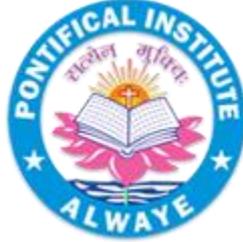


PONTIFICAL INSTITUTE OF THEOLOGY AND PHILOSOPHY

FACULTY OF THEOLOGY



**THOMAS BERRY'S NEW STORY OF THE UNIVERSE: A NEW
APPROACH TO CATHOLIC ECOLOGICAL ETHICS**

A Dissertation Submitted to the Faculty of Theology in Partial Fulfilment of
the Requirement for the Licentiate Degree in Dogmatic-Moral Theology

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ABBREVIATIONS

CA	-	<i>Centesimus Annus</i>
CCC	-	<i>Catechism of the Catholic Church</i>
CG	-	<i>City of God</i>
Con	-	<i>Confessions</i>
CSDC	-	<i>Compendium of the Social Doctrine of the Church</i>
CV	-	<i>Caritas in Veritate</i>
EC	-	<i>Earth Charter</i>
EV	-	<i>Evangelium Vitae</i>
FT	-	<i>Fratelli Tutti</i>
GS	-	<i>Gaudium et Spes</i>
IPCC	-	Intergovernmental Panel on Climate Change
LF	-	<i>Lumen Fidei</i>
LS	-	<i>Laudato Si</i>
NASA	-	National Aeronautics and Space Administration
ND	-	J. Neuner and J. Dupis, <i>The Christian Faith in the Documents of the Catholic Church</i>
PT	-	<i>Pacem in Terris</i>
OA	-	<i>Octogesima Adveniens</i>
QA	-	<i>Querida Amazonia</i>
RH	-	<i>Redemptor Hominis</i>
SRS	-	<i>Sollicitudo Rei Socialis</i>
ST	-	<i>Summa Theologica</i>

UN - United Nations

UNEP - United Nations Environment Programme

UNFCCC- United Nations Framework Convention on Climate Change

WHO - World Health Organization

WMO - World Metrological Organization

GENERAL INTRODUCTION

Ecological problems have become the greatest challenge that affects the whole of humanity and surroundings at the present scenario. The ecological degradation has reached its peak that humans really feel the punch of it in everyday life. The recurrence of incessant rains, floods, drought, cyclones, landslides, costal erosions, and sea level rising have become common phenomenon all around the globe. Humans themselves are the real culprits for this great catastrophe. The nature was a menace for humans once, but the very humans have become real threat to the nature now. Therefore it is inevitable to understand the reality and change human attitude and actions. Though there are many organisations and groups that are active in ecological endeavour. Christianity in general and Church in particular cannot be alien to these ecological crises. Though the Church has become conscience of the world in many of the justice issues, its involvement in ecological issues is that of very recent.

Pope Francis, pioneer in bringing Catholic ecological thought in the forefront, in his Encyclical *Laudato Si*¹ states that, the technological mind sees nature as an insensate order, as a cold body of facts, as a mere given, as an object of utility, as raw material to be hammered into useful shape; it views the cosmos similarly as a mere space into which objects can be thrown with complete indifference. The intrinsic dignity of the world is thus compromised. When human beings fail to find their true place in this world, they misunderstand themselves and end up acting against themselves (*LS*, 115).² He continues to affirm that, an inadequate presentation of Christian anthropology gave rise to a wrong understanding of the relationship between human beings and the world, which gave the impression that the protection of nature was something that only the faint-hearted cared about. Instead, human dominion over the universe should be understood more properly in the sense of responsible stewardship (*LS*, 116). Thus the environmental action is the need of the hour not only for the survival of the nature but also for the survival of the humanity itself. It necessitates a new response from the Church towards

¹ Hereafter for *Laudato Si* the short form *LS* shall be used.

² Francis, *LS* (Trivandrum: Carmel International Publishing House, 2015).

the protection of the environment. Thus it is important in Church's ecological ethics to find means by which humanity finds its place in the universe and respect the Earth. Therefore, the universe-centric approach based on the new story of the universe of Thomas Berry³ becomes most significant.

Berry an American Passionist, (1914-2009) is one of the great prophets of ecology. The practical need to change human attitude about the planet and to spark a revolution in human thinking about the Earth before it is too late, is the radical focus of Berry's efforts. He became famous for proposing that a deep understanding of the history and functioning of the evolving universe is a necessary inspiration and guide for effective functioning as individuals and as a species.⁴ Berry is an original thinker. Berry's vast knowledge and specific expertise as a cultural historian, united with his concern for the future of the planet is a unique blend revealing a genuine original thinker.⁵ Berry's worldview is in the context of the universe. Berry's worldview is one that conceptualized the universe as the only text for which there is no context.⁶ Berry also has a prophetic vision for the humanity as part of the Earth Community. Berry has gifted a powerful vision of what it means be a member of the Earth community. It is up to humanity to allow his prophetic vision to inform human action on behalf of a larger Earth community.⁷ Thus ecological vision of Berry is a great challenge for Catholic ecological ethics in the area of the safeguarding of the nature.

BERRY: THE GEOLOGIAN

Berry is a Green Man in the fullest sense. Berry was a warrior on behalf of Mother Earth. He was a Green Man in the fullest sense of that world.⁸ Cristina Richie expounds that Berry was named as one of the fifteen green religious

³ Hereafter for Thomas Berry the short form Berry shall be used

⁴ Cf. Joseph Pathrapankal, "Biblical Eco-concerns in the Context of Asian Religions," *Asian Horizons* 6, no. 2 (June 2012): 245.

⁵ Cf. Heather Eaton, introduction to *The Intellectual Journey of Thomas Berry*, ed. Eaton. (New York: Lexington Books, 2014), ix.

⁶ Cf. Stanley Krippner *et al.*, "Dreaming in Sacred Sites," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 72.

⁷ Cf. Sean Esbjorn-Hargens, "Ecological Interiority; Thomas Berry's Integral Ecology Legacy," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 103.

⁸ Cf. Matthew Fox, "Some Thoughts on Thomas Berry's Contributions to the Western Spiritual Tradition," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 18.

leaders in 2007, along with Pope Benedict XVI, Dalai Lama, and Ecumenical Patriarch Bartholomew.⁹ Berry calls himself as geologist. Daniel P. Scheid enumerates that Berry, whose academic expertise was in cultural history, though technically not a theologian due to his reverence for Earth considered himself a “geologist.”¹⁰ Berry out of his concern for the Earth, realized that it is necessary to act together for the cause of the Earth. Brian Edward Brown elucidates that Berry’s consistent focus is with the unified whole, the collective human in its species identity and its presence within and relationship with the larger Earth Community.¹¹ Thus he proposed the new story of the universe as an impetus for this great work of ecology at the present time.

Berry is a Catholic religious priest belongs to the Congregation of the Passion. Ervin Laszlo enumerates that Berry born William Nathan Berry in Greensboro, North Carolina, in 1914. Berry was the third of thirteen children. By the age eight he had concluded that commercial values were threatening life on the planet. Three years later he had an epiphany in a meadow, which became a primary reference point for the rest of his life. At the age of twenty Berry entered a monastery of the Passionist Order, he was ordained in 1942, and travelling widely, he began examining the cultural history and foundations of diverse cultures and their relations with the natural world. He received his doctorate from Catholic University of America. He then studied Chinese language and Chinese culture in China and learned Sanskrit in order to study the traditions of religion in India. Later he assisted in an educational program for the T’boli tribal peoples of South Cotabataon, a Philippine island, and he taught the cultural history of India and China at universities in New Jersey and New York from 1956 to 1965. He was director of the History of Religions graduate program at Fordham University from 1966 to 1979. He founded and then directed, from 1970 to 1995, the Riverdale Center of Religious Research

⁹ Cf. Cristina Richie, “Carbon Reduction as Care for our Common Home: *Laudato Si*, Catholic Social Teaching, and the Common Good,” in *Asian Horizons* 9, n: 4 (December 2015), 701.

¹⁰ Cf. Daniel P. Scheid, *The Cosmic Common Good; Religious Grounds for Ecological Ethics* (New York: Oxford University Press, 2016), 64.

¹¹ Cf. Brian Edward Brown, “The Earth Jurisprudence of Thomas Berry and the Tradition of Revolutionary Law,” in *The Intellectual Journey of Thomas Berry*, ed. Eaton. (New York: Lexington Books, 2014), 196.

in Riverdale, New York. Berry studied and was influenced by the work of Teilhard de Chardin, and from 1975 to 1987 he was the president of the American Teilhard Association. He also studied Native American culture and shamanism.¹² He died in the year 2009.

