Abstract

The philosophical reflections of the present article have the goal to study the relationship between science and religion. According to academic consensus, modern science was born during the seventeenth century with a theological concern that sought to question religious authority. Since then, modern science was separated from the spiritual and religious dimensions, in order to objectively study the ontological structure of reality. This situation led to a religious syncretism that sought to reconcile different cultural traditions, as well as pantheism, whose philosophical conception conceived the natural laws of the universe and nature as a theological equivalent to the figure of “God” in different religions. For this reason, this article addresses the complexity of the phenomena of our ontological reality from a transdisciplinary approach, where science and religion merge to give way to the cosmodern paradigm. As a result of the integration between religious and scientific epistemes a global ethics is proposed that reinvents the sacred. The research also develops an interreligious and intra-religious dialogue that helps us to understand that nature and the cosmos constitute the meeting between the different scientific and religious knowledge. To conclude, it is argued that learning to coevolve consciously requires the development of an ecology of knowledge, where the outer physical knowledge and inner spiritual wisdom of our human condition converge and complement each other on different levels of logic and perception.

Keywords

Cosmodernity, education, science, religion, spirituality.

Resumen

Las reflexiones filosóficas del presente artículo tienen el objetivo de estudiar la relación entre ciencia y religión. Según el consenso académico, la ciencia moderna nació durante el siglo XVII con una inquietud teológica que buscaba cuestionar la autoridad religiosa. Desde entonces, la ciencia moderna fue separada de las dimensiones espirituales y religiosas, con el fin de estudiar objetivamente la estructura ontológica de la realidad. Esta situación dio lugar a un sincretismo religioso que buscaba conciliar diferentes tradiciones culturales, así como al panteísmo, cuya concepción filosófica concebía las leyes del universo y de la naturaleza como como un equivalente teológico a la figura de “Dios” en las diferentes religiones. Por este motivo, el artículo aborda la complejidad de los fenómenos de nuestra realidad ontológica desde un enfoque transdisciplinar, donde la ciencia y la religión se fusionan para dar lugar al paradigma cosmoderno. Como resultado de la integración entre epistemes religiosas y científicas se propone una ética global que reinvente lo sagrado. La investigación también desarrolla un diálogo interreligioso e intra-religioso que nos ayuda a comprender que la naturaleza y el cosmos constituyen el meta-punto de encuentro entre los diversos saberes científicos y religiosos. Para concluir, se argumenta que aprender a coevolucionar de forma consciente requiere el desarrollo de una ecología de saberes, donde el conocimiento físico exterior y la sabiduría espiritual interior de nuestra condición humana convergen y se complementan en diferentes planos lógicos y perceptivos.

Palabras clave

Cosmodernidad, educación, ciencia, religión, espiritualidad.

Introduction

While art and spirituality occupied an important role in archaic and prehistoric societies, the emergence of modern science in the seventeenth century turned it into a modality of epistemic organization that has changed the course of humanity on Earth during the past centuries. From an anthropological point of view, science and religion are historical cultural constructions that were developed through interpretations of the earthly and cosmic reality, creating and conforming a multitude of paradigmatic epistemic frames. In this context, modern science was separated from the spiritual and religious dimensions, in order to objectively study the ontological structure of reality. But this situation also gave rise to other philosophical currents that, like religious syncretism, sought to reconcile different cultural traditions. In turn, pantheism was constituted as a philosophical doctrine that conceived the laws of the universe and nature as a theological equivalent to the figure of “God” in different religions. As is logical, the collective imaginaries of cultures and civilizations have been nourished by these epistemological paradigms that have been constructed throughout human history (Collado, 2016a).

For this reason, this article makes a phenomenological approach to the relationship between science and religion. When comparing these epistemic constructions from a binary, dichotomous and excluding
thought, science and religion appear confronted by their logical con- 
trictions: external knowledge vs. inner knowledge, objectivity vs. sub-
jectivity, reason vs. faith, materiality vs. idealism, method vs. revelation,
etc. On the contrary, when our reality is observed from a complex and 
integrating thought that seeks to cooperate, associate and complement 
(Yanes, 2016), it is perceived that both epistemic paradigms study and 
interpret the ontological structure of the reality in which the individuals 
are circumscribed, that is, nature and the cosmos. In this sense, the phi-
losopher of nature Luciano Espinosa declares:

From the outset, the most elementary teaching of modern history affirms 
that nature can no longer be a normative, almost sacred instance, linked 
in addition to an apodictic and monolithic reason that knows it; but the 
current crisis of civilization also shows that it must not be reduced to a 
mere object of exploitation or pure technological re-creation, depending 
on the different stages of the will to power and its instrumental reason. 
Secularism and personal autonomy, critical reflection on the theoretical 
and practical limits, sense of complexity, effective ecological awareness, 
self-containment and responsibility... are some of the many elements that 
support this simple starting point and that now must be taken for grant-
ed. The most coherent position against these two newly rejected poles 
(the schizophrenia between subordination and dominion with respect to 
nature) is to consider it the common home and the basic support of life, 
although until now society is not consistent with a geobiological principle 
so clear in the deep version of the term (Espinosa, 2013, p. 11).

This vision confirms the global interdependence of ecosystems 
through an evolutionary self-regulation of planetary scope. For this reason, 
I defend that nature and the cosmos constitute the meta-meeting point 
between the diverse scientific and religious knowledge (Collado, 2016b). 
By addressing the complexity of the phenomena of our ontological reality, 
we can understand that science and religion complement each other in dif-
ferent logical and perceptual planes. In harmony with the understanding 
of the universe and the nature developed by Baruch Spinoza (1985) and 
Albert Einstein (2011), the astrophysicist Hubert Reeves (1988) argues that 
the existence of God is manifested through physical laws. For this reason, 
everything seems to indicate that the human being is the most insane spe-
cies of all the millions of species that exist, since he worships an invisible 
God and kills the visible nature... unaware that this Nature he’s is destroy-
ing is that Invisible God who is worshiped in multiple ways in different reli-
gions. It is a scientific vision that includes the philosophical and theological 
heritage of the pantheism of the previous centuries.
Faced with the problem of climate change that had already started, Reeves (1988, p. 47) asks: “Is it in the nature of man to manufacture, as quickly and effectively as possible, the weapons of his own self-destruction? And if so, will it be possible for us to escape our nature?”. While there is no single answer to these questions, the scientific consensus is beginning to replace the Holocene by the Anthropocene, by conceiving that the devastating action of the human being in nature constitutes a new geological epoch distinct from the Quaternary period (Steffen, Crutzen and McNeill, 2007) (Waters et al., 2016). Everything seems to indicate that the answer lies within us, since the socioecological trace of the current globalization is derived from the unbridled consumption of natural resources that the world citizenship is exercising over the Pachamama (Collado, 2016c), our Mother-Earth according to the worldview of the indigenous peoples of the Andes.

It is up to us to avoid the course of self-destruction to which we are heading. For this reason, the future survival of human life is to reach a state of deeper unity with nature, developing a higher level of comprehensive consciousness that understands the ontological essence of life as a continuum. This implies understanding the universe itself as “an infinite ocean of energy where things unfold to form space, time and matter,” according to the physicist David Bohm (1992, p. 182). From this earthly and cosmic vision, a new civilizing phase seems to emerge with citizen awareness about the processes of interconnectivity, interdependence and continuum. But learning to coevolve consciously to re-establish our connections with nature entails the development of an ecology of knowledge, where external knowledge and inner knowledge of our human condition converge. That is, where science and religion merge to give rise to the cosmo-modern paradigm.

