Chapter 97

The concept of the Four Ecologies in Leonardo Boff: Towards to Cosmocentrism and Biocentrism

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1 INTRODUCTION

Leonardo Boff turned 80 in December 2019. Considered by many to be the greatest Brazilian intellectual alive, Professor Leonardo Boff has written more than a hundred books throughout his intense and prolific theological, philosophical and academic career. Leonardo Boff is a consecrated author, with hundreds of thousands of copies sold worldwide, and in the 1970s and 1980s he was also a religious whose importance in Latin American theological thought must remain for decades to come.

In this context, thinker Michel Lowy refers to Leonardo Boff:

In the history of Christianity and social struggles in Brazil, there is a before and after Leonardo Boff. you sown a magical grain that fell into fertile land and gave birth to a whole forest, a whole rain forest, an amazon ideas, values, feelings and emancipatory struggles.

Due, among other reasons, to the acidic and harsh stance that the Vatican began to adopt on him and his work from the mid-1980s, his criticism was acquiring such conformation that he finally moved away from the Catholic Church from 1992, and has since taken on the challenge of building a new set of propositions and theories in the field of Philosophy and more specifically ethics, who catapulted him as a new defender of a paradigm that reconciles the existence of humanity on planet Earth without having to destroy and exhaust the environment.¹

¹ According to Leonardo Boff himself, his dismissal from the Catholic Church was so embarrassing that to this day he received no response to his request: "Funny, I forwarded the papers and the Vatican to this day has not responded to me. So officially, I can enter any church, celebrate, preach, marry, I mean, it was a unilateral shutdown. In 1992, during the Echo, came the general of the order, instructed by the Vatican, saying: "So far, the order has helped you, now you have to help the order. So you have to stop teaching, writing, traveling, giving interviews, publishing". I: "How? I've done this before, I don't do it anymore. Before it could be humility, here is humiliation, I do not accept it". "You can choose any place of the order, any convent, that order is all over the world..." I don't accept that. "So all afternoon, we've been working out alternatives so I can keep doing something. I said to him, 'Theologian has only the word as communication, spoken and written. If you take the word from him, he's a null person. Human rights, Brazil's struggle to conquer a democracy, the Church helped to rescue this freedom and you want to impose it, I do not accept". Then he communicated with someone and said to me, "No alternative, you can choose anywhere". "If I go to Korea, to the Philippines, in that faraway place, other languages, can I teach, write?" "No, you can't, you have to submit completely." So I said, 'I change to stay the same. I don't accept and I'm leaving as a protest'. And then we discussed 'how are we going to do?' We were going to wait - it was July, during Echo 92 - to warn friends, bishops and so on" (BOFF, 1998).
During the last twenty-five years, Boff has produced extensive literature related to ecological issues and correlated topics such as planetary ethics; coming in his most recent works to propose what he calls the "new World Ethos", or Civilizing Paradigm, also called the "Ecological Paradigm", or more recently "Cosmology of Transformation", in which humanity no longer establishes relations of exploration with nature or with other human beings.

The main works of this new phase are: Ecology, Globalization and Spirituality: the emergence of a new paradigm (1993), Dignitas Terrae - Ecology: cry of the Earth, cry of the poor (1995), Knowing - caring - ethics of the human: compassion for the earth (1999), World Ethos: a minimum consensus among humans (2003); Caring for the Earth, protecting life: how to avoid the end of the world (2010); The Tao of Liberation: exploring the ecology of transformation (BOFF & HATHAWAY, 2012); Sustainability: what it is – what is not (2012b) and finally, the Boffinian concept of the Four Ecologies (2012).

This article, based on the bibliographic research undertaken under the Master's project defended at the Jesuit Faculty of Theology and Philosophy of Belo Horizonte, and which was presented orally during the 3rd Abhr South Regional Symposium in Florianópolis, between 20 and 22 November 2017, has as main objective to analyze the so-called Four Ecologies proposed by Leonardo Boff (2012) understanding -as a great intellectual effort of the author aiming to achieve the overcoming of Anthropocentrism, towards Cosmocentrism and Biocentrism.

**Problematic: The Ethical-Ecological Paradigm in Leonardo Boff**

Initially, here is a contradiction of substantive importance in boffinian environmental discourse, the basic difference between ethics and morals, which for the author lies in the fact that the former is part of Philosophy, while the second is part of concrete life. If, on the one hand, ethics considers fundamental conceptions about life, the universe and the human being to stact principles and values that guide people and human groups, morals, on the other hand, is founded on nothing more than culturally established customs, habits and values (BOFF, 2009).