Berry's words calls for human kingship with Earthly companions. Berry himself, as an uncommon man in communion with the universe. His poetic words summon forth human kinship with others, brining mindful of human interdependence with earthly companions.¹³ Berry's works draw humanity to the Earth. Exploring the breadth, depth and riches of Berry's works leads one from the daily and local aspects of our individual lives to the richly conceptual and theoretical aspects of human minds that permit to see the whole Earth.¹⁴ The life and work of Berry especially his insightful narration of the new story of the universe has a great momentum for the protection of the nature. Accordingly it is paramount to unearth the great contribution of Berry in the area of environmental protection.

THE NEW STORY OF THE UNIVERSE

The eco-theology of Berry is based on deep understanding of the history and functioning of the universe, named as the new story of the universe. New Story as a term coined by Berry referring to the present, scientific understanding of the cosmos as developing and inner-connected by origin. While science has developed physical meaning of this, Berry seeks to have humans understand this as a sacred story of the universe and of the total human venture.¹⁵ This new story opens up human acknowledgement of the reality. The story in Berry is a central theoretical position. On the one hand story is the anthropocentric narration of all that is meaningful and significant

¹² Cf. Ervin Laszlo, "Thomas Berry, Earth Scholar: A Brief Biography," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), xiv-xv.

¹³ Cf. Geneen Marie Haugen, "Thomas Berry and the Evocation of Participatory Consciousness," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 32.

¹⁴ Cf. Paul Waldau, "From the Daily and Local to the Communion of Subjects," in *The Intellectual Journey of Thomas Berry*, ed. Eaton. (New York: Lexington Books, 2014), 223.

¹⁵ Cf. Anne Lonergan and Stephen Dunn, glossary to *Befriending the Earth; A Theology of Reconciliation between Humans and the Earth* by Thomas Berry and Thomas Clarke (Mystic: Twenty-Third Publications, 1991), 150.

for the human. On the other hand, story opens the human to acknowledge the inherent cosmological otherness at the heart of human existence.¹⁶ Thus the new story of the universe can ignite a great fire in human thoughts about the Earth. Berry explains that there is a future that is taking place. A movement toward the healing of the Earth can be observed even amid the many devastating processes that are still functioning. As there is a rewriting of the story of the past and consider the realities of the present, it has already begun the shaping of the future.¹⁷ Therefore the hope for the future is based on the new story of the universe. Despite dire times, Berry was hopeful to the end about human prospects. He derived his hope from the story of the universe itself.¹⁸ The story of the universe can transform human attitudes. This is a story of such immensity and immediacy that is completely transforms the shallow narrative of materialism and consumerism.¹⁹ Human recognition of the Earth community in the context of the universe is the actual response to the ecological crises. Berry argues that nothing less than the recognition of Earth as primary community can ensure the survival of complex life systems.²⁰ Thus ecological challenge is to learn and live the universe story. Berry's contribution to ecology and religion at both the scholarly and the practical level is most often associated with the large vision. Learn and live the Universe Story.²¹ Thus, the new story of Berry becomes a real challenge to Christianity in general and Church in particular to respond genuinely to ecological issues. This new understanding of Berry can be a great impetus for the Catholic ecological action.

¹⁶ Cf. John Grim, "Thomas Berry and Indigenous Thought: First Nations and Communion with the Natural World," in *The Intellectual Journey of Thomas Berry*, ed. Eaton. (New York: Lexington Books, 2014), 133.

¹⁷ Cf. Thomas Berry, "The Emerging Ecozoic Period," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 13.

¹⁸ Cf. Bill Plotkin, "Insistence-The Key to the Great Work of Our Times: A Soulcentric View of Thomas Berry's Work," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 71.

¹⁹ Cf. Duane Elgin, "The Double Life of Thomas Berry; Emergence and Evolution," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 84.

²⁰ Cf. Joanna Macy, "Earth Community," in *Thomas Berry Dreamer of the Earth*, ed. Ervin Lazlo and Allan Combs (Toronto: Inner Traditions, 2011), 105.

²¹ Cf. Anne Marie Dalton, "The Great Work in a Sacred Universe: The Role of Science in Berry's Visionary Proposal," in *The Intellectual Journey of Thomas Berry*, ed. Eaton. (New York: Lexington Books, 2014), 187.

OBJECTIVE OF THE STUDY

The present research, “Berry’s New Story of the Universe: A New Response to Catholic Ecological Thought” is a definite study of the eco-theology of Berry in the light of Catholic ecological justice. The primary objective of the study is aimed to understand how the ecological ideas of Berry could be a paradigm in the ecological ethics of the Church. Second objective is to develop the Catholic Ecological thought to a more relevant and genuine perspective in the light of the new story of the universe by Berry to respond adequately to the ecological problems of the present time. Third objective is to find critically relevant means for the Church on the basis of eco-theology of Berry, to respond to the challenges of ecological degradation of the present time. Fourth objective is to reinvent the authentic human role in the universe in light of the new story of Berry and to respond to the call given by the Church for the well being of the nature. Fifth objective is to promote the importance of ecological orientation in present day theological studies and to examine the theological ecological impetus proposed by Berry on the basis of Church’s ecological justice. Finally, to analyse the eco-principles based on the new universe of Berry, on the basis of ecological challenges posed by the Church Documents and to find new Christian response for Catholic Ecological Thought.

SOURCES OF THE WORK

The central idea which is conveyed in this thesis is the importance of Berry’s new story of the universe as a new response to Catholic ecological thought. The search for theological foundations of this concept makes it inevitable to go to the original works of Berry. The Primary sources of the thesis include the original works of Berry and the Church documents that deal with the ecological justice. The secondary sources include the articles and books that explain the concepts of Berry. The other sources for the thesis include; articles and books on Berry, Encyclicals and other Church Documents, Encyclopaedias and Theological Dictionaries and other published books articles, and internet sources.

SCOPE AND RELEVANCE OF THE STUDY

All Christians believe that God has created the world and God found it good. God expects humanity to protect and maintain nature and to be responsible in the use of natural resources and other living beings. The Earth today is heavily exploited and constantly threatened by heavy human interventions. In the Post modern era one of the important concerns is that for the environment, because the Earth is under a great threat. Earth preserves all creatures. At the same time, all creatures need to take responsibility of preserving the Earth and maintaining the equilibrium. The Church also has an important obligation for taking care of the Earth.

The Fathers and great saints of the early Church spoke of common good, common ownership, common welfare, and well being of all humans in such a way that the humans were friendly with nature and took responsibility of protecting and sustaining it. The search for ecological concerns in the early Christian traditions reveals few inspiring personalities. The Shepherd of Hermes invited Christians for repentance and taught them to live friendly with nature. Antony the Great, the father of monastic life was very friendly with the nature and animals. In the same way Paul of Thebes loved and lived in the midst of the nature. Basil the Great was against all forms of hoardings. He preached that common sharing is the universal destination of all creatures. Augustine of Hippo spoke against the rich in buying and selling of creatures as commodities. According to John Chrysostom, the creation and all its fruits are meant for all and not for a few. St. Francis of Assisi was proclaimed as the patron saint of Ecology and Ecologists. He emphasized the caring treatment of plants and animals as part of spiritual living. Francis found the face of God in nature and felt strongly the presence of God in it. He understood that humans have a deep connection with the nature. Francis realized that he was part and parcel of nature and he was able to listen and understand the voice and movement of nature.²² The ecological concerns were part of the teachings of Church Fathers and prominent saints in the history of the Church, but those became scarce with the development of theology in the middle ages. The

²² Cf. A. Alangaram, "Ecological Concerns in Christian Traditions: Reflections on *Laudato Si*," in *Asian Horizons* 9, n: 4 (December 2015), 632-635.

ecological concerns were totally neglected from the theological endeavour. The ecological thought became a concern again only in post modern period in Christian theology. The new understanding of environmental stewardship comes from the Christian understanding of God's revelation. It is God who created the entire cosmos, the world and all that it has, it is God created humans in his likeness and image and entrusted to them the world with the responsibility of tilling it and keeping it. Humans have two-tier responsibility. On the one hand human beings produce things in cooperation with nature, on the other hand they have a great responsibility of maintaining the world with its ecological balance. Ecological balance is not only to protect nature but also to sustain it. The present human ethics is unfortunately, selfish, destructive, profit oriented, dehumanizing.²³ Thus it is necessary to formulate church's ethics that respects and cares for the nature.