The paradigm of cosmodernity: integrating science and religion

The notion of cosmodernity that is defended in this article is distinguished from Modernity and Postmodernity because it aims to achieve sustainable human development from a biomimetic approach that studies, emulates and perfects the coevolutionary strategies of ecosystems in the Great History. As a whole, Great History seeks to organize knowledge in a transdisciplinary way to integrate and unify the history of the universe, the history of the planet Earth, the history of life and the his-
tory of humanity. For this reason, Great History is based on the scientific consensus achieved by the international community in astronomy, cosmology, physics, geology, biology, chemistry, anthropology, paleontology, archeology, ecology, history, geography, demography, etc. It is a term coined by David Christian (2010) and theoretically based on Fred Spier (2011) that seeks to recognize the place of humanity within the cosmos. Obviously, this pretension exists in multiple spiritual beliefs and ancestral worldviews of native indigenous peoples, therefore cosmodernity integrates a critical inter-epistemological dialogue between scientific and non-scientific knowledge. Thus, nature constitutes the meta-point of encounter between the different epistemes.

In the paradigm of cosmodernity, science and religion are no longer confronted dichotomically as in Modernity and Postmodernity, but are united by nature, which acts as a model, a measure and a mentor. Science and religion represent, in effect, the two complementary ways to reach an integral cosmodern consciousness. While the first rationally places us as citizens of a small planet in a solar system peripheral to the Milky Way; the second way promotes the spiritual development of a cosmodern consciousness that allows us to feel psychosomatically the interdependence of the cosmic, biological, ecological and anthropological phenomena that transcend us as a distinguished species of coevolution in the Great History (Collado, 2016d). As can be seen in Figure 1, the ecological and cosmological vision of life in nature allows us to coherently integrate and reconcile science and spirituality, managing to overcome the dichotomy created in Modernity through the Logic of the Included Third created by the physicist and philosopher Stephane Lupasco (1994).

As seen in Figure 1, the logic of the third included allows us to conceive the inclusion of the antagonistic phenomena “A” and “non-A” in all levels of reality by the presence of the “T state”. This physical-epistemological logic breaks with the imaginary of a one-dimensional reality, where only the level of reality that exists is 1. At this level, phenomena appear as contradictory and are mutually exclusive. “Tertium non datur” and “principium tertii exclusi” are Latin designations to refer to the Aristotelian formulation of the principle of non-contradiction. A principle of exclusion and epistemic reduction that bases the classic binary logic that has governed the structures of human thought in the West, for more than two millennia, and that still remains embedded in the paradigmatic epistemic picture of a large part of the 21st century world citizenship.
Based on the philosophical and epistemological postulates of phenomenology presented by quantum physics, Lupasco (1994) breaks with the imaginary of a one-dimensional reality, where two adjacent levels of reality are linked by the logic of the third included. In the same way that there are different physical laws that govern in each ontological level of Nature (macro, meso and micro), our human perception also has different levels of understanding our reality. While each quantum entity has the wave-particle duality-simultaneously integrating the classical concepts of “wave” (A) and “particle” (non-A) at the same time—the “T state” acts as a quanta that integrates different elements and phenomena with a polylogical approach. This means that different logics act together in the same space and time, despite their contradictions. That is why complex thought manages to perceive the level of reality 2, which constitutes the logical axiom that integrates science and religion: acting as the third party that unifies and complements them. From this cosmodern vision, nature and the cosmos act giving coherence to the different historical and epistemological cultural constructions that have been created during the history of humanity to explain our ontological reality.

Metaphorically speaking, cosmodernity constitutes an evolutionary phase in the history of the human race where the high level of awareness makes it co-responsible with the current terrestrial scenario of poverty, violence, social exclusion and environmental degradation. This sensitization allows him to develop his cognitive and affective potential-
ity to achieve a spiritual, ecological and cosmological consciousness that interconnects him with the Pachamama, in order to save it from the early collapse to which we are directing it. It is a transcendental metamorphosis destined to the self-knowledge of the human kind, where a new human aspect emerges capable of transgressing the paradigmatic epistemic picture of current unsustainability. To this form of coevolutionary self-knowledge of the human race on Earth I call it the Paradigm of Cosmodernity (Collado, 2016b).

The beginning of this cosmomodern paradigm goes back to the middle of the 20th century, a historical period where three irreversible processes took place for humanity: 1) the creation of a nuclear technology that threatens to destroy everything that surrounds us, 2) the possibility to travel to outer space to inhabit other planets, and 3) the intergovernmental capacity of the peoples of the Earth, with the foundation of the United Nations system, to achieve a culture of peace that safeguards all biodiversity. Since then, the process of globalization has made the current network society (Castells, 2000) has reached an important technological development at the expense of exploiting the human being and the environment. As has happened with the Internet in recent years, there is no doubt that quantum computers, artificial intelligence, nanotechnology, biotechnology, glasses and contact lenses with access to the Internet, the genetic mutation of DNA, artificial intelligence, robotics, travel in space and the “discovery” of extraterrestrial intelligent life on other planets, as well as other “techno-cultural revolutions”, will radically modify our habits and relationships in a short period of time.

This conceptual notion of “cosmomodern paradigm” is in harmony with the idea of “cosmodernity” created by Nicolescu (1994, 2014) and with the “cosmodernism” of Christian Moraru (2011). In the thoughts of both authors, an important bioethical foundation of responsibility with the problems of the world is denoted, an epistemological call for the binary and reductionist overcoming of knowledge, and a marked contextual relation of the human being with the cosmos. In this direction, my research aims to stand as an epistemic complement that is in, between and beyond the positions of these authors. Not only are the cosmic processes interlinked to the human condition identified, but also seeks to biomimetically apply the co-evolutionary strategies identified from natural ecosystems in the Big History to solve contemporary socio-ecological problems.

Since the publication of his work Théorèmes Poétiques in 1994, Nicolescu has been proposing a new vision of the world that re-conceptualizes the role of the cosmos completely, conceiving Cosmodernity as an
immense cosmic matrix to which we belong as a simultaneously single and multiple realities. In the words of Nicolescu:

The quantum discontinuity, the indeterminism, the constructive randomness, the quantum non-separability, the bootstrap, the unification of all physical interactions, the supplementary dimensions of space, the Big Bang, the anthropic principle -other poems of that modern gigantic Mahabharata that is represented to our blind eyes. I dream of a brilliant stage director who had the courage to make Max Planck the central character of the Mahabharata of cosmodernity (Nicolescu, 1994, p. 86).

Making a parallel between the extensive epic-mythological text of the Ancient India of the Mahabharata and the multiple phenomena of quantum mechanics, Nicolescu (1994) considers that cosmodernity is the reencounter with a ternary thought. While Modernity is characterized by the binary separation between subject and object, cosmodernity manages to defeat binary thought as a mental schema and as the root of new nuclear barbarism. For Nicolescu (2014, p. 212), the idea of cosmodernity “essentially means that every entity (existence) in the universe is defined by its relation to all other entities”. Based on the foundations of quantum physics, contemporary science has replaced the object with the relationship, interaction and interconnection of natural phenomena. This perceptive metamorphosis of a mechanistic universe to a living universe establishes a new Philosophy of Nature in Cosmodernity.