Leonardo Boff departs from the two original meanings of the word ethos (from ancient Greece) to point out the differences between ethos and ethics. The Greeks wrote the word in two different ways, "ethos" with the "eta" (and long), meaning the human abode and also character, mode, being and profile of a person; and "ethos" with "epsilon" (and short), meaning customs, habits, habits and traditions (BOFF, 2009).

Boff states that today there is a powerful return to nature and the universal logos, which he calls a new ecological paradigm, paradigm of cosmology or cosmology of transformation – conceptions thought of in the horizon of new knowledge accumulated by earth sciences and ecology (BOFF, 2003).

From the analysis of Boffinian perceptions, it is observed that the origin of the problems and crises arising from the current civilizational model based on liberal capitalism, consumerism and unbridled
individualism, is that this entire economic system survives exclusively at the expense of the systematic and virulent exploitation of the poor and nature (BOFF, 2010).

Gaia - Mother Earth calls for help. Pollution of large urban centers, lack of basic sanitation in emerging countries, rampant deforestation, incessant burning, and frightening and continuous pollution of water resources are problems that are the source of the self-destructive and bankrupt model of industrial development that increasingly causes the increase in the greenhouse effect and climate change. According to several researchers, this environmental crisis can cause, among other several problems, such as the scarcity of drinking water and food in a relatively short time.

In this scenario, according to Boff (2010) there are two wounds that burn: the chaga of the immense poverty through which more than one billion people pass through, caused by the exploitation of the poor by the rich, and the countries underdeveloped by the developed, and the environmental wound by which hundreds of species are extinguished each year, caused by the exploitation of nature and life forms by the consumerist health of humanity (BOFF, 2010).

Boff radicalizes this criticism of the two wounds caused by the greed of the capitalist system that destroys everything based on profit, and visualizes the great similarity between the social struggle of the 1970s and 1980s with the struggle for the environment in the late twentieth century and beginning of the 21st century when he states:

[...] both lines of reflection and practice start from a cry: the cry of the poor for life, freedom and beauty: the theology of liberation; and the cry of the earth that groans under Oppression: ecology. Both aim for liberation, one of the poor from themselves, as historical subjects organized, aware and articulated with other allies who assume their cause and their struggle; and another of the earth through a new alliance of the human being with it, in a fraternal/sororal relationship and with a type of sustainable development that respects the different ecosystems and guarantees a good quality of life for present and future generations (BOFF, 1995, p. )

For Leonardo Boff, this scenario is clearly founded on an outdated cosmoitles, and which is to be briefly overcome, what Boff calls the Cosmology of Domination, based on an anthropocentrism founded on the instrumental-analytical reason of mechanistic, deterministic, and materialistic cutting, and which relies on rationalist philosophers such as Descartes, Francis Bacon, etc., who see nature as an object of conquest and domination of man (BOFF, 2010).

According to Boff, this Cosmology of Domination will be dialectically replaced by the Cosmology of Transformation, founded on a post-anthropocentric, ethical-ecological paradigm in which nature appears no longer as an object, but as the same territory and fabric of man, but as his own home and matter from which he draws his sustenance, and the beings of nature – plants and animals – appear no longer as objects of man, inferior to him, but rather as his planetary brethren (BOFF, 2003).
Problematic: The new planetary civilization and the Cosmology of Transformation

It is never too late to remember that for Boff, a new civilization gradually begins to chart a new civilizational paradigm, more focused on the benevolent dimensions of humanity towards Mother Earth and the poor. The human being begins to feel awakened and reconnected to the mystery that makes up the universe. The moment, according to Boff, is to join forces to find solutions (BOFF, 2003).

It is necessary, according to the author, the emergence of a planetary civilization, which prioritizes ethical principles and care relations for the whole cosmos. The ethics of essential care aims to rescue life and conceive broad justice for all victims of our current culture of violence, exclusion, domination and exploitation (BOFF, 1995).

The current situation will then be overcome by a new humanity, committed to building a new civilizational standard. Thus, the "ecological paradigm" beckons to a nobler destination of the human being and the planet Earth (BOFF, 1995).

Boff states, in this context, that the "phenomenon of Globalization and the corresponding planetary consciousness will give rise to this new civilizational paradigm" leading the planet to the Ecozoic Era (BOFF, 2002, p. 115).