The ethics that is based on anthropocentric has become outdated and become the cause of degradation of the ecology as secondary. The authentic teachings of scriptures, Fathers of the Church, saints, and magisterium demand a concrete action towards the protection and care of the nature. It demands to have a new impetus to solve this great dilemma in the ecological ethics of the Church. Berry, being a lover of the nature tried to provide solutions to the dilemma by proposing a new story that would be more holistic in understanding of the universe as a whole. He believed that this new understating would provide a new impetus to the environmental action and provide intellectual and practical solutions. The thesis as part of moral theology will focus on environmental justice, especially focusing on Berry's New Story of the universe, as a new response to catholic ecological thought.

RESEARCH PROBLEM AND HYPOTHESIS

The Ecological Justice issues are comparatively recent in Christian Ethics. Though there were theological discourses on ecological care among the Church Fathers and early saints, it became scarce in the further development of theology. The theology and Christianity even became alien towards ecological concerns in the middle and modern ages. The ecological problems

²³ Alangaram, "Ecological Concerns in Christian Traditions," 635.

became so severe in the post modern time that, it became inevitable for the Church to involve herself in the protection of the nature. Thus the Church started to deal with the ecological problems as part of the Christian Ethics. The principles of Christian Social Ethics were applied to find solutions for the ecological problems. Church's ecological thought today is based on the principle of sustainability based on personhood, solidarity and subsidiarity. But these principles are drawn from human moral perspective. Though these principles are capable of providing basis for human moral and social issues, it is not sufficient to deal adequately with ecological issues. It is imperative to draw principles for ecological ethics from the principles of universe-centric-ecology. It is only the principles based on universe-centric-ecology can be real productive for catholic ecological action of the Church. Thus it is important for Catholic Ecological ethics to develop a new approach based on universe-centric-ecology. The Ecology of Berry provide with Eco-principles based on the new story of the universe. This research is to find out the importance of universe-centric-ecology based on the new story of the universe of Berry in contributing and making relevant the Catholic Ecological Ethics in responding to the ecological challenges of the present time.

The hypothesis of this study is that the new story of the universe of Berry, which enhances a universe-centric ethos, would be an appropriate approach for Church to do ecological involvement in a world that is badly affected by ecological crises.

METHODOLOGY AND PROCEDURE

Every thesis or research encompasses the methodology and procedures employed to conduct scientific research. The design of a study defines the study method. The study method that is used in this thesis is descriptive and qualitative. The descriptive research is to narrate the state of things as they are and the qualitative research deal with the study of human behaviours as they deal with the basic human motivations, aptitudes, attitudes, feelings, opinions, and desires.²⁴ This research deals with the present state of environment in the context of new story of the universe of Berry and rediscovers a genuine human

²⁴ Cf. Bijoy Augustine and Vincent kundukulam, *Research Methodology* (Alwaye: SH League, 2021), 6-7.

response to environmental degradation in the context of universe-centric approach.

This thesis has been organized in three chapters with a General Introduction and General Conclusion. The General Introduction consists of seven main points; they are Berry: the geologist, the new story of the universe, objective of the study, sources of the work, scope and relevance of the study, research problem and hypothesis and methodology and procedure. Chapter one deals with Berry's new story of the universe as a universe-centric-ecology. The first part deals with the significance of the new story of the universe. The second part deals with the theoretical background of new story of the universe. The third part explains in detail the new story of the universe. The fourth part deals with the eco-principles of the new story of the universe. This chapter is very significant in the sense that it deals with the eco-principles based on the new story of the universe.

The second chapter depicts the Church's Ecological Ethic and Berry's Universe-Centric-Approach. The first part of the chapter makes an analysis of the Church's ecological justice and Ecology of Berry. The ecological crisis are analysed on the basis of the teachings of the Church. The challenges and concerns expressed in various church documents will be brought forth and enumerated to understand the importance of ecology of Berry in the Church's ecological ethics. The second part of this chapter deals with the various concepts and explanation of Berry's ecology as a challenge to Christianity. This part of the chapter is very significant in the sense that it deals with the challenges to Christianity posed by the universe-centric-ecology in dealing with the ecological degradation of the present.

The third chapter explores Berry's universe-centric approach as a new response for Catholic ecological ethics. The importance of ecology of Berry in Church's ecological thought will analysed to deal with the present day Ecological crisis. This chapter deals with the eco-principles of Berry as Church's responses towards the ecological challenges. It analyses how the universe-centric-ecology provides a genuine approach to the Church to respond to the theological and spiritual challenges posed by the ecological crisis. It underlines the response of the Church in the present day environmental crisis and its role in restoring ecological justice based on the

universe-centric-ecology. It also enumerates the ecological vision of Berry as a new impetus for Catholic ecological thought to respond towards the ecological challenges of today and for the better future of the Earth.

Finally, the General Conclusion will deal with the Synthesis, New Perspectives, Findings and Interpretations.

CHAPTER I

BERRY'S NEW STORY OF THE UNIVERSE A UNIVERSE-CENTRIC-APPROACH

1.0 INTRODUCTION

The new story of the universe is the pedestal for eco-theology of Berry. Being identified himself as a geologist than a theologian, Berry was apprehensive about the great devastation caused to the nature. He also recognized the role humanity played in ecological degradation. Out of his care for the Earth, he realized that only human harmony with the universe can bring real solution to the problems of ecological disaster. The intellectual pursuits and experiences made him to realize that the discontinuity and disharmony with the Earth in particular and universe in general as the real cause for the ill-treatment of the environment by humanity. The stories that humans cherish are no longer capable of bridging this gap rather they have become the cause for the indifference. So Berry understood that there is a necessity for a new story that would provide a great impetus for the ecological concern and action. Thus, the new story of the universe was proposed, which would bring the whole humanity together for this noble cause of care for the nature. Consequently Christianity in general and Catholic ecological ethics in particular cannot be alien towards the genuinely motivated ecological action. Hence this chapter tries to understand the relevance of new story of the universe which formed the base for ecology of Berry and which proposes a universe-centric-ethic in Christian context. This chapter explains Berry's new story of the universe under the following titles; the significance of a new story of the universe, the theoretical background of the new story of the universe, the new story universe, and the eco-principles of the new story of the universe.

1.1 THE SIGNIFICANCE OF THE NEW STORY OF THE UNIVERSE

The Covid-19 pandemic has affected human life drastically. The emergence of Covid-19 in Wuhan, China underlines human apathy towards the nature. The *Oxford Journal of Environmental Law* ascertained that the welfare controls for most of the animals on sale in the Wuhan market, where Covid-19 is believed

to have started, were entirely inadequate.¹ The Covid 19 pandemic reminds that humanity is only a part of the nature. The times of Covid 19 pandemic is teaching humanity about the false narrative of safe and secure lives; it reminds that humanity is only a part of the biotic system, the planet Earth.² The Earth, once a gorgeous place has become a difficult place to live in. It is not just different plants and animals that are endangered, the very human life on Earth is affected. In 2019, a landmark report by the United Nations Environmental Programme³-hosted Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services warned that the pace of nature's decline is unprecedented. Nature is declining globally at rates unprecedented in human history and the rate of species extinctions is accelerating, with grave impacts on people around the world. The Report also reminds that it is not too late to make a difference, but only if it is started now at every level from local to global.⁴ Christians cannot be alien to this call. *Docat*, on safeguarding creation state that Christians can make a valuable contribution to the preservation of the ecosystem when they care for creation instead of venting frustration about the environment and this care for creation must be combined with the search for knowledge and the readiness to act (*Docat* 256).⁵ This search for knowledge and readiness to act necessitates a new Christian approach which would combine a theoretical background and concrete action. Thus, through a universe-centric-approach global catastrophic can be averted by the process of restoring human society to its rightful place in the cosmic community. Berry explains that though humans are paralysed by a destructive, addictive, and pathological lifestyle, it is only by looking at the history of the cosmos and understanding the divine essence humanity share with creation, humans can go forward as a positive part of Earth's unfolding and fulfilment.⁶ Thus the new

¹ Cf. Amanda Whitfort, "Covid-19 and Wild Life Farming in China: Legislating to Protect Wild Animal Health and Welfare in the wake of a Global Pandemic," *Oxford Journal of Environment Law* 33, no. 1 (January 2021): 71.

² Cf. Lekshmi Ramakrishna Iyer, "A Cross-Cultural Dialogue to Save the Planet," *Journal of Dharma* 46, no. 2 (April-June 2021): 200.

³ Hereafter short form UNEP shall be used.

⁴ Cf. UNEP, *Letter from the Executive Director UNEP in 2019* (Nairobi: UNEP, 2020), <https://www.unep.org/annualreport/2019/index.php>

⁵ *Docat* (Bengaluru: Asian Trading Corporation, 2016).