For this reason, Nicolescu (2014, p. 214) defines cosmodernity as “a new era founded on a new vision of contemporary interactions between science, culture, spirituality, religion and society. The old idea of the cosmos, in which we are active participants, is resurrected.” This is a basic characteristic of the cosmodernity that entails the development of a systemic thought that understands the universe as a whole, that is, as an extensive cosmic matrix where everything is in perpetual movement and structuring itself energetically. “Respect for Nature, conceived as the body of God, implies respect for the intelligence hidden in the laws of Nature” (Nicolescu, 2014, p. 24). Therefore, the study of nature and the study of humankind complement each other, since by studying the laws of the universe the human race manages to understand its own condition, and vice versa. For this reason, Nicolescu (2014) considers that a transdisciplinary theory that unifies the levels of Reality is a good start to involve the more than 8 530 disciplines identified by Klein (1994), which fragment knowledge and, therefore, divide and separates the scientific and religious dimensions of the human being.
On the other hand, the notion of the cosmomodern paradigm presented in this article is also in harmony with the arguments that Christian Moraru (2011) develops in his book Cosmodernism: American Narrative, Late Globalization, and the New Cultural Imaginary. In this work, Moraru (2011) analyzes the narrative of American culture after the fall of the Berlin Wall and the end of the Cold War in 1989, where he observes that for the first time since World War II, critics consider the restoration of the borders of the present. In this sense, Moraru (2011) defines polysemantically the concept of cosmodernism in the following way:

Cosmodernism is mainly (a) an imaginary modality of mapping the current world as a cultural geography of relationality; (b) for the same reason, a protocol for the formation of subjectivity; (c) an ethical imperative pointing both to the present and the future; and (d) a critical algorithm to decipher and assemble a post-1989 narrative range of theoretical imaginations for a reasonably coherent model and, again, face the future. If the cosmodern read the world in terms of I-other interconnections, this algorithm helps me to read their readings and thus become a cosmodern voyeur, aware of their perceptions for a new geometry of “us” (Moraru, 2011, pp. 5-6).

In this way, Moraru (2011) characterizes cosmodernism by the geocultural structure of co-presence, hence cosmodernism is distinguished from modernism and postmodernism by the interrelation of cultures. Inspired by the ethical individuality of Levinas’s thought, Moraru (2011) theoretically develops a comparison between identity studies, postmodern intertextuality and analysis more oriented to the context of academic globalization, pointing out that “identity is, for the cosmodern mind, the reason to be and the vehicle for a new union, for solidarity beyond political, ethnic, racial, religious and other borders” (Moraru, 2011, p. 5). In the search for ramifications of this “ethics of human proximity” in the humanities of the last decades of the globalized era, Moraru (2011) manages to identify a road map for the cosmomodern imaginary around several axes:

These axes (a) thematize the cosmomodern as a way of thinking about the world and its culture, about cultural perception, self-perception and identity; (b) to be on the vanguard, consequently, communicational intersubjectivity, dynamic dimension of cosmodernism; and (c) articulates the cosmomodern imaginary in five regimes of relationship, or subimaginaries: “the idiomatic”, the “onomastic”, the “translatability”, the “readable” and the “metabolic”. These are the foci of this five-part volume (Moraru, 2011, p. 8).
Desde este imaginario cultural, Moraru afirma que la racionalidad cosmoderna es relacional, superando la racionalidad moderna que se caracteriza por “des-relacionar la presencia del Otro en el mundo y por el mismo movimiento el mundo mismo” (Moraru, 2011, p. 29). Bajo una gran influencia del pensamiento ético de Levinas, Moraru (2011, p. 316) considera que el “cosmodernismo se entiende mejor como una proyecto ético en vez de un proyecto ‘técnico’”, al señalar que se trata de un proyecto que cuenta “con considerables sustentos en nuestra forma de pensar, no sólo sobre el sujeto, sino también sobre el discurso, la historia, la cultura, la comunidad, el patrimonio y la tradición” (2011, p. 316).

In this cosmodern line of thought I conceive the planetary challenge to reach the Sustainable Development Goals (SDGs) agreed by the United Nations by the year 2030, since world citizenship has an “infinite bioethical” responsibility to safeguard the millions of earthly life forms we know. The cosmodernity emerges to study the complexity of the interterroactions developed between the dynamic systems that make up life (human beings, animals, plants, etc.), within an environment that houses the ideal conditions for its coevolution: the Earth-Motherland (Morin and Kern, 2005). The cosmic miracle of the emergence of life is a transdisciplinary challenge that we must urgently recognize in order to achieve lasting sustainable development. For this reason, it is necessary to create a space of inter-epistemological convergence between science and religion to learn to co-evolve along with the ecosystems of the Pachamama, also known as the sacred in the ancestral worldviews of indigenous peoples.

Reinventing the sacred from the sciences of complexity

During the last decades, a strong dialogue between scientists and spiritual leaders has been intensified to explore together the meaning of the ontological reality of nature and the universe. This dialogue found a point of encounter in the Bootstrap theory of particles elaborated by the theoretical physicist Geoffrey Chew in the 1960s, when trying to unify quantum mechanics with the theory of relativity. The theoretical model supposed a great rupture with the traditional scientific approach of the West when showing that nature can not be understood by means of the reduction of fundamental entities like the atom, the subatomic particle, the quarks, etc. The traditional mechanistic conception of nature and the universe collapsed when showing that reality is a wide network of interrelated dy-
namic events in an indivisible whole, where each particle helps generate other particles that are generated by these simultaneously.

This theoretical observation of the bootstrap model has been present in numerous spiritual worldviews of the East. A good example is the Buddhist philosophy of the Mahayana that emerged in India during the first century AD. and extended by to Asian countries such as Bangladesh, Bhutan, China, Korea, Japan, Malaysia, Mongolia, Nepal, Singapore, Sri Lanka, Tibet, Taiwan and Vietnam. Through the Indra network metaphor illustrated in the Avatamsaka Sutra, this spiritual worldview recognizes a cosmic network of events that applies to the entire universe. But this interpretation can not be understood intellectually, but through meditation, because it is an insight barely perceptible by the enlightened mind. That is why the scientific dimension and the spiritual dimension constitute two indissoluble spheres in the paradigm of cosmodernity that is defended in this article, since both help us to become aware that the current world in which we live is the image and likeness of our interconnected individuality: fruit of multiple interretroactions.

At present, there seems to be a substantial conceptual difference between the words “religion” and “spirituality”. Although the definition of both represents a reason for controversy among specialists, both converge on the sacred. As the biomimetic thinker Fritjof Capra (2011, pp. 14-15) points out, “the original meaning of «spirit» in many ancient philosophical and religious traditions, both in the West and in the East, is a breath of life. The Latin word spiritus, the Greek psyche and the Sanskrit atman mean, all of them, “breath” or “breathing”. This notion also appears in Chinese thought with the word shen (神), and in the Islamic world with the fitrah (فطرة). Another more illustrative definition is that made by the transcultural educator Edward Brantmeier (2010, p. 16), who pointed out that “spirituality can be an inherent integral force in vibrant peace and in life itself. As a process and strength, spirituality is composed of intuition, a sense of sacredness, knowledge, interconnectivity and interdependence. “For this reason, spirituality is a transcultural phenomenon in all historical societies.

