

Environment and Human Ecology

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Since the beginning of creation, God made a covenant with the first male and female: “The Lord God took the man and put him in the Garden of Eden to till it and keep it.” (Genesis 2: 15). Over the centuries, humanity has lost sight of the original and divine mission to “work and care” for the environment. In this term paper, I will analyze the relationship between “environment and human ecology” as it is understood in *Caritas in Veritate* and *Laudato Si’*. I will first introduce the two documents, then I will analyze ecology and environment, afterward human ecology, and ecological awareness, and conclude in a prayer for our earth.

Introduction

Pope Benedict XVI’s encyclical *Caritas in Veritate*¹ on “integral human development” was written in 2009 not just to Catholics but to all people of good will.² The English title, “*On Integral Human Development Charity and Truth*.” This encyclical is a summation of the Church’s social doctrines. The original purpose of this encyclical was to promulgate it on the fortieth anniversary of *Populorum Progressio*, which was promulgated in 1967. The encyclical was presented two years later because of the global economic recession.³ Pope Benedict used ten sections to address the relationship between human and the rights and duties to the environment⁴ and to link charity and truth in the search for justice, the common good, and authentic human development.⁵ “*Nature expresses a design of love and truth,*”⁶ God’s gift to everyone and God’s love for humanity “perceived in the things that have been made” (Romans 1:20).

Pope Francis’s encyclical *Laudato Si’*⁷ on “Care for Our Common Home” was written in 2015 and did not develop a new social teaching. The English translation, “*Praise Be to You*.” It is composed of 245 sections entirely dedicated to the environment, to “every person living on

¹ Latin, for Charity in Truth

² Bruce Duncan, 109

³ Catholic Distance University, *From Pope Paul to Today*, accessed September 22, 2020, https://cdu.instructure.com/courses/1068/pages/from-pope-paul-to-today?module_item_id=81582

⁴ Pope Benedict XVI, *Caritas in Veritate*, 43-52

⁵ USCCB, *Caritas in Veritate: Resource material*, Accessed September 15, 2020, <https://www.usccb.org/beliefs-and-teachings/who-we-teach/adults/caritas-in-veritate-resource-material>

⁶ Pope Benedict XVI, *Caritas in Veritate*, 48

⁷ Central Italian, for Praise Be to You!

this planet.”⁸ Pope Francis’s encyclical *Laudato Si’* refers to our planet as our “common home.”⁹ The Holy Father makes it clear that he writes the document in response to the global crisis facing the environment and not on the anniversary of any previous encyclical. The encyclical ends with a sentimental and deep message on “*prayer for our earth*” and “*A Christian prayer in union with creation.*”¹⁰

In the history of the social encyclicals, Pope St. Paul VI addresses, for the first time, his concern on “Pollution and Care of the Environment of Tomorrow”¹¹ in the Apostolic Letter *Octogesima Adveniens* “on a call to action to social justice”¹² at the eightieth anniversary of *Rerum Novarum* in 1971. The Holy Father addresses a serious problem,

21. Not only is the material environment becoming a permanent menace; - pollution and refuse, new illness, and absolute destructive capacity - but the human framework is no longer under man's control, thus creating an environment for tomorrow which may well be intolerable. This is a wide-ranging social problem which concerns the entire human family.

Later, at the 100th anniversary of *Rerum Novarum*, Pope St. John Paul II writes a vital issue regarding the destruction of “human environment” in the encyclical *Centesimus Annus* and talks about the irrational destruction of the natural environment, “*the more serious destruction of the human environment*, something which is by no means receiving the attention it deserves.”¹³

What is ecology?

To begin with this analysis, first take a close look of the word “ecology.” It is derived from the ancient Greek words of “oikos” and “logos,” meaning “household,” or a “place to live.” The first person who uses this term was a German zoologist Ernst Haeckel in 1866. He applied the term as “*oekologie*” in the relation of the animal both to its organic as well as its inorganic environment. Ecology is a science that deals with the interrelationships between the organism and its “environment.”¹⁴ According to Professor Robert Leo Smith, ecology is also

⁸ USCCB, *On Care for Our Common Home: Laudato Si’ Discussion Guide*, accessed September 15, 2020 <https://www.usccb.org/issues-and-action/human-life-and-dignity/environment/upload/laudato-si-discussion-guide.pdf>

⁹ Pope Francis, *Laudato Si’*, 17.