⁶ Cf. June Raymond, *Meditations with Thomas Berry* (London: GreenSpirit, 2010),

story of the universe, which underlines a universe-centric-ethical approach, can ascertain the future of humanity and the Earth.

This part of the chapter analyses the significance of the new story of the universe. The importance of the new story arises from the challenges posed by the environmental destruction of the present time to conventional theology and religion, traditional concepts of God and Trinity, universe as single community, the role of human species, democracy to biocracy and ecology and justice. Thus the new story of the universe gives an impetus to reinvent humans in the context of the universe for the care of the creation.

1.1.1 ECOLOGICAL CHALLENGE

The greatest challenge of the present century is ecological challenge. The environmental degradation caused by humans is starting to challenge the very human existence on the face of the Earth. The sixth report of Intergovernmental Panel on Climate Change⁷ A.1 and A.2 states that the scale of recent changes across the climate system as a whole and the present state of many aspects of the climate system are unprecedented over many centuries to many thousands of years. It is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere⁸ and biosphere have occurred.⁹ Therefore, velocity of environmental destruction, which is the signs of the time pose a challenge for having a human ecological awakening. The first phase of the human ecological awakening is the recognition of the present state of the cosmos. The ecological degradation is at a critical stage of decay. The cosmos is in a critical situation of decay and its continued destruction by human beings poses serious problems that affect the human beings themselves.¹⁰ The ecological problems affect humanity also. Berry explains that the devastation of the planet today is negating hundreds of millions, even billions, of years of

⁷ Hereafter the short form IPCC shall be used.

⁸ The Cryosphere refers to any place on Earth where water is in its solid form, where low temperatures freeze water and turn it into ice. Cf. "Cryosphere," Earthdata, accessed on 13 August 2021. <https://earthdata.nasa.gov/learn/discipline/cryosphere>

⁹ Cf. IPCC, *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Report* (Cambridge: Cambridge University Press, 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf

¹⁰ Cf. Oliver Inchody, "Ecological Crisis: Its Crisis and Praxis" *Journal of Dharma* 36, no. 3 (July-September 2011): 302.

past development on the Earth. This is a most momentous period of change, a change unparalleled in four and a half billion years of earth history.¹¹ Thus it is important that for any ecological action the first challenge is to recognize the present situation of the universe.

The other aspect of the ecological challenge demands a redefinition of the humans from a catalyst in great destruction of the Earth to recognition of human role in the order of the universe. The human activity is greatly responsible for this condition of the environment, including global warming, ozone decline, nuclear radiation, air and water pollution, and industrial toxins. Burning of fossil fuels such as coal, oil gas, deforestation and other land uses such as growing paddy rice led to massive carbon dioxide, methane and nitrous oxide emissions. Industry is responsible for more than one-third primary energy consumption and carbon dioxide emissions of the globe.¹² In order to move from human as a catalyst in environmental degradation, it is important to identify human role in genuine ecological action. Berry enumerates that the role of humans at present ecological devastation is that of a chosen group, a chosen generation, or a chosen human community. As prophets, the call of every individual of the present time is to undertake the mission of ecological awakening. The inevitability of individual existence demands a new understanding of human role in the universe.¹³ The human ecological awakening at the face of large ecological degradation gives humanity a new mission. Therefore, it is important for humanity to take the challenge by recognizing present state of ecological degradation and redefining human role on the basis universe-centric ecological mission.

1.1.2 CONVENTIONAL THEOLOGY

Theology deals with clarification of theories and concepts that are related to religious faith. The theology is an intellectual discipline that aims at setting forth in an orderly manner the content of a religious faith.¹⁴ The Christian

¹¹ Cf. Thomas Berry and Thomas Clarke, *Befriending the Earth; A Theology of Reconciliation between Humans and the Earth* (Mystic: Twenty-Third Publications, 1991), 4.

¹² Cf. Ipsita Roy and Ajith Kumar Behura, "Revising the Relationship between Business and Environment" *Journal of Dharma* 39, no. 2 (April-June 2014): 168.

¹³ Cf. Berry and Clarke, *Befriending the Earth*, 5.

¹⁴ John MacQarrie, "Theology" in *Encyclopedia Americana*, vol.26 (Danbury: Grolier Incorporated, 1991), 633.

theology is an encounter of revelation through human reason. The theology is a branch of learning in which a Christian, using his or her reason enlightened by divine faith, seeks to understand the mysteries of God revealed in and through history.¹⁵ Though, the basic nature of Christian theology is that it is derived from revelation, it always encountered and responded to the concrete reality and situations of the time. Berry pointed out that the Christian theology developed thorough the encounter with the outer reality of the time. The Bible has a theological aspect but is not, strictly speaking, a structured theology. Structured theology began only after contact with the Greek world. Christianity as it exists has been profoundly enriched and has grown precisely because of its contact with an outer world. This enabled Christianity to expand its understanding of itself, also of the divine, and of the processes whereby the human fulfilled its divine appointed purpose. St. Augustine gave further development to theology through his contact with the Neo-Platonism of his time. In the thirteenth century, St. Thomas Aquinas entered into the world of Aristotle and so brought about a new and finely wrought theological expression of Christianity.¹⁶ Thus it is ecologically important that theology respond to the reality of environmental degradation.

The Christianity and theology has become purely past oriented. It still narrates the old story which makes it unfeasible to encounter the realities of the time, especially the problems related to the ecology. This creates a discontinuity in theology. The crisis in the ecosystem endangering the life of humans and other living beings is one of the most frightening problems of the present time. This crisis is very much a religious and spiritual issue and demands a befitting response through scientific outlook and religious approach.¹⁷ This discontinuity in theology makes the religion irrelevant in dealing with the concrete issues of the world. Berry expounds that, there is a great discontinuity that is clearly visible in the present day religions. The world of today is the world known through scientific observation and it is different from the classical world into which Christianity first emerged. That is

¹⁵ Cf. G. F. Van Ackeren, "Theology" in *New Catholic Encyclopaedia*, Vol. 13 (New York: Gale, 2003), 891.

¹⁶ Cf. Berry and Clarke, *Befriending the Earth*, 8.

¹⁷ Cf. Jose Kalapura, "Environment Crisis and Religions," *Journal of Dharma* 31, no. 4 (October-December 2006): 437.

the reason for the difficulty throughout all religions of the present time. No religion is equipped to deal with the new challenges. No religion has taken any effective responsibility for the fate of the Earth concretely. Thus by not accepting a responsibility for the fate of the Earth, there is failure of religious responsibility to the divine, as well as to the human.¹⁸ The present day unequalled discontinuity in theology can be bridged by a universe-centric approach that makes the religion to encounter the realities of the time, especially the ecology issues.

1.1.3 RELIGION AND BEAUTY OF CREATED WORLD

Religion deals with belief and practices that are associated with the divine. The religion is the pattern of belief and practice through which humans communicate with or hope to gain experience of that which lies behind the world of their ordinary experience. Typically it focuses on an Ultimate or Absolute, thought of some one believes in God.¹⁹ The religion deals with human relationship with God thorough worship and other spiritual activities. The theological explanation is from the subjective point of view as religion is a virtue that leads man to render to God the homage that is due to Him. As an objective manner of behaviour and concrete manifestation of virtue, it comprises belief in one God, personal and infinite in His attributes; an attitude of absolute respect and submission; exterior acts that express this belief and this attitude in worship; and, as required by all exterior human activity, institutions to regulate that activity.²⁰ There is a mutual influence of religion and the world. There is an influence of the beauty of the world in the concept of the divine in all the religions. According to Berry gorgeous world has influenced human's wonderful idea of God. Humans wonder at the magnificence of whatever that brought the world into being. This in turn leads to a sense of adoration and a sense of immense gratitude. It is due to human participation in such a beautiful world. This adoration and gratitude in turn is

¹⁸ Cf. Berry and Clarke, *Befriending the Earth*, 9.

¹⁹ Cf. Ninian Smart "Religion" in *Encyclopedia Americana*, vol.23 (Danbury: Grolier Incorporated, 1991), 359.

²⁰ Cf. J. Goetz, "Religion" in *New Catholic Encyclopaedia*, Vol. 12 (New York: Gale, 2003), 57.

called religion.²¹ Therefore the religion has a great responsibility to safeguard the beauty of the world. The concept of beauty itself is not independent of nature. The aesthetic sense in humans evolved with the appreciation of the beauty lying in their surroundings.²² Consequently the religion has an important responsibility in preserving the beauty of the world. Thus it is religious responsibility to recognize and preserve the beauty of the world which entails a concrete ecological action.

