monograph*. Kyiv: Talkom, 2024. 200 p. ISBN 978-617-8352-32-5. *History of science and technology*, v. 14, n. 1, 2024. DOI: 10.32703/2415-7422-2024-14-1-284-291.

PYLYPENKO, Svitlana; IVASHCHENKO, Olha. *A Philosophical Discourse of the Earth. Philosophy and Cosmology*, Kyiv, Ukraine, v. 28, p. 22-31, January 2022. DOI: 10.29202/phil-cosm/28/2.

SHOSHITAISHVILI, Boris. *From Anthropocene to Noosphere: The Great Acceleration. Earth's Future*, [s. l.], v. 9, n. 2, 2021. DOI: 10.1029/2020EF001917.

SINCRONARIO DA PAZ. A matemática do tempo. [S.l.: s.n.], [20--]. Available at: <https://sincronariodapaz.org/matematica-do-tempo/>. Accessed: Oct. 7, 2025.

SINCRONICAMENTE: Livro de Estudos do Tempo. [S. l.: s. n.], Canela - RS: Sincronário da Paz, 2020

SOUTH, Stephanie. *Acesso Ao Teu Ser Multidimensional: Uma Chave Para a História Cósmica*. [S. l.: s. n.], 2020a. 173 p. ISBN 978-0-9767759-5-9.

SOUTH, Stephanie. *Rainha Vermelha: Iniciação no Coração do Tempo*. 1st. ed. Oregon: [s. n.], 2020b. 276 p.

STROBEL, Lilla. Pierre Teilhard de Chardin's evolutionary theology and its reception in theological and scientific literature. *Opuscula Theologica et Scientifica, Scientific Journal of John Wesley Theological College*, v. 1, n. 2, p. 127-137, 2023. DOI: 10.59531/ots.2023.1.2.127-137.

VASCONCELOS, Aparecida Maria de; MARIANI, Ceci Maria Costa Baptista. *Espiritualidade ecológica por "um novo humanismo": aportes de Teilhard de Chardin e do Papa Francisco*. *Perspectiva Teológica*, [S. l.], v. 55, n. 3, p. 671, 2023. DOI: 10.20911/21768757v55n3p671/2023.

VERNADSKY, V.I. (1998). *Living Matter in the Biosphere*. In: *The Biosphere*. Copernicus, New York, NY. DOI: 10.1007/978-1-4612-1750-3_4

VIDAL, Clément. *Pierre Teilhard de Chardin: a visionary in controversy. History and Philosophy of the Life Sciences*, [s. l.], v. 43, n. 125, 2021. DOI 10.1007/s40656-021-00475-7.

VIDAL, Clément. *What is the noosphere? Planetary superorganism, major evolutionary transition and emergence*. *Systems Research and Behavioral Science*, [s. l.], v. 41, n. 4, p. 614-622, 2023. DOI: 10.1002/sres.2997.

VUCA X BANI. [S. l.]: *Pensamento em Gotas*, 2022. Available at: https://www.youtube.com/watch?v=KG_2Q4BMpB8. Accessed: Oct. 07, 2024

In Lak'ech,
Nicky Klöpsch
@168_kmk