In turn, the etymological origin of the word “religion” comes from the Latin religio, composed by the prefix re- (indicating intensity); the ligare verb linked with the Indo-European root leig- (meaning link, join, link), and the suffix -ion (denoting action and effect). That is to say, the term “religion” means “action and effect of binding intensely”, without implying any god or gods in between. The same points the philosopher and historian of religions Mircea Eliade (apud Nicolescu, 2008, p. 137):
“the sacred does not imply the belief in God, in gods or in spirits. It is... the experience of a reality and the origin of the consciousness of existence in the world. “Unfortunately, this religious and spiritual experience of being *religado* and in connection with the *sacred* world of nature has historically evolved.

Although Modernity has relegated it to the background, religion has been constituted as a set of beliefs and dogmas alienated around interpretative differences on the levels of reality and individuality. That is to say, the human being has been delineating and defining different epistemic paradigmatic pictures based on his hermeneutic interpretations with the sacred and the profane. That is why the vast majority of religions continue to deal with the spiritual world, but from a unique perspective that is often incompatible with other religions created in different cultural and historical constructions. As is known, this diversity has given rise to the appearance of phenomena such as extremism or religious fundamentalism.

Historically speaking, religions have dictated moral norms for individual and social behavior through rituals of prayer and worship, organizing patterns of behavior in the feelings of veneration, adoration and fear of the god or gods where the individual/society is paradigmatically circumscribed. For this reason, the philosopher and economist Karl Marx (1973) considers that religion is the “opium” of the people, since it is a form of social alienation that, by presenting Heaven as a place of understanding and justice, justifies the current state of existing things in the earthly world. Para una gran parte de la ciudadanía mundial contemporánea, el concepto actual de religión engloba un imaginario que además de defender determinados intereses económicos y políticos, también alimenta el miedo de las personas: amenazándolas con el infierno eterno y causándoles un sentimiento de pecado y culpabilidad. Para muchas personas agnósticas y ateas, la religión es vista como un conjunto de reglas dogmáticas que guía a las personas siguiendo los preceptos de un libro sagrado, por lo que se convierte en una causa importante de división y conflicto entre la propia especie humana, tanto a nivel inter-religioso como a nivel intra-religioso.

Throughout the history of mankind, religion has become a risk factor for all the conflicts that have taken place, especially in the region of the Middle East. This is an area of great instability due to a complex network of ethnic, racial, political and economic factors that arise from the coexistence of the three largest monotheistic religions in the world: Judaism, Christianity and Islam. At present, interreligious conflicts are suf-
ffered in countries such as Nigeria (Christians and Muslims), Israel (Jews and Muslims), Thailand (Buddhists and Muslims), Sudan (Muslims and non-Muslims), Afghanistan (radical Muslim fundamentalists and non-Muslims), and in Bosnia-Kosovo (Catholics, Muslims and Orthodox). At the same time, intra-religious conflicts are taking place with greater visibility within Islam, between Shiites and Sunnis, in countries as troubled as Syria, Lebanon or Iraq. In these countries is emerging the so-called “Islamic State”, which threatens the world through terrorism practiced by its followers in the “holy war” against the West.

All these confrontations seem to indicate that we have had a wrong way of looking for our spirituality. Instead of cultivating and investigating the mind and our relationship with the sacred, we have preferred to maintain dogmatic beliefs: confusing them with religion and spiritual growth. That is why all libertarian education must transgress these epistemic paradigms to promote an inquisitive mind, that questions and discovers by itself, instead of reproducing and imitating contents of a certain “sacred book” written thousands of years ago (Collado, 2017).

In this line of thinking, the Indian theosophist Krishna (2013) points out that:

Jesus Christ did not become Christ through a church or a belief, but through his own understanding and his own investigation. Buddha attained enlightenment, understanding, through his own meditation, of his own investigation. We must understand that and correct the situation in our educational system (p 27).

All liberating education should guide each individual of world citizenship in their own intellectual, emotional and spiritual search, questioning the epistemic paradigms in which they find themselves. What is my identity? Why is this my nationality? Why should I follow this religion? What are my responsibilities with nature given my human condition and capacity for reflection? Only by researching and having our own insights do we learn to respond. Repeating the answers of Jesus Christ, Buddha, Muhammad or other spiritual leaders does not cultivate our consciousness to safeguard life on Earth. Each response is unique and non-transferable.

For this reason, it is important to reinvent the sacred from our own individual hermeneutics, which implies learning to dialogue intra-religiously. According to the philosopher, theophysicist and specialist in religious comparisons, Raimon Panikkar (1999, p. 74): “If interreligious dialogue is to be a real dialogue, an intra-religious dialogue must accom-
pany it, that is, it must begin with my questioning of myself and the rela-
tivity of my beliefs. “The thought of Panikkar is a meeting point between
East and West, since his works constitute a continuous intercultural and
interreligious dialogue that leads to the mutual fecundation between cul-
tures and civilizations: where we all learn from everyone.

Each language is a world (...) each culture is a galaxy with its own criteria
of goodness, beauty and truth. We mentioned that the truth, due to the
fact that it is its own relation, is pluralistic, if pluralism is understood as
the consciousness of the incompatibility of the different worldviews, as
well as the awareness of the impossibility of judging them impartially,
one no one finds himself on top of his own culture that offers him the
elements for judgment (Panikkar, 1998a, p. 29).

As Panikkar (1998a) expresses, pluralism makes us aware of our
contingency and of our limits to judge, showing us how to coexist in
front of a cultural diversity that implies galaxies of cosmovisions with
criteria related to reality. According to Panikkar (1998b), every culture
and civilization has three ontonomic orders (myth, logos and mystery)
and a cosmotheanic dimension that interrelate, making the human, the
cosmic and the divine inseparable. In this way, Panikkar (1998b) unifies
and reconciles physical cosmology and religious cosmology, giving a new
philosophical and spiritual sense to the ontonomy of science. The plural-
ist consciousness reminds us that every culture or religion is intrinsically
open to being fertilized by others, since the understanding of our human
condition in the universe requires an integral solidarity among all beings
to approach the knowledge of our ontological structure.

In a complementary way, the physicists and philosophers of the re-
ligion Danah Zohar and Ian Marshall (2000, p. 3) argue in their work SQ:
Connecting With Our Spiritual Intelligence that “the complete picture
of human intelligence can be completed with an analysis of our spiritual
intelligence.” According to Zohar and Marshall, spiritual intelligence ad-
dresses and solves problems of meaning and value, places our actions and
lives in a richer and broader context and, ultimately, evaluates whether
the course of an action or a path of life it is more significant than another.
This freedom of spiritual and religious choice is also explicitly endorsed
in Article 18 of the Universal Declaration of Human Rights:

Everyone has the right to freedom of thought, conscience and religion; this
right includes freedom to change his religion or belief, and freedom, either
alone or in community with others and in public or private, to manifest his
religion or belief in teaching, practice, worship and observance.
We must choose wisely the image we want of the sacred to guide our lives and civilizations, without falling into the barbarism of self-destruction. Hence the importance in clarifying the epistemic postulates of the most practiced religions, with the aim of building a new global ethic that reinvents our human relations with the sacred.