¹⁰ Pope Francis, *Laudato Si’*, 246

¹¹ Pope Paul VI, *Octogesima Adveniens*, 21

¹² Pope Paul VI, *Octogesima Adveniens*, 1

¹³ Pope John Paul II, *Centesimus Annus*, 38

¹⁴ Pimm, Stuart L., *Ecology*, Conservation Ecology Research Unit, Duke University, Durham, N.C., accessed September 10, 2020, <https://www.britannica.com/science/ecology>

called “bioecology, bionomics, or environmental biology.” Ecology studies the sociological and political problems in human affairs, such as, pollution, global warming, food scarcities, extinctions of plants and animals.¹⁵

On November 29, 1979, Pope St. John Paul II issued a papal bull that declared St. Francis of Assisi the patron of ecology and of those who promote ecology.¹⁶

What is environment?

The Online Encyclopaedia Britannica, on the other hand, refers to environment as the complex of physical, chemical, and biotic factors that act upon an organism or an ecological community and ultimately determine its form and survival.¹⁷ The Merriam-Webster dictionary defines it as the circumstances, objects, or conditions by which one is surrounded.¹⁸

Human ecology and its applications

Roderick J. Lawrence’s article “*Human Ecology and Its Applications*” explains that since the late 19th century the term “ecology” has been interpreted in diverse ways. In the natural sciences, for instance, botanists and zoologists often use the term “general ecology” to refer to the “interrelations between animals, plants and their direct surroundings.”¹⁹ Human ecology sociologists suggest that it is the study of the “dynamic interrelationships between human populations and the physical, biotic, cultural and social characteristics of their environment and the biosphere.”²⁰

Lawrence explains that human ecology is a term that has been characterized by a lack of consensus about what it really means.²¹ Human ecology can also be considered the environment relations which have a history in several scientific disciplines and professions including: archaeology, anthropology, biology, demography, epidemiology, general ecology, geography,

¹⁵ Smith, Robert Leo, *Ecology*, Professor of Wildlife Biology and Ecology, West Virginia University, Morgantown, accessed September 10, 2020, <https://www.britannica.com/science/ecology>

¹⁶ Pope St. John Paul II, *Papal Declaration of Francis as Patron of Ecology*, accessed October 4, 2020, <https://francis35.org/english/papal-declaration-francis-patron-ecology/>

¹⁷ The Editors of Encyclopaedia Britannica, *Environment*, accessed September 11, 2020, <https://www.britannica.com/science/environment>

¹⁸ Merriam-Webster Dictionary, *Environment*, accessed September 11, 2020 <https://www.merriam-webster.com/dictionary/environment>

¹⁹ Lawrence, Roderick J, *Human ecology and its applications*, Centre for Human Ecology and Environmental Sciences, Elsevier Science Geneva, Switzerland, 2013, 31, accessed September 11, 2020 http://ssu.ac.ir/cms/fileadmin/user_upload/Daneshkadaha/dbehdasht/eko/pazooohesh/article_human_ecology/lawrence2003.pdf

²⁰ *ibid.* 31

²¹ *Ibid.* 32

law, medicine, political science, psychology, and sociology.²² One aspect that is not considered in human ecology is the “anthropological dimensions of human customs, knowledge and values, as well as communication and information.”²³ Lawrence concludes that the term remains divided between the “social and natural sciences,” as well as between the “theoretical and applied approaches” in each of these sciences. There is a need to replace the addition of multiple disciplinary contributions by interdisciplinary approaches of human ecology.²⁴

Integral ecology

In the book, “*The Theological and Ecological Vision of Laudato Si’: Everything is Connected*” by Vincent J. Miller we read one of the clearest visions regarding “human ecology.” In chapter one: Everything is connected, Miller explains in deep the term “Integral ecology” in the light of St. Francis’s spiritual and moral vision of interconnectedness and the teachings in *Laudato Si’* by Pope Francis. First, Miller clarifies that it is important to understand that integral ecology involves a *belief* based on the nature of the world that all things are interrelated. Second, it is important to have a special vision of integral ecology that requires a specific *lens* that allows us to perceive this “connectedness” with the Triune God. Third, an integral ecology beckons us to follow *moral principles* to preserve these interconnections.”²⁵