The new paradigm will be characterized by a redefinition of the way of relating to nature and peoples, by a redefinition of human subjectivity and work; for, as planetary consciousness grows, there is also a growing conviction that the issue of the environment, ecology, is contextualized in everything, in public policies, industry, education and international policies. Due to the exhaustion of non-renewable resources, humanity will have to change its pattern of behavior towards nature or it will meet enormous cataclysmas (BOFF, 1995).

For this reason, 21st century society will consume with more responsibility, constituting a new alliance of respect and devotion to nature (BOFF, 1995).

For Boff, the new development will be done with nature and not at the expense of it, as it has been for centuries.

Boff states:

There will be a global social pact between peoples, based on three fundamental values that all will assume: 1) safeguarding the conditions for the planet to continue to exist and co-evolve; 2) to guarantee the future of the human species as a whole and the conditions of its further development; 3) preserve perpetual peace among peoples as a means for the solution of all conflicts that will always exist (BOFF, 2002, p. 115)

Boff prevails the sense that, instead of dominating nature in this eternal relationship of exploration, humanity must place itself within nature in tune with it and always open to new transformations.

Moreover, there is also the sense that all nature constitutes an open system and that therefore it can always welcome new interactions and energy flows, unlike the closed view of anthropocentric modernity,
which lives as in a walnut shell, closed in itself and immune to external influences, therefore, universal dialogue (BOFF, 2003).

According to the author, among other things, what would characterize this new cosmolgy of transformation would be "respect for every form of life and the dignity of nature and not its exploitation by humanity" (BOFF, 2003). In a point, "put care in the place of domination, to place spirituality as a data of human reality, and not just an expression of a religion" (BOFF, 2003).

**Problematic: The expansion of Ecology for Leonardo Boff - Ecocentrism and Biocentrism**

It was Ernst Haeckel, a German biologist (1834-1919), who created in 1866 the word ecology and defined its meaning: the study of the inter-retrorelationship of all living and non-living systems with each other and with their environment.

From a regional discourse as a subchapter of biology, it has become a universal discourse, perhaps of greater mobilizing force at the turn of the millennium. Boff thus shows the need to expand the conception of the term "ecology" to the urgent demands of the 21st century, and in this sense Boff in his classic work "The Four Ecologies: Environmental, Political and Social, Mental and Integral (BOFF, 2012)", points out new paths and practices of ecology.

It was in this work that Boff delimited, through the detailing of the four ecologies, his new ethical-environmental conception.

According to Boff, in *environmental* ecology, in order to understand this concept, it is necessary to overcome the reductionist view on ecology and perceive a more integrative view of the entire environment, with its specificities and its biomes with its unique particularities, mainly that the planet Earth is a living superorganism (Gaia theory), which regulates itself since the anthropic action does not hinder Gaia, which is what is currently happening (BOFF, 2012).

Also according to Boff (2012), political and *social* ecology deals with the social inequalities that martyr Mother Earth through the cry of millions of poor and excluded by the capitalist system that devours everything, emphasizing the importance of sustainability, inclusion and social justice, since social inequalities are not ecological, and since it is assumed that production must only satisfy human needs and not generate profit for Minorities. Humanity, in this perspective, cannot sacrifice the ecological capital of the next generations, and all investments must prioritize basic sanitation, education and health.

*Mental ecology is*, for Boff (2012), a perspective that necessarily needs to address the intense prejudice and wild aggressiveness of the human being after the industrial revolution towards nature, and more importantly, on the importance of planetary consciousness for the preservation of all terrestrial species, since, without them, the future of humanity itself will not be assured. In mental ecology, the focus is precisely on overcoming the Consciousness of humanity as a mere species aiming at the construction of a new Planetary Consciousness from the overcoming of Anthropocentrism.
On this ecology, the author comments:

From inner ecology, the Earth, the Sun, the Moon, the trees, the mountains and the animals are not only out there, they live in us, like figures and symbols loaded with emotion. The experiences - good or traumatic - that we had with these realities left deep marks on the psyche. This explains the aversion to some or the affinity we feel with others.

Such symbols form a true interior ecology, whose code of decipheration was one of the spiritual achievements of the 20th century, with Freud, Jung, Adler, Lacan, Hillmann and others. Within us, according to CG Jung, shines the archetype of Imago Dei, of the Absolute. No one has worked better than Viktor Frankl in this dimension that he calls the spiritual unconscious, and modern people call the mystical mind or God's point in the brain. Ultimately, this spiritual unconscious is an expression of the earth's own spirituality and the universe that explodes through us, which is the conscious part of the universe and the Earth. (BOFF, 2009b, p. 1)

Finally, integral or profound ecology seeks, according to Boff (2012) to awaken in the human being the flame that generates a new holistic and integrating worldview of the universe, in which the human being must finally awaken his holistic consciousness to his divine mission to act as the gardener of Eden who was presented to him, using his knowledge and techniques to care for the Earth, the common house, Mother Earth, Gaia, Pachamama (BOFF, 2012). That is, Boff encourages human beings so that, from the present moment, all the intellectual efforts of humanity are necessarily ecocentric.