A new global ethic?

Learning to coevolve in a sustainable way with the Pachamama entails the emergence of a paradigmatic scenario characterized by a planetary consciousness where different worldviews and epistememes coexist, including science and religion. The perception of being interconnected with the cosmos must converge in a new global ethic and spirituality that reinvents our human relationships with the sacred. The work A Global Ethic is fundamental here. The Declaration of the Parliament of the World’s Religions by theologians Hans Küng and Karl-Josef Kuschel (2006), who advocate a global ethic and a Parliament of the World’s Religions to achieve a culture of permanent civilizing peace. “In the not too distant future we should have other statements that make the global ethics of religions more precise and concrete,” argue Küng and Kuschel (2006, p. 9), adding that “maybe one day there may even be a declaration of the United Nations on a Global Ethics to provide moral support for the Declaration on Human Rights, which are so often ignored and cruelly violated.” According to Küng and Kuschel (2006), interreligious dialogue is the fundamental pillar for achieving a lasting world peace, since the global society does not need a single religion or ideology, but a set of ethical norms, values, ideals and purposes that already present in all of them, being a common denominator that surpasses them and makes them walk in the same direction.

In this sense, the doctor, theoretical biologist and researcher in complex systems on the origin of life on Earth, Stuart Kauffman (2008, p. XIII), believes that “we can reinvent the sacred. We can invent a global ethic, in a shared space, safe for all of us, with a view of God as the natural creativity in the universe. “In addition, Kauffman (2008) points out that we are completely responsible for ourselves, our lives, our actions, our values, our cultures and, ultimately, the current planetary civilization that destroys the environment every day. For Kauffman (2008, p. 283), reinventing the sacred is not a sacrilege, “on the contrary, with caution, I think we need to find a global spiritual space that we can share through our diverse civiliza-
tions, in which the sacred becomes legitimate for all of us”, that is, a global spiritual space where “we can find a natural sense of God [for] that we can share to a substantial degree whatever our religious convictions” (2008, p. 283). Here lies the importance in getting the socio-ecological problems recognized by the UN SDGs to promote a global ethical and spiritual space, free of identity egos, through a cosmodern consciousness that supposes a bridge of union between the different religions, spiritual cosmovisions and interpretations of the sacred. But how many interpretations are there of the sacred? How many religions continue to exist in the world? How to reconcile the paradigmatic epistemic frames in which the different religions find themselves in the same global spiritual space?

Although it is impossible to affirm with certainty the exact number of current religions and the number of practicing followers to each of them, the book The Everything World’s Religions Book published in 2010 by the writer and philosopher Kenneth Shouler makes an approximate estimate of 4,200 religions. Despite the difficulties, this figure is also shared by the group of researchers and religious scholars who work in the online initiative of adherents.com, where statistical data from academic studies are contrasted and an open consensus is constructed between different opinions and explanations of experts and professionals of the area. Certainly, this map supposes a reduction of the 4,200 religions estimated by Shouler (2010) and the independent researchers of adherents.com, but at the same time it helps us to recognize and identify the
most practiced religious beliefs in the present: Christianity, the Islamism, Hinduism, Buddhism and traditional Chinese religion. It draws attention how the colonizing countries have imposed their religious epistemic picture in their respective colonies, as is the case of Catholic Christians in almost all of South America, Central America and much of North America for the hegemony of Spanish and Portuguese in most of the territory. It is also the case of Protestantism in the former British colonies of North America, South Africa, Australia and New Zealand. Under this logic of epistemic imposition also stand out the satellite countries of the former Soviet Union, which practice the Christian orthodox side for the most part. It is also considerably remarkable how in the southern part of the African continent, where different Muslim, Christian and tribal currents coexist, which explains to a large extent, the increase in the number of refugees and displaced persons in these countries due to the high ethnic-religious conflict. The Islamic influence is evident in the northern part of Africa, the Middle East and much of Southeast Asia. In Asia we find Hinduism as a preeminent religious epistemic picture in terms of number of followers, while in Buddhism followed by a large number of Asian countries. Traditional Chinese religion also has a strong influence in the area. But what positively stands out are the most tropical areas of Australia and the Amazon rainforest areas in South America, which retain a strong traditional and tribal roots of the world views of native peoples.

In order to complement the information on map 1, chart 1 has been drawn up to make an interreligious comparison of the paradigmatic epistemic structures that constitute the most practiced and influential philosophical and religious doctrines at present. In spite of not having a great pre-eminence in the map, Judaism is also included because of its strong historical presence, since Christianity and Islam, which are practiced by more than half of the world’s citizens, were separated from it. The intention is to create a meta-point of reflection to be able to conceive with greater clarity this global ethical and spiritual space that Kauffman (2008), Küng and Kuschel (2006) demand, since all these interpretations of the natural reality and the cosmos seem to converge in many aspects, as detailed later in figure 2.

As can be seen in chart 1, Christianity (33%), Islam (21%), Hinduism (14%), Buddhism (6%) and traditional Chinese religion (6%) constitute, as a whole, the religious beliefs of 80% of the current world citizenship. But if we also take into account that some 1.1 billion people are secular, not religious, agnostic and atheist (16% approx.), That means that only a margin of 4% remains for the rest of the religious worldviews,
which would be 4.195. In other words, the other 4 195 religions and spiritual worldviews identified by Shouler (2010) are practiced by 4% of the world population, which in 2010 (when the estimates were published) amounted to approximately only 275 million people. The contrast is very relevant: for the year 2010, some 5 500 million people followed one of the five great religions, 1,100 million did not follow any, and only 275 million people kept the rest, corresponding to some 4 195 religious worldviews.

**Chart 1**

Interreligious comparison of the most practiced and influential philosophical and religious doctrines today. (The number of followers follows the statistical estimations of adherents.com.)

<table>
<thead>
<tr>
<th>Religion</th>
<th>Cristianism</th>
<th>Islam</th>
<th>Hinduism</th>
<th>Budism</th>
<th>Chinese T.R</th>
<th>Judaism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symbol</td>
<td><img src="chart.png" alt="Cross" /></td>
<td><img src="chart.png" alt="Moon" /></td>
<td><img src="chart.png" alt="Om" /></td>
<td><img src="chart.png" alt="Buddha" /></td>
<td><img src="chart.png" alt="Tao" /></td>
<td><img src="chart.png" alt="Star of David" /></td>
</tr>
<tr>
<td>Founder</td>
<td>Jesus</td>
<td>Mohamed (Muslims)</td>
<td>Ha no founder</td>
<td>Siddharta Gautama (Buda)</td>
<td>Has no founder</td>
<td>Abraham</td>
</tr>
<tr>
<td>Conception</td>
<td>Monotheist</td>
<td>Monotheist</td>
<td>Monotheist and polytheist</td>
<td>No theist</td>
<td>polytheist</td>
<td>Monotheist</td>
</tr>
<tr>
<td>Place of worship</td>
<td>Church</td>
<td>Mosque</td>
<td>Temple</td>
<td>Temple</td>
<td>Temple</td>
<td>Synagogue</td>
</tr>
<tr>
<td>Holy Scriptures</td>
<td>Bible (Old and New Testament)</td>
<td>Koran (114 azoras)</td>
<td>4 Vedas, Upanisad, Mahabharata, Bhagavad-Gita, Ramayana</td>
<td>Vinaya, Sutra, Abhidharma</td>
<td>Oral tradition</td>
<td>Tora (Misná y Talmud)</td>
</tr>
<tr>
<td>Main Currents</td>
<td>Catholicism, Protestantism, Orthodox, Evangelical, Pentecostal,</td>
<td>Sunism, Shivism, Sufism, Jariyism</td>
<td>visnuismo, krishnaísm, shivaísm, shaktism</td>
<td>theravada, mahayana, vajrayana</td>
<td>Confucianism, Taoism,</td>
<td>orthodox, reformist, conservative, reconstructionist Karaite, Hasidic</td>
</tr>
<tr>
<td>Followers (millions)</td>
<td>2.100 - 2.300</td>
<td>1.500 - 2.040</td>
<td>900</td>
<td>375 - 500</td>
<td>394 - 800</td>
<td>14</td>
</tr>
<tr>
<td>% of world population</td>
<td>33%</td>
<td>21%</td>
<td>14%</td>
<td>6%</td>
<td>6%</td>
<td>0.25%</td>
</tr>
</tbody>
</table>