According to Dr. Miller’s introduction, he emphasizes that the encyclical *Laudato Si’,* integrates the role of doxology for caring for our “common home.”²⁶ Pope Francis begins praising the God of creation and later makes the papal reflection on the environment. *Laudato Si’* is not only an ecological awareness encyclical, but also contains an orientation towards praise, reverence, and service between creator and creature to reach “universal communion.”²⁷ Pope Francis marks a turning point in the contents of Catholic Social Teaching to open the doors for a dialogue between theology and the sciences to reach an “integral ecology” vision.²⁸

Dr. Miller concludes that to obtain an integral ecology as a guide for action and moral principle, we need to trust, to have the special vision and to see the signals to reach the awareness to protect “our common home,” as Pope Francis refers to planet Earth.

²² Ibid. 34

²³ Ibid. 32

²⁴ Ibid. 39

²⁵ Miller, Vincent J, *The Theological and Ecological Vision of Laudato Si’: Everything is Connected*, edited by Vincent J. Miller, New York: Bloomsbury T & T Clark, 1st Edition, July 27, 2017, 14-23

²⁶ Pope Francis, *Laudato Si’*, 17

²⁷ Ibid. 84-89

²⁸ Ibid. 137

Human ecology in the encyclicals

Pope St. John Paul II uses the term “human ecology” to illuminate another aspect of the spectrum that sociologists have not discussed, the “human environment.”²⁹ In the encyclical *Centesimus Annus*, under the chapter about private property and the universal destination of material good, The Holy Father considers the destruction of the “human environment” a more serious destruction than the effects on the natural environment.

38. Although people are rightly worried — though much less than they should be — about preserving the natural habitats of the various animal species threatened with extinction, because they realize that each of these species makes its contribution to the balance of nature in general, too little effort is made to *safeguard the moral conditions for an authentic human ecology*.

In contrast, Pope Benedict XVI addresses the term “*human ecology*” with another perspective: the relationship between human life, rights, and duties of the individual regarding the environment. In the encyclical *Caritas in Veritate*, Pope Benedict argues for an important call to action and a renewed reflection on how to set limits to the rights and duties, “*rights presuppose duties, if they are not to become mere licence.*”³⁰ It is vital to maintain the relation between duties and rights to take care of the gift God has given us: “the environment.” It is crucial that humanity recognizes *the covenant between human beings and the environment*³¹ to restore and respect our relationship with God’s creation. The deterioration of nature is connected to the culture that shapes human coexistence. “*The way humanity treats the environment influences the way it treats itself, and vice versa.*”³² It is our duty, a vocation that “requires a free and responsible answer.”³³

51. The deterioration of nature is in fact closely connected to the culture that shapes human coexistence: *when “human ecology” is respected within society, environmental ecology also benefits*. Just as human virtues are interrelated, such that the

²⁹ Pope John Paul II, *Centesimus Annus*, 38-39

³⁰ Pope Benedict XVI, *Caritas in Veritate*, 43

³¹ Ibid. 50

³² Ibid. 51

³³ Ibid. 17

weakening of one place other at risk, so the ecological system is based on respect for a plan that affects both the health of society and its good relationship with nature.

Pope Benedict XVI in the Celebration of The World Day of Peace, on January 1st, 2010, with the theme: “If you want to cultivate peace, protect creation”³⁴ highlights on the necessity of reaching a balance between humanity and creation.

Pope Francis writes the encyclical *Laudato Si'* and highlights the balance Pope Benedict has mentioned in *Caritas in Veritate*. Although, *Laudato Si'* is a dense and specific encyclical only focus on the environment teachings to create ecological awareness. Each chapter, of the eight chapters, is rich in knowledge and awareness to protect our “common home.” It contains an ecological approach between the cry of the earth and the cry of the poor. He explains the interconnection between human and ecology.³⁵ If we work towards a healthy humanity, it becomes a social and integral relationship.³⁶ Therefore, it becomes truly "human" and truly "ecological" since it contemplates humanity in a network of relationships. This connection will open a new vision towards God and the environment. When humans understand his Creator, it emerges a healthy ecology that supports a healthy human life.³⁷

Pope Francis defines ecology as “the relationship of living organism and the environment in which they develop”³⁸ and refers to the environment as a relationship existing between nature and the society which lives in it since we are all interconnected.³⁹

66. The creation accounts in the book of Genesis contain, in their own symbolic and narrative language, profound teachings about human existence and its historical reality. They suggest that human life is grounded in three fundamental and closely intertwined relationships: with God, with our neighbor and with the earth itself. According to the Bible, these three vital relationships have been broken, both outwardly and within us.