In this sense, Cosmocentrism is for Boff (2010) a philosophical proposition that affirms the priority of the natural world, which occupies the central and fundamental place in the order of existence, being nature or the world the most important being of all reality, and must then also occupy the reference center of every philosophical explanation.

And Biocentrism (BOFF, 2010) is a conception, according to which all life forms are equally important, and humanity is not the center of existence. Biocentrism was proposed as an antonism to anthropocentrism, which is the conception that humanity would be the focus of existence.

Thus, Boff clearly clarifies what Biocentrism is when he states that the drama of our culture

[...] was to have made difference a discrimination, an inequality. Hence the human being defining himself against nature; for not knowing the dignity of the land he reserves it for himself. It has no earth dignitas, it has the human dignitas. The difference is fundamental, because it is it that will allow communion, otherness as a challenge; distinct to be one. [...] I consider that the defense of life in its centrality is a gain in reflection, because it overcomes anthropocentrism, the utilitarian view of the human being using nature for himself. Here is the vision of life itself, your happiness. Through an ethics of compassion the human being is bound by vital bonds with all living beings. [...] To think of ecology as political integration, claimatory of life, libertarian of life, from the most fragile is, that is, to be biocentric (BOFF & KRENAK, 1992. p. 36)

Anthropocentric tendencies defend for the responsibility of the human being towards nature, while the biocentric, his duties before nature. In other words, nature is the rightholder.
2 METHOD

This article seeks to analyze the work *The Four Ecologies: Environmental, Political and Social, Mental and Integral* (BOFF, 2012), as an effort to overcome Anthropocentrism, towards Cosmocentrism and Biocentrism.

It is therefore an eminently documentary research, whose data collection was bibliographic, consisting of several texts by the author Leonardo Boff with emphasis on the idea of the four ecologies.

Marconi and Lakatos (2003) state that documentary research involves the survey of

 [...] of data from various sources, whatever the methods or techniques employed. This general source material is useful not only for bringing knowledge that serves as a background to the field of interest, but also to avoid possible duplication and/or unnecessary efforts; it can also suggest problems and hypotheses and guide to other sources of collection (MARCONI and LAKATOS, 2003, p. 174).

The analysis performed after cataloguing the main concepts of the studied author will consist of a quantitative analysis, systematizing the characteristics of the four boff ecology.

The work can be classified as a critical and systematic review of the literature, with emphasis on leonardo boff's cosmological proposal, from an analytical perspective.

3 RESULT AND DISCUSSION

The cosmological characteristics of the Four Ecologies for Leonardo Boff

The main result of the effort undertaken in this work is presented in Chart 1 below. In Boff's work, as it turns out, for each ecology there is an object to be cared for, and specific proposals.

<table>
<thead>
<tr>
<th>Ecology</th>
<th>Object</th>
<th>Proposal</th>
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<tbody>
<tr>
<td>Environmental</td>
<td>Planet Earth</td>
<td>• Environment in its entirety;</td>
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<td></td>
<td></td>
<td>• The environment needs to maintain its characteristics for future</td>
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<td></td>
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<td>generations;</td>
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<td></td>
<td></td>
<td>• Earth is a living superorganism;</td>
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<tr>
<td></td>
<td></td>
<td>• Mother-Earth, Gaia or Pachamama;</td>
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<td></td>
<td></td>
<td>• Overcoming the reductionist view on Ecology.</td>
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<tr>
<td>Politics and Social</td>
<td>Deleted</td>
<td>• Social inequalities are not ecological;</td>
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<td></td>
<td></td>
<td>• Ecology to value inclusion and social justice;</td>
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<td></td>
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<td>• Production must meet the needs;</td>
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<td></td>
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<td>• Humanity cannot sacrifice the ecological capital of the next generations;</td>
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<td></td>
<td></td>
<td>• Investments should prioritize basic sanitation, education and health.</td>
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<tr>
<td>Mental</td>
<td>Conscience</td>
<td>• Overcoming Consciousness as a mere species;</td>
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<td></td>
<td></td>
<td>• Building Planetary Consciousness;</td>
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<tr>
<td></td>
<td></td>
<td>• Abolish prejudice against nature;</td>
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<tr>
<td></td>
<td></td>
<td>• Overcome aggressiveness against animals and plants;</td>
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<td></td>
<td></td>
<td>• Prioritize the mental health of humanity;</td>
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<td></td>
<td></td>
<td>• Post Anthropocentrism.</td>
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<tr>
<td>Integral</td>
<td>Human being</td>
<td>• Awakening holistic worldview;</td>
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<td></td>
<td></td>
<td>• Build an integrative conception of the universe;</td>
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<td></td>
<td></td>
<td>• To conceive the Human Being as a gardener whose mission is to take care of the Earth;</td>
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<td>• Focus of Technology should be to harmonize human production with nature;</td>
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<td></td>
<td></td>
<td>• All of humanity's intellectual efforts need to be eco-centered.</td>
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</tbody>
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Fonte: Prepared by the author (2019)
As can be seen in Chart 1, the main difference between the ecologies lies precisely in the fact that for each of them the object is moving from the most general to the most specific.