Source: Own elaboration

As with the linguistic world, where it is expected that the 7 102 languages recognized by the *Ethnologue* in 2015 will be reduced and extinguished for various cultural reasons, it is also thought that these religious worldviews will be drastically reduced in the coming decades. According
to estimates of linguists, about 10,000 years ago, the human beings who lived in the world (between 5 and 10 million) spoke about twelve thousand languages. Although the current world population grew exponentially after industrialization, only a little over seven thousand languages remain. As a whole, the loss of languages and religious worldviews means that the human being is losing part of its inherent integrity. In other words, millenarian ways of understanding the world and creative alternatives to achieve sustainable development in peace and harmony with Mother Nature, in opposition to the current epistemic rationalist and capitalist hegemonic picture. The loss of a millennial worldview represents, therefore, the loss of a unique way of thinking and conceiving our reality.

According to the cultural analysis and theological argument of the philosopher of religion Mark Taylor (2007), religion molds our reality, since faith and value are inevitably and inextricably interrelated for believers and non-believers alike. That is why everything seems to indicate that the five great religious epistemic blocks will have an evolutionary dynamic similar to the gravitational forces during the expansion of the universe: absorbing matter (citizens) and getting bigger and bigger through violent impacts, especially in Africa, where the population is expected to grow to 1.8 billion during the second half of the century (United Nations, 2014). But one must also take into account a growing religious entropy, that is, the unusable part of the energy contained in a system: adherence to the group of the “non-religious”. This would mean incurring in the oblivion of the spiritual dimension of the human condition, with the risk of breaking the balance between rational efficacy and spiritual affectivity. That is why it is urgent that the teaching-learning processes establish mechanisms to go beyond the pedagogical contents of formal and institutionalized education, reaching families, communities, civil society, the private sector, policy-makers, the media, internet, etc. It should also promote awareness campaigns, awareness and participation with local knowledge in general and indigenous peoples in particular. Speaking of the history of philosophy and social theory, Michel Foucault (2007, p. 44) argues that “any education system is a political way of maintaining or modifying the appropriation of discourses, with the knowledge and powers that they They bring with them”. Therefore, power and knowledge are two inseparable complex spheres of the same educational process where discourse, ideology, contents, forms of relationship between teachers and students, textbook, etc. are established.

Consequently, the repercussion of the system of formal education cannot be considered neutral, since all these elements of power
and knowledge harbor, on the one hand, the capacity to epistemically colonize individuals in order to sustain the purposes of economic fundamentalism and its competitive market values; and on the other hand, they have the potential to develop an alternative thought oriented to a transnational cooperation in order to create other possible worlds. Given that individuals learn and internalize the order and hierarchy imposed by the dominant classes in educational processes formalized by the public system, it is urgent to save and rescue ancestral knowledge through critical intercultural pedagogical mechanisms that reconcile forms of coexistence that have always been in harmony with the sacred. “Hence, the emergence of a new philosophy of nature in gestation, subject neither to the traditional metaphysics nor to science alone, but open to the different discourses that intersect in it, have clear repercussions” (Espinosa, 1999, p. 116). The important thing, in my opinion, is to appreciate the common ground that the philosophy of science and the philosophy of religion have when using nature as a meta-meeting point for civilization.

Sustainable development cannot be conceived as a set of goals, but a continuous process of adequate management of all the natural assets of the biosphere. Without falling into a romantic idealization, it is important that cosmodern education defends, recognizes and cares for the rights of indigenous and aboriginal peoples; since their customs, languages, religious beliefs and worldviews in general represent an ancestral biomimic wisdom necessary to comply with the SDGs proposed by the UN (Collado, 2016e). This ecology of scientific and non-scientific knowledge helps us to reformulate the socio-ecological metabolism through new symbiosis between natural ecosystems and human cultural production systems. In this sense, biomimicry emerges as a science that seeks the harmonic reinsertion of human systems within natural systems, to reintegrate the technosphere and the sociosphere into the biosphere (Collado, 2016f).

In this line of thought, the philosopher of science Jorge Riechmann (2014, p. 171) affirms that we must address the principle of biomimicry in a broader sense, to “understand the principles of the functioning of life at its different levels (and particularly at the ecosystem level) with the aim of reconstructing human systems so that they fit harmoniously into natural systems.” For this reason, the challenge of creating new biomimetic systems of sustainable economic production with the environment requires awakening the coevolutionary consciousness of individuals through the epistemic combination of science-spirituality. The emergence of ecology as a science that questions, values and links human relationships with nature, has made us realize that science and spirituality should be studied
and practiced in a complementary manner (Madera, 2016). This invites us to reason and question everything, (re) discovering ourselves as an integral part of the cosmos in complete ecological communion, which implies reinventing the sacred through a new ethical and spiritual space. But how can we develop our spirituality outside the formal religious tradition? The following section seeks to answer this and other questions.

An interreligious and intra-religious dialogue of historical spiritual beliefs

As is well known, human beings have committed countless crimes in the name of religions. In fact, scientific, rational, objective and secular thought erupted in the seventeenth century to counteract human power of divine origin. But the predominance of this hegemonic rational epistemic picture, to the detriment of other human dimensions, has led us to an even more devastating panorama: the nuclear threat and climate change derived from the prolonged and systemic exploitation of nature. For this reason, it is necessary a potential and simultaneous development of the different scientific and religious knowledge to learn to coevolve in a resilient way in the Pachamama. To this end, an interreligious and intra-religious analysis is needed to help us discern how to develop our spirituality outside the epistemic frameworks built by the traditions of formalized and institutionalized religion.

According to the book The Tao of Liberation. An ecology of transformation written by ecologist Mark Hathaway and the theologian Leonardo Boff (2014, p. 374): “the spirituality of each person is unique in some sense, and our spirituality can be based on the diversity of religious and philosophical traditions, as well as in our own experience.” However, they also warn that “most of humanity finds in religious traditions the key source of their spiritual understanding. It is almost impossible to consider spirituality without considering at the same time the influence—potentially positive or negative—of religion” (Hathaway and Boff, 2014, p 376). For this reason, it is necessary to learn to differentiate spirituality within the historical interests that have predominated and continue to be given within religions.