1.1.4 GOD AND CREATION

God is a general term for deity. In the Bible, the word is used to refer both to the deity worshiped in the Judeo-Christian tradition and to deities worshiped by other peoples.²³ God is understood or explained in relation to humans in traditional sense. The Christian Scriptures present the God of revelation, the God who makes himself known and gives himself to humankind through his words and deeds.²⁴ Christianity as a religion that gave importance to the transcendent nature of God. God is the Supreme Being, Pure Act, First Cause of all, provident conservator and governor of the universe; the Absolute, infinite, eternal, immutable, intelligent, omniscient, all-powerful, and free; the Creator, to whom creatures owe homage, respect, and obedience; the Sovereign Good, diffusive of all goodness, toward which everything tends as to its ultimate final cause.²⁵ But there are also traces of presentation of God as immanent in Christian tradition. St Augustine enumerates that God is more intimate to us than we are to ourselves (*Confession*²⁶ III.6.11). The real ecological action demands that God be properly understood and explained in relation to creation. The Christian perspective on ecology attains its beautiful integration and comprehensive presentation, which takes into account God, creation, and

²¹ Cf. Berry and Clarke, *Befriending the Earth*, 9.

²² Cf. Praha Shankar Dwivedi, "Exploring the Ethic and Aesthetic of Eco-Caring in *Uttamaramcarita*," *Journal of Dharma* 42, no. 2 (April-June 2021): 130.

²³ Thomas R. W. Longstaff, "God" in *Harper's Bible Dictionary*, ed. Paul J. Achtemeier (Bangalore: Theological Publications in India, 1990), 350.

²⁴ Cf. M. A. Hoonhout, J. R. Gillis and R. J. Buschmiller, "God" in *New Catholic Encyclopaedia*, Vol. 6 (New York: Gale, 2003), 270.

²⁵ Cf. Hoonhout, Gillis and Buschmiller, "God," 270.

²⁶ Hereafter for *Confessions* the short form *Con* shall be used.

human beings.²⁷ Therefore, the Concept of God can be clearly understood in relation to creation. Berry explains that the sense of God, of the human, of creation and revelation, in certain sense these all come together. It cannot be dealt separately. There cannot be any sense of the divine without creation. Speculatively, there can be talk about God as being prior to or outside creation or independent of creation, but in actual fact there is no such being as God without creation.²⁸ Therefore in environmental action it is important that the concept of God be understood in relation to creation. Starting from God, the relationship between God and nature is clarified to locate the relationship between human and nature, in order to explore a way out for the ecological crisis faced by humankind. In the face of the global ecological crisis, Christianity is determined to reflect on its past, and re-discuss the relationship between human and nature.²⁹ Thus the ecological action demands a holistic outlook that amalgamates the concept of God in relation to creation.

1.1.5 THE TRINITY AND UNIVERSE

The Trinity is the Christian concept of God. Trinity is a term denoting the specifically Christian doctrine that God is a unity of three persons: Father, Son and the Holy Spirit.³⁰ The Christian concept of God is one God, but three Persons. The Trinity is Father, Son, and Holy Spirit; the one God in three Persons that is the object of the Christian confession concerning the deity.³¹ Thus the Trinity is a great mystery of one substance. The central and characteristic Christian doctrine of God is that He exists in three persons, the Father, the Son, and the Holy Spirit. At the same time the Christian church insists that God is one in substance and thus combines in a mystery the truths set forth in the Holy Scriptures.³² Thus there is a unity and communion in

²⁷ Cf. Paulachan Kochapilly, "All for Life, Life for All," *Journal of Dharma* 39, no. 4 (October-December 2014): 346.

²⁸ Cf. Berry and Clarke, *Befriending the Earth*, 10.

²⁹ Cf. Fuxing Ren, Jun Wang and Robin Vijayakumar, "Environmental Sustainability and Christian Theology," *Journal of Dharma* 46, no. 2 (April-June 2021): 255.

³⁰ Thomas R. W. Longstaff, "Trinity," in *Harper's Bible Dictionary*, ed. Paul J. Achtemeier (Bangalore: Theological Publications in India, 1990), 1098.

³¹ R.L Richard and J. Hills, "Trinity, Holy," in *New Catholic Encyclopaedia*, Vol. 14 (New York: Gale, 2003), 189.

³² Cf. Frederic C. Grant, "Trinity," in *Encyclopedia Americana*, vol. 27 (Danbury: Grolier Incorporated, 1991), 116.

Trinity. The Catechism of the Catholic Church³³ elucidated that that The Trinity is One. We do not confess three Gods, but one God in three persons, the consubstantial Trinity (CCC 253).³⁴ Thus Trinity can be explained as a Divine Community. Berry explains that one of the remarkable things about Christian belief is that it goes beyond the question of the divine as the only being that is pure simplicity, a pure flame of existence. There exists in the Christian world that the inner life of the divine is community. To say that community is at the heart of ultimate simplicity is a challenging statement.³⁵ Thus the Christian understanding of God as Trinity is the communion of three Persons, the Trinity itself is communion has a great ecological importance.

The Trinity is the most difficult theological concept for human mind to understand and comprehend. There were different ways the concept of Trinity was explained. Berry expounds a new and in some ways a better model based on cosmology and the functioning of the universe. That is the model of differentiation, inner articulation, and communion, which emerges from our scientific understanding of the universe.³⁶ Berry explains that the world as emergent diversification and differentiation, each particle has its own interiority. Every particle has its identifying inner structure, its inner being. Everything speaks itself and everything is receiving something from every other particle of the universe. So there is the communion of things. The volume of each atom is the volume of the universe. Every atom is immediately influencing every other atom in the universe, no matter how distant, even if it is billions of billions of light years away. So there is still the bonding. So the explanation of Trinity in our times, in the light of cosmological model would be in terms of principle of differentiation; the Father, the principle of interior articulation, the inner principle of things, the Son, and the Holy Spirit, the bonding, the holding together of things, the spirit of love, the inner spirit of reality.³⁷ The new understanding of the Trinity in relation to the universe becomes ecologically relevant.

³³ Hereafter for *Catechism of the Catholic Church* the short form CCC shall be used.

³⁴ Cf. CCC (Bangalore: Theological Publications in India, 1994).

³⁵ Cf. Berry and Clarke, *Befriending the Earth*, 15.

³⁶ Cf. Berry and Clarke, *Befriending the Earth*, 15.

³⁷ Cf. Berry and Clarke, *Befriending the Earth*, 16.

1.1.6 THE UNIVERSE AS A SINGLE COMMUNITY

Universe, the whole cosmic system of matter and energy of which Earth, and therefore the human race, is a part. The universe is taken to mean the totality of created beings, both material and spiritual.³⁸ The vast majority of scientists believe in the big bang³⁹ theory or general relativity⁴⁰ theory, which explains the beginning of the universe. The *HOSA Journal of Atmospheric and Earth Science*, explains that according to the big bang theory, about 13.7 billion years ago all the matter that constitutes the universe was concentrated in a single point, which exploded, giving rise to everything. The other theory of the origin of the universe is the General Relativity Theory. It is the basis of the current cosmological models of the universe. General relativity generalizes Einstein's special relativity and Isaac Newton's law of universal gravitation providing a unified description of gravity as a geometric property of space and time. In general relativity, the distribution of matter and energy determines the geometry of space time.⁴¹ Both these theories proved the origin of the universe as having a common origin. Due to the numerics of singularity applied to the primeval universe at the zero time considered as arithmetically necessary for any mathematical explication of the universe, it is compelled to say that, before explosion, the then-size, -time, and -radius of the primeval universe had to be zero.⁴² Thus universe can be understood as a single community from a common beginning. Berry's understanding is that one thing that is important in the evolving process of the universe is that the relationship of the origin. Everything in the universe is genetically cousin to everything else. All living things on the planet Earth are clearly derived from a single origin; the trees, the birds, and all living creatures are bonded together in a single community of

³⁸ Cf. J.H. Wright, "Universe, Order of," in *New Catholic Encyclopaedia*, Vol. 14 (New York: Gale, 2003), 328.

³⁹ The Big Bang Theory is the leading explanation about how the universe began. At its simplest, it says the universe as it is known it started with an infinitely hot, infinitely dense singularity, and then inflated. Cf. Fernando Alcoforado, "The Future of the Universe, Sun, Earth and Humanity," *HOSA Journal of Atmospheric and Earth Science* 4, no. 19 (2021): 1.

⁴⁰ General relativity is physicist Albert Einstein's understanding of how gravity affects the fabric of space-time. Cf. Alcoforado, "The Future of the Universe," 1.

⁴¹ Cf. Alcoforado, "The Future of the Universe," 1.