While the first ecology has as its object the Planet Earth, the second is totally concerned with the Social Excluded, while the third focuses on Consciousness in a holistic and environmental bias and, finally, the fourth ecology, or Integral or Deep Ecology, cares about the human being.

In addition, it was possible to verify that there is a great relationship between the concepts of Cosmocentrism and Biocentrism as consequences of the ideal constructed from the four ecologies, which is seen in Chart 1.

4 FINAL CONSIDERATIONS

This work, whose main objective was to analyze Leonardo Boff’s work *The Four Ecologies: Environmental, Political and Social, Mental and Integral* (BOFF, 2012) as an effort by that author to overcome Anthropocentrism, towards Cosmocentrism and Biocentrism, was constructed from a documentary research, with eminently bibliographic data collection, based on several texts by the author Leonardo Boff with emphasis on the idea of the four ecology, original creation of that author.

From the analysis, it was also possible to show that Leonardo Boff proposes a universal ethics in order to establish a fraternal coexistence between man and nature.

It was observed that for Boff the basic difference between ethics and morals lies in the fact that the former is part of Philosophy, while the second is part of concrete life. If, on the one hand, ethics considers fundamental conceptions about life, the universe and the human being to stact principles and values that guide people and human groups, morals, on the other hand, is based on culturally established customs, habits and values.

In a period like the current one, taken by the lack of concrete postures of the authorities in the face of environmental and social crises, which present themselves, in addition to the concrete possibility of political regression and loss of social rights, Boff’s thinking is a light that can guide ideas and, especially, practices. We tried to demonstrate the central aspects of Leonardo Boff’s thought, under a philosophical section from the so-called Four Ecologies.

It is interesting to note that Leonardo Boff, a theologian and philosopher persecuted and outlawed by the Vatican in the pontificate of John Paul II and Benedict XVI, became in the 21st century a kind of “official theologian of the Vatican” in the pontificate of clearly progressive positions, of Pope Franciscos. On this Michel Lowy (2018, p.320) tells us):

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2 The eciclique “Laudato Oneself” according to several theologians is of inspiration, among other sources, in the works of Leonardo Boff. On this topic, this author will resume it in another article, for being a very extensive topic and extrapolating our objective in this article.
But in recent years something has changed: the magic grain of his thought, his message of hope, faith and universal solidarity – with the poor, the oppressed and with our Mother Earth – crossed the ocean and reached Rome. Our pontiff, who chose the name Francis, named after the friend of the poor, birds, brother sun and sister moon, studied with attention and sympathy his writings and took them as one of his main sources of inspiration. This is how the Encyclical *Laudato Si emerges in 2015,*

Boff is, in this understanding, one of the Brazilian thinkers who most enriches the people of knowledge, for being thought provoking and current. And the breadth of his open, free, dialoguing and plural thinking, a precious tool for analysis and action in the world of the 21st century.

As Libanio (2008, p.9) states in his article "Leonardo Boff's Thought", he is among today's thinkers "for his volcanic personality" and concludes that it is a "difficult task to critically fly over Leonardo's monumental work, which covers an arc of more than 30 years with consistent texts".

It is concluded that, according to Leonardo Boff, humans, animals, plants and all living beings are interdependent planetary citizens who inhabit mother-earth (Gaia), and only together will they overcome the current socio-ecological crisis.

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