To this end, the work Why Religion Matters by Huston Smith (2003) is a good work that helps us analyze and compare some of the defining spiritual connotations of the epistemic pictures that constitute the paradigmatic worldviews of the most practiced and influential religious
beliefs of the present: Christianity, Islam, Hinduism, Buddhism, traditional Chinese religion and Judaism.

**Figure 2**
Representation of the levels of reality and levels of individuality in the most influential religious beliefs

As shown in Figure 2, it is a diagram in the form of a mandala that has the flower of life in the center representing the common wisdom of the original peoples. The mandala addresses the interpretations that the main religious beliefs have about the relationships between reality and individuality. The reality levels of the upper part are reflected in the levels of individuality of the lower part through four circles of different intensity. The importance of this figure lies in the fact of being able to contrast the multitude of similarities that exist between the paradigmatic epistemic pictures of the six most practiced and influential religions at present, which are practiced by an approximate 80.25% of the current world population.
population. To some extent, this mandala serves so that world citizenship can be recognized in the mirror of the other, of the infinite otherness, since there are numerous bridges between these great cultural cadres.

Although this space does not allow a meticulous interreligious study with all the characteristic details of each epistemic block, there is no doubt that a new global spiritual space begins to emerge from the horizontal dialogue between religions. This dialogue with interreligious aspects shows that human consciousness evolves towards integration with the sacred from different historical spaces and times, although each religious perspective gives a different value to the nature of reality. Despite the many differences between religions, the mandala points to the millennial idea of the “Great Chain of Being”, that is, the idea that reality is an interwoven network of levels of consciousness achievable from matter, body, mind, soul and ultimately the divine source, Tao, Nirvana. Spiritual insights reveal an understanding of sacredness where life is radically interconnected at all levels. Nature invites us to develop spirituality through our own Judeo-Christian spirit, Islamic fitrah, Chinese shen, Buddhist Buddha-dhatu and Hindu atman to be in harmony with the sacred.

Developing our spirituality cannot be an obligation of the paradigmatic microworld that surrounds us. It must be a personal devotional option that reinvents our common and shared meta-world, with new value systems that ensure more sustainable habits with the environment, as well as the conservation of life on our planet. According to Hathaway and Boff (2014, pp. 376-377), “we must take into account the role of spirituality and that of religion in trying to get out of our path of destruction and undertake another in which human beings we participate actively in the preservation and improvement of the integrity, beauty and evolution of life on Earth.” To open ourselves to this new path, the human species needs to promote the preservation of biodiversity and take care of the life of the ecosystems, as pursued by the UN SDGs. Reaching a great human family in coevolutionary harmony with the ecosystems of the Earth is, in effect, the great objective of the cosmodernity paradigm. We have to reinvent the sacred and transgress the traditional epistemic cadres that anchor us in the religious and cultural differences that confront us and lead us to physical and spiritual death. On the contrary, we must focus on the development of a culture of peace among peoples so as not to hinder future generations. In all the beliefs and cultures of humanity there is that common transhistorical yearning.

A good example of this peaceful worldview are some of the sacred revelation texts of Hinduism, such as the Vedas and the Upanishads. Un-
doubtedly, Mahatma Gandhi is considered an apostle of peace and non-violence thanks to his spiritual knowledge of these Hindu philosophical texts. The main essence of these veneration treaties is the realization of unity with all creatures. Despite the diversity of beliefs (monotheistic, polytheistic, panentheism, pandeism, monism, atheism, etc.), the Hindus believe that behind the visible universe (Maya), there is a final and infinite reality known as *Nirguna Brahman*, which has no imaginable form. This monistic character contrasts with the polytheistic worship of numerous gods and goddesses, who receive attributes at the level of the *Saguna Brahman*. The *deva* (masculine) and *devi* (feminine) deities are described as supernatural beings, as is the case of the guardians of the directions on the walls of the Shiva temple in *Prambanan* (Indonesia). *Prakriti* is nature, which inhabits the dense body of the human being, which according to the sacred text of the *Bhagavad Gita* is directed by the subtle body, that is, the mind, intelligence and ego. The *Karana sarira* or causal body is the seed of the dense body and the subtle body that the *atma* performs as the ultimate individual instance to connect with the ultimate reality of the *Nirguna Brahman*. Similar to the Chinese *Tao* or Buddhist Nirvana, the Hindu *Nirguna Brahman* shows that the search for the truth of the unity of nature and the cosmos transcends all religious beliefs, going further, without being conceived or described in words.

In fact, that was the conclusion shared by the Indian poet and writer Rabindranath Tagore (Nobel Prize in Literature in 1913) with the famous physicist Albert Einstein (Nobel Prize in Physics in 1921) during their meeting on July 14, 1930 on the outskirts of Berlin. A good example of this inability to describe the ultimate reality of the universe was given by Tagore himself at another time, with a commonly-known quote that reads: “Most people believe that the mind is a mirror, which reflects with greater or less accurate the world outside of them, without realizing that, on the contrary, the mind is itself the main element of creation.” It is a deep insight that involves an ontological leap in the way we perceive the structure of Reality.

Undoubtedly, this philosophical and religious conception goes beyond the concept of *deep ecology* formulated by the Norwegian philosopher Arne Naess in the 1970s. According to Naess (1973), there is a superficial ecological vision that perceives the human being above nature and that gives you the right to exploit it without limits. To overcome this marked anthropocentrism, Naess proposes a *deep ecology* where the human being is connected horizontally with all living beings. Although this conception has been criticized for considering that human life has the
same value as other forms of life, the Hindu conception of Tagore goes far beyond this theoretical framework. Tagore’s introspection suggests that our mind is capable of transcending all gnoseological and ontological levels to create the very structure of cosmic and earthly reality.

This deep insight of Tagore is also shared by his compatriot and spiritual philosopher Jiddu Krishnamurti. In a booklet called The Future of Humanity, Krishnamurti (1983) talks with the physicist David Bohm from the question: What is the future of humanity? During the dialogue, these authors consider that humanity took a wrong turn and went out of its way, becoming a habit to continue in that situation that is leading us to the annihilation of life on Earth, including the human race. To change this civilizing course, Krishnamurti (1983) emphasizes the fact of promoting spirituality, since cumulative scientific knowledge can not free us from disaster, but the revealing insights that connect us extra-sensually with the whole to transcend reality. Incredible as it may seem, this spiritual vision has found scientific foundations since the second half of the 20th century, especially with the formulation of the Autopoiesis Theory postulated by Humberto Maturana and Francisco Varela (2011).

Similar to the bootstrap model, the Autopoiesis Theory reveals that all phenomena are interconnected and possess the intrinsic capacity to self-organize as a whole. What we think is transmitted to the rest of the body by the blood peptides, which act as molecular messengers of the same psychosomatic network between the nervous, immunological and endocrine systems. For this reason, Bohm argues that “modern research within the brain and nervous system really gives considerable support to Krishnamurti’s statement that insight can change brain cells” (Krishnamurti, 1983, p. 4). Thus, it seems that the ability to transcend with the mind and create the structure of reality from deep meditation could be scientifically proven in the coming years with more compelling evidence.