⁴² Cf. Raphael Neelamkavil, "Causal Horizontal Research in Cosmology," *Journal of Dharma* 34, no. 2 (April-June 2009): 196.

life.⁴³ This single community of the universe is the central point of the new story that requires the inevitability of concrete human ecological praxis for the care for creation. Hence it is ecologically important for humanity to recognize the single community of the universe.

1.1.7 THE ROLE OF HUMAN SPECIES

The humanity played a major role in the current fate of the Earth. In a short period of time the human species has emerged as the dominant species in almost all ecosystems. This domination has led to the degradation of the natural environment. What humans have done well for themselves has among other things reduced habitat for animals and plants, changed climate, polluted air and water, and created a burden of toxic wastes for future generations.⁴⁴ Thus it is paramount to redefine the role of human species for any ecological action. The classical definition of Aristotle identifies human as rational animal (*De Anima* III.11). Berry explains human as that being in whom the universe reflects on and celebrates itself and its numinous origin in its own, unique mode of conscious self-awareness. All the living beings are conscious in their own way, but in the human it becomes dominant mode of functioning. It is not that humans think on the universe; rather the universe thinks itself, through human being.⁴⁵ But human misunderstanding has caused the devastation of the environment. It would be nature at its most sublime for *Homo sapiens*, searcher and explorer, to work with the rest of creation in loving and peaceful harmony. Unfortunately, after the ascent of human, everything has changed paving way to cosmic discrimination prompted by human misunderstanding.⁴⁶ Therefore, it is important to have a proper understanding of human role in the universe. Berry expounds that there are always two modes of any being, its micro-phase mode and macro-phase mode, in other words, its particular mode and its universal mode. In this sense, humans are not simply genetically cousin to everything in the universe but there is a certain identity with everything.

⁴³ Cf. Berry and Clarke, *Befriending the Earth*, 14-15.

⁴⁴ Cf. James B. Martin-Schramm and Robert L. Stives, *Christian Environmental Ethics; A Case Method Approach* (New York: Orbis Books, 2003), 9-10.

⁴⁵ Cf. Berry and Clarke, *Befriending the Earth*, 21.

⁴⁶ Cf. Rayappa A. Kasi, "Anthropology versus Cosmology; A Schism in Cosmogensis," *Journal of Dharma* 37, no. 2 (April-June 2012): 170.

Human exist in this comprehensive context. The humans are so intimate with the Earth that any degradation of the planet is degrading the larger self. It is suicide.⁴⁷ Consequently it is essential for any environmental action to redefine and understand the actual human role in the cosmos as cousin to everything in the universe and thus care for the Earth as our common home.

1.1.8 DEMOCRACY TO BIO-CRACY

Democracy is a people oriented system of governance by the representatives of people themselves. The word democracy has many meanings but in the modern world its use signifies that the ultimate authority in political affairs rightfully belong to the people.⁴⁸ Democracy is a system that places sovereignty in the hands of many and their elected representatives. The essential elements of modern democracy are universal adult suffrage, representation in a legislative body of a fair proportion of the electorate and decision by majority vote of the electorate in determination of major questions of policy.⁴⁹ Democracy is often celebrated as a great system to the point of missing serious shortcomings, but democracy has been the reason behind many of the ecological damages. The chief shortcoming of democracy is the narrow focus of these systems on human material well-being to the neglect of spiritual well being and flourishing of biotic communities. Another shortcoming that is the great emphasis on economic growth has contributed especially to environmental degradation. The added production and consumption produced by economic growth put increased pressure on resource extraction and creates waste in abundance. The sheer volume of it all may itself overwhelm the capacity of the earth to yield resources and absorb waste. It has a great impact on specific ecosystems.⁵⁰ Thus, the democracy has become an instrument to colonize the environment.

Berry regarded democracy a conspiracy of human against the natural world. Berry points out that the United States Constitution is constitution of

⁴⁷ Cf. Berry and Clarke, *Befriending the Earth*, 22.

⁴⁸ Sidney Hook, "Democracy" in *Encyclopedia Americana*, vol. 8 (Danbury: Grolier Incorporated, 1991), 684.

⁴⁹ Cf. J.G. Kerwin, "Democracy," in *New Catholic Encyclopaedia*, Vol. 4 (New York: Gale, 2003), 643.

⁵⁰ Cf. Martin-Schramm and Stives, *Christian Environmental Ethics*, 14-15.

humans. It guarantees human rights to life, liberty and the pursuit of happiness at the expense of the continent. It is important to have a constitution that includes all components of the continent.⁵¹ It is high time to go beyond the narrow understanding of constitutions of individual states. It is vital to go beyond the limited vision of the Constitutions of various nation-states to the wider realm of global interdependence of and universal responsibility for all creation.⁵² It is important to recognize the legal status of the rights of nature. Berry explicates that the legal status of rights for natural modes of being is especially needed now when human has attained such extensive power over the functioning of the planet it possesses.⁵³ Therefore it is necessary to shift from democracy to bio-cracry. The bio-cracry grows out of an apparently new, yet really very old, worldview. In the history of the evolution of the *Homo Sapiens* the relationship between humans and their environment has always been symbiotic. Moving beyond democracy to biocracy, moving form a human-centred world to a bio-centric world will represent one giant step for humankind.⁵⁴ Inspired by Berry, W. Thomas Martin explains biocracy as contrast to democracy as a life process that is inclusive of all species and their environment. Biocracy cares for the whole and the interrelationship among the whole the part of the whole. It is concerned about the diversity of all life. Biocracy includes the democratic voices of all human beings in their bioregions. It means listening to the voices of nature, and giving voices to the new genesis story.⁵⁵ Thus, the human transformation from democracy to biocracy entails a genuine ecological action, which makes the universe-centric-ethic important.

1.1.9 ECOLOGY AND JUSTICE

Justice is an important principle of human society. The idea of justice, owing much to biblical *sedaqah* and *mishpat* as to the Roman concept of *ius*, is a

⁵¹ Cf. Berry and Clarke, *Befriending the Earth*, 42.

⁵² Cf. Prashant Olalekar, "Cocreate Cosmic Compassion; A Holisitc Perspective or Our Times," *Vidyajyoti Journal of Theological Reflection* 82, no. 7 (July 2018): 554.

⁵³ Cf. Thomas Berry, *The Great Work; Our Way into the Future* (New York: Bell Tower, 1999), 74.

⁵⁴ Cf. W. Thomas Martin, *From Biocracy to Democracy* (Victoria: Friesen Press, 2016), 6.

⁵⁵ Cf. Martin, *From Biocracy to Democracy*, 7-8.

cardinal principle of the entire western tradition.⁵⁶ According to the common definition of St Thomas Aquinas, the virtue of justice is “the strong and firm will to give to each his due” (ST 2a2ae, 58.1).⁵⁷ There can be two ways of dealing with ecological issues. The first way is dealing ecological issues as genuine justice issues. The human consumption of goods and resources of the planet and the dumping of anthropogenic wastes are beyond the capacity of ecosystems. This is not only a scientific and economic problem but more importantly a moral problem a matter of intra-generational, inter-generational, and intra-species injustice.⁵⁸ The second way of dealing with ecological issues as related to other justice issues. The ecological problem as intimately connected to justice for the poor. The option for the poor is to enhance the power of the powerless by raising critical awareness of their situation and by organizing them to help themselves become capable of making decisions conducive to affirm their right and fight injustice and progress in a co-operative manner. It implies evolving together with the people a new vision of society, which will bring about a transformation of relationships and institutions that are operative today. In other words, it is enabling people to channelize their energies into movements that will bring all segments of people into the larger movement of integral human growth, both material and spiritual.⁵⁹ It is important to address ecological issues in both the levels. It is only an integral human approach that can address ecological issues in both these levels. Berry’s position was that to deal effectively with the natural world, it is also important to deal with the human world, with human world as integral to the natural world.⁶⁰ Therefore it is important to recognize that humans are integral with the nature. It is also important to realize that preserving the planet is necessary for the future existence of humanity. It is an invitation to live according to the conditions of the planet. United Nations⁶¹ preamble on Sustainable developmental goals states that determined to protect

⁵⁶ Cf. Inchody, “Ecological Crisis,” 307.

⁵⁷ B. Haring, “Justice,” in *New Catholic Encyclopaedia*, Vol. 8 (New York: Gale, 2003), 67.

⁵⁸ Cf. Jose Nandhikkara, “Planetary Ethics during Anthropocene,” *Journal of Dharma* 46, no. 2 (April-June 2021): 123.