³⁴ Pope Benedict XVI, *World Day of Peace*, 2010, accesses Sept. 30th, 2020 http://www.vatican.va/content/benedict-xvi/en/messages/peace/documents/hf_ben-xvi_mes_20091208_xliii-world-day-peace.html#_ednref27

³⁵ Pope Francis, *Laudato Si'*, 111

³⁶ Ibid. 112

³⁷ Ibid.119

³⁸ Pope Francis, *Laudato Si'*, 138

³⁹ Ibid.139

Laudato Si' answers questions, such as, “What is happening to our Common Home?”⁴⁰ It also addresses the concerns of the “Gospel of Creation,”⁴¹ and “the human roots of the ecological crisis.”⁴² It explains the interconnection between human and environment and today’s global crisis, such as pollution, global warming, urban development, depletion of natural resources, and the extinction of animals, among others. For that reason, “it is important to reflect on the elements of an integral ecology.”⁴³ Pope Francis suggests major paths of dialogues like “lines of approach and action”⁴⁴ to change our direction to save our planet from major catastrophes. The encyclical ends with an “ecological education and spirituality”⁴⁵ towards a new lifestyle to protect our “common home” from self-destruction.

202. Many things must change course, but it is we human beings above all who need to change. We lack an awareness of our common origin, of our mutual belonging, and of a future to be shared with everyone. This basic awareness would enable the development of new convictions, attitudes, and forms of life. A great cultural, spiritual and educational challenge stands before us, and it will demand that we set out on the long path of renewal.

Ecological Conversion

Pope Francis offers a few suggestions for an ecological spirituality conversion based on the convictions of faith, the Gospel teachings, prayer, and the example on the figure of Saint Francis of Assisi.⁴⁶

It is necessary to acquire a healthy relationship with creation in order to establish the recognition of our “errors, sins, faults and failures”⁴⁷ to guide us to repentance and the desire to change. Any conversion requires a call for new attitudes that foster a spirit of generous care.⁴⁸ In the last chapter, Pope Francis reminds us that the ecological conversion must be an effort not

⁴⁰ Ibid. 17-60

⁴¹ Ibid. 62-100

⁴² Ibid. 101-136

⁴³ Ibid. 137-162

⁴⁴ Ibid. 163-201

⁴⁵ Ibid. 203-245

⁴⁶ Ibid. 202-245

⁴⁷ Pope Francis, *Laudato Si'*, 218

⁴⁸ Ibid. 220

only individual, but also a community conversion.⁴⁹ Pope Francis empathizes that each creature needs the harmony of creation.⁵⁰

What can we do to reach an ecological conversion?

Caring for the natural environment has become a politically and controversial issue. Some economists, scientists, authorities, and some Catholics deny the impact of global climate change. To spread an ecological awareness, first we need to recognize there is a problem or sin. Second, to understand what we are doing to solve the problem. Last, maybe, we can reach to an ecological conversion.

Definition of a sin

According to the Catechism of the Catholic Church, Sin is an offense against reason, truth, and right conscience; it is a failure in genuine love for God and neighbor caused by a perverse attachment to certain goods. It wounds the nature of man and injures human solidarity. It has been defined as an utterance, a deed, or a desire contrary to the eternal law.⁵¹

In the book, *Ten Green Commandments of Laudato Si'* by Father Joshtrom Isaac Kureethadam, he introduces the principles of “Seeing-Judging-Acting” to reach ecological awareness and care for humanity.⁵² The Ten Green Commandments are:

1. Take care of our common home.⁵³
2. Listen to the cry of the poor.⁵⁴
3. Rediscover a theological vision of the Natural world.⁵⁵
4. Recognize that the abuse of creation is ecological sin.⁵⁶
5. Acknowledge the human roots of the crisis of our common home.⁵⁷
6. Develop an integral ecology.⁵⁸
7. Learn a new way of dwelling in our common home.⁵⁹

⁴⁹ Ibid. 216-221

⁵⁰ Ibid. 84-92

⁵¹ *Catechism of the Catholic Church*, 1849

⁵² Kureethadam, Joshtrom Isaac, *Ten Green Commandments of Laudato Si'*, Saint John's Abbey, Collegeville, Minnesota, Liturgical Press, February 18, 2019, 19-201

⁵³ Ibid. 19-34

⁵⁴ Ibid. 35-55

⁵⁵ Ibid. 55-72

⁵⁶ Ibid. 73-88

⁵⁷ Ibid. 89-111

⁵⁸ Ibid. 112-126

⁵⁹ Ibid. 127-142

8. Educate towards ecological citizenship.⁶⁰
9. Embrace an ecological Spirituality.⁶¹
10. Cultivate ecological virtues.⁶²

The *Ten Green Commandments* might be the beginning path for an ecological conversion. As I mention before, first we need to recognize there is an ecological problem and observe with a new vision. Then we can distinguish our wrong habits and change it with good practices, like the 3Rs: reduce, reuse, and recycle. Ultimate, we can act and reach an ecological consciousness that led us to an ecological conversion.

Relation between environment and human ecology

Humanity has had an evolution throughout its history. First, it was all about survival, cultivating its land, pastoring its flocks, and multiplying. Slowly, humans have matured to protect their offspring, surroundings, and wealth. The twentieth century's industrialization and globalization have expanded the scope of the continual evolution of humanity. Now, it is not about a single family or a single tribe, but it is about the world. Ironically, it continuous to be about survival. The interconnection still exists since the beginning of creation. Human ecology takes precedence over the natural environment, and both need to be safeguarded to reach a balance and authentic human ecology.⁶³

The environment is our collective good and it is a challenge for the whole humanity to protect it.⁶⁴ “It is a *matter of a common and universal duty that of respecting common good, destined for all.*”⁶⁵ To understand the original divine mission to “work and care” for the home we live in (Genesis 2: 15), we need to be aware of our interconnection with each other, the planet and the environment. Moreover, we need an extraordinary force and virtue to understand it: love.⁶⁶ “If one member suffers, all suffer together; if one member is honored, all rejoice together.” (1 Corinthians 12:26). Furthermore, we must not disregard the “human environment”⁶⁷ which includes human life from birth to natural death.

⁶⁰ Ibid. 143-160

⁶¹ Ibid. 161-180

⁶² Ibid. 181-201

⁶³ Pope Francis, *Laudato Si'*, 92

⁶⁴ Catholic Distance University, *The Environment*, accessed September 29, 2020.
https://cdu.instructure.com/courses/1068/pages/the-environment?module_item_id=81603.

⁶⁵ The Compendium of the Social Doctrine of the Church, 466

⁶⁶ Pope Benedict XVI, *Caritas in Veritate*, 1

⁶⁷ Pope John Paul II, *Centesimus Annus*, 38-39

To conclude this analysis between “environment and human ecology” as it is understood in *Caritas in Veritate* and *Laudato Si’*, I will finish with Pope Francis prayer for our earth.⁶⁸

“246. A prayer for our earth

All-powerful God, you are present in the whole universe
and in the smallest of your creatures.
You embrace with your tenderness all that exists.
Pour out upon us the power of your love,
that we may protect life and beauty.
Fill us with peace, that we may live
as brothers and sisters, harming no one.
O God of the poor,
help us to rescue the abandoned and forgotten of this earth,
so precious in your eyes.
Bring healing to our lives,
that we may protect the world and not prey on it,
that we may sow beauty, not pollution and destruction.
Touch the hearts
of those who look only for gain
at the expense of the poor and the earth.
Teach us to discover the worth of each thing,
to be filled with awe and contemplation,
to recognize that we are profoundly united
with every creature
as we journey towards your infinite light.
We thank you for being with us each day.
Encourage us, we pray, in our struggle
for justice, love and peace.”

⁶⁸ Pope Francis, *Laudato Si’*, 246

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