Cosmomodern conclusions to bio-inspire more sustainable and resilient futures

The investigation of the physical states of the world and other subatomic phenomena have scientifically proven that the ontological structure of reality is constituted by a vast network of interconnections that includes the subject-observer. This self-conscious recognition of interconnected individuality has a great transcendence to achieve planetary sustainability, since it forces us to become more responsible and reflective people
with the coevolutionary processes that life develops on the planet as an interdependent whole.

In other words, the acts and actions of pollution and environmental degradation of each person directly and indirectly affect the rest of the world’s citizens, but also their environmental. We must understand that each of us creates his unique world through interrelatedness with others, and this interrelation with other singular worlds occurs in a shared world: a meta-world. When we discover that we cannot be replaced by anyone else, since we are unique individuals, we understand that the world is made up of many worlds. A world with more than seven thousand two hundred million worlds! Each world interacts in a personal way interconnecting with the whole universe in its own unique way, just as the constellations of neurons in our brain do.

As Chilean philosophers and biologists Humberto Maturana and Francisco Varela (2011, p. 270) explain: “we do not perceive that we only have the world that we create with others, and that only love allows us to create a world in common with them”. Each one of us is a singular individual being who lives in a meta-world that welcomes us for our vital, affective and intelligent flourishing; but our meta-actions are ending the life of this common and shared meta-world that affects us all transcendentally. The actions of consumption and pollution of each individual directly affect the rest of the world citizenship (current and future), but also the great biodiversity that co-evolved in natural ecosystems for billions of years.

By demonstrating that there is a reciprocal paradigmatic conditioning between the subjects of the emerging global citizenship with the environment, it is clear that the SDGs can only be achieved in a collective and indivisible way: by feeling part of the coevolutionary processes of an indissoluble meta-world. As in the subatomic world, the individual lacks meaning as an entity isolated from the parts of an indivisible whole that is in constant movement and restruction, as is the world citizenship in the current planetary era. We must promote a systemic-analytical thinking that recognizes the human condition within a vast network of relationships and energy movements in continuous restructuring. It is necessary to complement the epistemic fragmentation that people create about the structure of reality.

As Bohm (1992, p. 22) explains when exposing his Holomovement Theory, “we have the habit of taking the content of our thought as a description of the world”, and this creates the epistemic illusion of considering that there is a direct correspondence with the objective reality. According to the Theory of Relativity and Quantum Theory, this relation-
ship is much more complex than a simple correspondence, since there is no separation by parts, that is, the ontological structure of the universe can only be understood in terms of relationality between human beings, with nature, with our Mother Earth and with the cosmos in its broadest sense. In other words, in spite of the fact that both theories are very different from each other, they show us the need to understand the world as an indivisible whole where all the parts of the universe—including the human being and its instruments—merge into one totality structured by matter-energy in constant transformation process. A good beginning to understand this complexity is to combine scientific reason with spiritual introspection to unify life, mind and matter, without making any categorical division between the physical world and the living world. In this context, the paradigm of cosmodernity could be defined metaphorically as the constellation of interconnections that individuals of world citizenship must realize in order to reach an authentic sustainable development through a synchronic participation with the cosmic dance that stars and galaxies perform during the processes of energy transformation.

In the same way that in the quantum world subatomic particles lack any meaning if they are studied in isolation, the interretroactions of individuals have to be understood within an extensive network of interconnections and correlations. The awareness that all our actions are interconnected in a vast network of universal interdependence is the key to safeguard the planet’s rich biodiversity and achieve compliance with the SDGs in 2030. To move in this direction it is necessary to create new inter-epistemological dialogues between scientific and non-scientific knowledge in all spheres of formal, non-formal and informal education.

In the paradigm of cosmodernity, the scientific knowledge of an outer physical universe converges with the spiritual knowledge of an inner emotional universe. “The transdisciplinary educational experience for sustainability includes the spiritual dimension as a nucleus for relevant creation in our societies, locally and globally,” explains anthropologist Cristina Núñez (2012, p. 109). This means that educational success can not be reduced to a simple quantification carried out through standardized tests on reading comprehension, science or mathematics, as is the case with the OECD PISA tests. The true educational success is that students have spiritual, emotional and psychosomatic experiences between body and mind with the intention of developing deep connections with other people, with life, with nature and with the cosmos.

In short, everything seems to indicate that the dialogues held on the foundations of the mind, matter, consciousness, life and nature, be-
between great scientists and spiritual leaders (Einstein and Tagore, Bohm and Krishnamurti, Anton Zeilinger and Dalai Lama, etc.), will be able to reveal the uncertain path of this crossroads of paradigmatic unsustainability in which we find ourselves as an interconnected world-society. That is why the cosmopolitan paradigm that I postulate to achieve a sustainable development, through biomimetic inspiration, relies as much on spiritual beliefs as on empirical scientific demonstrations, without falling into the dogmatism of one side or the other. The cosmodern vision integrates both types of knowledge to make a civilizational metamorphosis that reinvents our relationship with the sacred. Nature is a unique model to imitate to achieve a socio-economic sustainability, as is well known for the spiritual and ancestral beliefs of the indigenous peoples that we must rescue for their rich millenary wisdom. Therefore, it is concluded that to learn to coevolve in a resilient manner in the Pachamama requires the potential and simultaneous development of different scientific and religious knowledge.

The paradigm of cosmodernity is consolidated, therefore, under the premises of transnational cooperation, intergenerational solidarity and the harmonic and sustainable co-evolution of human cultural systems together with the ecosystems of nature. We must take advantage of the opportunity offered by the SDGs to walk together towards a sustainable civilizational horizon with the environment. At this historic crossroads, it is necessary to understand that sustainability is a complex and transdimensional process that is inside and outside of the human being at the same time. It also represents a historic opportunity to biomimetically reformulate our values about the sacred, as well as the opportunity to create a “global ethic” by which we can live together in a culture of peace that allows us to avoid the ecological and civilizing disaster to which we are heading. In this sense, the philosopher Jürgen Habermas (2011) postulates his concept of “post-secular paradigm”, where he affirms that we are changing religions towards a kind of “supra-ethics” and postmodern secularity towards new plural meanings of deep solidarity.

Hence, the cosmo-modern approach constitutes an epistemological opening that seeks to integrate, include and combine the multiple cosmic, physical, biological, ecological, spiritual, religious, mystical, rational, social, political, ethical, emotional, affective, cultural and artistic dimensions of a human being that coevolution and self-eco-organizes permanently in the systemic and interdependent processes of energy, matter and information (Collado, 2016a). Facing the dangers of the future, with the collective pretension of fulfilling the SDGs proposed by the UN for 2030,
requires reflecting on the appearance of the human being in the Great History in a holistic, systemic and transversal way, without forgetting the epistemic worldviews and the cultural traditions of each particular context. In this process, the combination of science and religion allows us to bio-inspire ourselves of the flexible strategies of nature and the cosmos to adapt to each eco-social circumstance of our community, serving as a model, a measure and a mentor to integrate the wisdom of the biosphere in the structures of the human sociosphere and the technosphere.

Note

1 Since 1951, the *Ethnologue* research project has been publishing works related to the world of living languages. In its 18th edition corresponding to 2015, with Lewis, M. Paul, Gary F. Simons and Charles D. Fennig as editors, 7,102 live languages have been recognized among a population of 7,106,865,254 people.

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