⁵⁹ Cf. D.J Margaret, “Interrelated Option for the Poor and the Earth,” *Asian Horizons* 9, no. 4 (December 2015): 665.

⁶⁰ Cf. Berry and Clarke, *Befriending the Earth*, 44-46.

⁶¹ Hereafter the short form UN shall be used.

the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.⁶² Thus it is urgent to find integral approach that combine both ecological justice issues in one hand and human justice issues in other.

1.2 THE THEORETICAL BACKGROUND OF THE NEW STORY OF THE UNIVERSE

The environmental dilapidation has become the greatest challenge that affects every form of life on Earth. Environmental damage is seriously affecting habitat regions. Sixth report IPCC state that climate change is already affecting every inhabited region across the globe with human influence contributing to many observed changes in weather and climate extremes.⁶³ As a result, different agencies and ecologists are trying to find the solutions and ways by which the great destruction of the Earth and human life itself can be averted. United Nations Framework Convention for Climate Change⁶⁴ in the Paris agreement of 2015, Art. 7(5) proposed that parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems, and should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into relevant socioeconomic and environmental policies and actions, where appropriate.⁶⁵ This call demands a holistic unique approach for environmental action. *Docat* on “Being a good stewards of Creation” state that only when there is more exact theological, ecological, economic, aesthetic, or cultural description of the aspects of nature, there be a meaningful reflections about preservation and protection of the

⁶² Cf. UN, *Transforming our World: 2030 Agenda for Sustainable Development* (New York: UN, 2015), <https://sdgs.un.org/2030agenda>

⁶³ Cf. IPCC, *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Report* (Cambridge: Cambridge University Press, 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf

⁶⁴ Hereafter short form UNFCCC shall be used.

⁶⁵ Cf. UNFCCC, *Paris Agreement* 2015 (Paris: UN, 2015), https://unfccc.int/sites/default/files/english_paris_agreement.pdf

nature (*Docat 257*). This demands a unique Christian approach for ecological action that can re-establish harmonious relationship with nature. The key question to solve the ecological crisis is to rethink and understand our relationship with nature and the things in it, or in a different sense, what our evolving relationship with nature should concern and establish.⁶⁶ The uniqueness of new story of the universe arises from the fact that, it is based on a multi-religious, multi-discipline, multi-cultural and personal experience that re-defines and re-establishes human relationship with the nature. Berry stresses that the lack of proper story that explains the relationship between the humans and the universe is the real cause for the harm done to the nature. Only a new story which amalgamates the entire cosmos can bring a paradigm shift in the attitude of humans for the care of the Earth in particular and universe in general.⁶⁷ Berry developed the new story of the universe that bring together the concepts of classical theologians like Augustine and Aquinas to the philosopher and palaeontologist Teilhard Chardin, from cosmology to Asian religions to indigenous thought to his own personal experience at the meadow.

1.2.1 AUGUSTINE

St Augustine, the Bishop and Doctor of the Church, is the most influential Latin Church Father. By the power of his language and the depth of his thought became the dominant figure and force in Western Christianity and continue to be a very powerful influence up to the present.⁶⁸ At this time of great ecological problems, it is important to explain relationship among God, Human being and creation in the context of Christian ecology. The Christian perspective on ecology heavily depends on the triadic relationship, that is, oneness with God, rootedness with creation, and relatedness with every human being.⁶⁹ Berry made use of the concepts of Augustine to explain this triadic relationship. First of all Augustine's concept of God influenced Berry in the explanation of relationship between God and creation. St Augustine expounds

⁶⁶ Cf. Ren, Wang and Vijayakumar, "Environmental Sustainability," 252-253.

⁶⁷ Cf. Raymond, *Meditations with Thomas Berry*, 10-11.

⁶⁸ R.J. Teske, "Augustine, St." in *New Catholic Encyclopaedia*, Vol. 1 (New York: Gale, 2003), 852.

⁶⁹ Cf. Kochapilly, "All for Life, Life for All," 343.

that God is more intimate to us than we are to ourselves (*Con.* III.6.11). So God can be understood in relation to creation. Berry explains that there cannot be sense of the divine without creation. Speculatively, there could be talk about God as being prior to or outside creation or independent of creation, but in actual fact there is no such being as God without creation. When a person associates the creation with the divine, it is the existential fact that there is no God without creation and there is no creation without God.⁷⁰ Thus the understanding of God in the context of creation demands a genuine Christian ecological action. The explanation of the mutual relationship among the creation is another important area of ecology. The contemporary ecological crisis refers to the problems that arise from the nature and understanding of our relationship to other things on the planet.⁷¹ Thus, Augustine's concept of diversity in creation has real ecological importance. Augustine states "shall I speak of the manifold and various loveliness of sky, and earth, and sea; of the plentiful supply and wonderful qualities of the light, of sun, moon, and stars; of the shades of trees; of colours and perfume of flowers; of the multitude of birds, all differing in plumage and in song; o the variety of animals, of which the smallest in size are often the most wonderful" (*City of God*⁷² 22.24). Based on this understanding of diversity in creation, Berry explains that each reality determines its absolute value of both for the individual and for the community.⁷³ The mutual order of creation that Augustine spoke of "because you did not make them all equal, each single thing is good and collectively they are very good, for our God made his whole creation very good" (*Con* 7.12) has in Berry achieved greater prominence. He explains that the basic direction of the evolutionary process is toward constant differentiation within a functional order of things.⁷⁴ Therefore the diversity and order in reality of Augustine get greater prominence in Berry in explaining the absolute value of each reality in creation and that it must be respected and protected.

⁷⁰ Cf. Berry and Clarke, *Befriending the Earth*, 10.

⁷¹ Cf. Ren, Wang and Vijayakumar, "Environmental Sustainability," 253.

⁷² Hereafter the short form *CG* shall be used.

⁷³ Cf. Thomas Berry, *The Christian Future and the Fate of the Earth*, ed. Mary Evelyn Tucker and John Grim (Mumbai: St. Paul's, 2012), 120.

⁷⁴ Cf. Thomas Berry, *Selected Writings on the Earth Community*, ed. Mary Evelyn Tucker and John Grim (New York: Orbis Books, 2014), 168.

1.2.2 THOMAS AQUINAS

St Thomas Aquinas is the most influential Catholic theologian. He is the most important and influential scholastic theologian and philosopher.⁷⁵ A central influence on Berry was Aquinas's cosmological emphasis on the participation of all reality in God's being. Aquinas has expounds that "for He brought things into being in order that His goodness might be communicated to creatures, and be represented by them" (*Summa Theologica*⁷⁶ I.47.1). Berry develops on the basis of this understanding and explains that the term God refers to the ultimate mystery of things. This mysterious power carries things through to their brilliant expression in all the forms of that is observed in the world.⁷⁷ This theological understanding of the objects as having in the nature promotes the genuine care for the nature. The theological approach towards various objects of nature was somewhere founded to promote eco-care based on ethics of religion.⁷⁸ Theological approach has a great role to play in eco-care.

The concept of universe as integral community by Berry was also influenced by the concept of Aquinas. Aquinas had explained:

we must say that the distinction and multitude of things come from the intention of the first agent, who is God. For He brought things into being in order that His goodness might be communicated to creatures, and be represented by them; and because His goodness could not be adequately represented by one creature alone, He produced many and diverse creatures, that what was wanting to one in the representation of the divine goodness might be supplied by another. For goodness, which in God is simple and uniform, in creatures is manifold and divided and hence the whole universe together participates the divine goodness more perfectly, and represents it better than any single creature whatever. (*ST* I.47.1)

From this Berry concluded that rather than the scandal of particularity, the universe is an integral community. The universe has to be the primary election. The primary election, the primary concern, has to be totality, and anything that is elected has to be chosen in the light of totality. Within this

⁷⁵ W.A. Wallace, J.A. Weisheipl, and M. F. Johnson, "Thomas Aquinas, St." in *New Catholic Encyclopaedia*, Vol. 14 (New York: Gale, 2003), 13.

⁷⁶ Hereafter the short form *ST* shall be used.

⁷⁷ Cf. Berry, *Selected Writings on the Earth Community*, 129.

⁷⁸ Cf. Dwivedi, "Exploring the Ethic," 136.

primary election, everything is elected, each in its own modality.⁷⁹ The universe as integral community highlights the concept of inter-subjectivity. The notion of inter-subjectivity helps us to repudiate the one-sided anthropocentric worldview and to embrace a balanced eco-centric worldview of reality.⁸⁰ Thus, it becomes inevitable to have universe-centric world view for ecological action.

1.2.3 PIERRE TEILHARD CHARDIN

Teilhard De Chardin is an important Christian thinker of evolutionary perspective. He is the proponent of a synthesis of the evolutionary perspective of modern science with the Christian world view.⁸¹ The evolutionary understanding of reality highlights the interconnectedness of reality. For integral ecology treating every actual entity of the cosmic reality, not as an object but as a subject of experience, paves the way to highlight a basic interconnectedness in the whole of reality.⁸² Thus it is important to emphasis the subjective nature of reality. Teilhard had explained that:

on the one hand the materialists insist on talking about objects as though they only consisted of external actions in transient relationships. On the other hand the upholders of a spiritual interpretation are obstinately determined not to go outside a kind of solitary introspection in which things are only looked upon as being shut in upon themselves in their ' immanent ' workings. Both fight on different planes and do not meet; each only sees half the problem I am convinced that the two points of view require to be brought into union, and that they soon will unite in a kind of phenomenology or generalised physic in which the internal aspect of things as well as the external aspect of the world will be taken into account.⁸³

Inspired by this vision, Berry expounds that the rediscovery of the mystique of Earth is a primary requirement to establish a viable rapport between humans and the Earth Community. Only in this context, the arrogance that sets apart humans from all other components of the planet can be overcome and

⁷⁹ Berry and Clarke, *Befriending the Earth*, 17.

⁸⁰ Cf. Valerian Mendonca, "A Metaphysics of Intersubjectivity for an Integral Ecology," *Asian Horizons* 9, no. 4 (December 2015): 748-749.

⁸¹ E.L. Bone, "Teilhard De Chardin, Pierre" in *New Catholic Encyclopaedia*, Vol. 14 (New York: Gale, 2003), 788.

⁸² Cf. Mendonca, "A Metaphysics of Intersubjectivity," 758.

⁸³ Teilhard De Chardin, *The Phenomenon of Man*, trans. Bernard Wall (New York: Harperperennial, 1995), 53.

established.⁸⁴ An eco-centric worldview grants humans a just and rightful place in the world of creation. In his scheme of evolution, Teilhard indeed disrobed humans of their centrality, but crowned them with responsibility.⁸⁵ Teilhard had explained that “man is not the centre of the universe as once we thought in our simplicity, but something much more wonderful — the arrow pointing the way to the final unification of the world.”⁸⁶ Thus influenced by Teilhard, Berry explains that “Now, the future shaping of the community depends on the entire Earth in the unity of its organic functioning, on its geological and biological as well as its human members.”⁸⁷ This rediscovery of human in the context of the whole reality points to the need for a universe-centric approach.

1.2.4 COSMOLOGY

Cosmology deals with the origin and structure of the universe. The cosmology means literally the science of the world. In modern scientific usage, cosmology also specifies that discipline which concerns itself with theories pertaining to the origin and structure of the universe.⁸⁸ Cosmology has a great significance in understanding relations in the environment. Cosmology is a vast treasure trove of relationships including past, present and future biotic and abiotic elements of the evolutionary universe.⁸⁹ Cosmology and evolution provides a realistic understanding of the universe. Most profoundly Berry perceived the centrality of cosmology and evolution to any realistic comprehension, of anything. This became for Berry, the primal and principal reference point. Berry sensed that the dynamics operative in the formation and processes of universe, throughout its emergence and development, forming solar systems, and planets must have some consistency and patterns. This includes the dynamics and evolution of Earth, the biosphere, the diversity and

⁸⁴ Cf. Thomas Berry, *The Sacred Universe* (New York: Columbia University Press, 2009), 132.

⁸⁵ Cf. Mendonca, “A Metaphysics of Intersubjectivity,” 760.

⁸⁶ Chardin, *The Phenomenon of Man*, 224.

⁸⁷ Thomas Berry, *The Dream of the Earth* (Berkeley: Counterpoint, 2015), 23. O’Hara, “Thomas Berry’s Understanding,” 92.

⁸⁸ J.V. Burns, “Cosmology” in *New Catholic Encyclopaedia*, Vol. 4 (New York: Gale, 2003), 287.

⁸⁹ Cf. Kasi, “Anthropology versus Cosmology,” 169.

complexity of life and interiority.⁹⁰ This understanding of cosmology of the reality becomes important in ecology. Humans cannot afford to forget the simple truth that humans live, move and have our being in a network of relations with matter, microbes, plants, animals and other human beings and greater truth that the network of relations is constitutive of our forms of life.⁹¹ Thus, the biosphere is important then human being. In a cosmocentric viewpoint, the goal-in-itself of the development on planet is the biosphere, not human, that is all the living with all its great diversity, which maintains a hardly attainable equilibrium with its environments. Humans are merely a part of this great diversity which has been created not by them and therefore does not belong to them and humans must bow to it and serve the purpose of its preservation.⁹² From the understanding of cosmology it can be concluded that the human is a participatory reality. Berry explains that humans are members of the great universe community. Humanity is not outside of the universe rather within the universe. Humanity is nourished, instructed and governed by this community. All things depend for their existence and their activity. If this is true for the entire universe, it is especially true given the human dependence on Earth.⁹³ Thus the ecological emphasis on universe community is favourable even for human community.

1.2.5 ASIAN RELIGIONS

The religion has a great role to play in the area of environmental care. The messages conveyed by all religions, if grounded in developing the concept of eco-spirituality, it can be asserted, can cure the cancer of eco-crisis of the present age effectively and positively and for all these humans have to build a new relationship with the Earth.⁹⁴ Thus the religions are ecologically significant. The distinctiveness about Berry's approach was his effort not only

⁹⁰ Cf. Heather Eaton, "Metamorphosis; A Cosmology of Religions in an Ecological Age," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 156.

⁹¹ Cf. Jose Nandhikkara, "Human beings-in-solidarity-with-nature-and-grace: Cosmotheandric Perspective on Ecology," *Journal of Dharma* 37, no. 2 (April-June 2012): 123.

⁹² Cf. Kasi, "Anthropology versus Cosmology," 171.

⁹³ Cf. Berry, *Selected Writings on the Earth Community*, 67. Berry, *The Sacred Universe*, 118.

⁹⁴ Cf. Jose Kalapura, "Environment Crisis," 444.

to discuss the historical unfolding of the traditions being studied, but also to articulate their spiritual dynamics and contemporary significance.⁹⁵ The religious traditions of the past have had a great contribution for eco-care. Berry elucidated that the pathos of the present is that the human community has lost its capacity to interact creatively with the other components of the planet Earth. But in former times humanity, through their religious traditions had a capacity for being a creative presence within ever-renewing sequence of life upon the Earth.⁹⁶ Thus religions can play an important role in the ecological awakening for the Earth.

1.2.5.1 Confucianism

Confucianism is one of the major Chinese religion and philosophy. The term Confucianism was originally coined by 16th century Jesuits missionaries to China as a neologism for the venerable, all-encompassing tradition rooted in Chinese culture and philosophical-religious thought.⁹⁷ Confucianism teaches that meaningfulness can be achieved only in a holistic context. The Confucian existential quest for meaningfulness is not limited to the human-self, but is contextualized in a unity of the cosmological, social, familial and individual dimensions of human living.⁹⁸ The ecological importance of Confucianism is that self-realization of human can only be fully achieved in relationship to the Earth and universe. Mary Evelyn Tucker expounds that the great triad of Confucianism, namely, Heaven, Earth, and humans signifies this understanding that human can only attain their full humanity in relationship to the universe and the Earth.⁹⁹ This understanding of human as integral with the Earth and universe has a great ecological significance. Berry explains that the main principle of Confucian thought is that the human is integral with the Earth and the entire universe. This is compatible with modern cosmology that

⁹⁵ Cf. Mary Evelyn Tucker, "Thomas Berry and the New Story; An Introduction to the Work of Thomas Berry," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 5.

⁹⁶ Cf. Berry, *The Sacred Universe*, 81.

⁹⁷ J.Y. Tan, "Confucianism and Neo-Confucianism" in *New Catholic Encyclopaedia*, Vol. 4 (New York: Gale, 2003), 95.

⁹⁸ Tan, "Confucianism," 97.

⁹⁹ Cf. Mary Evelyn Tucker, "The Influence of Confucianism on Thomas Berry's Thought," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 78.

is every atom is in contact with and influencing every other atom in the universe.¹⁰⁰ Thus the Confucian understanding of human as integral with the Earth and universe is ecologically significant.

1.2.5.2 Buddhism

Buddhism is philosophical and religious system based on the teachings of Buddha. Buddhism is the complex of religious beliefs and philosophical ideas that has developed out of the teachings of the Buddha, the honorific title of the founder of Buddhism.¹⁰¹ *Madhyamika* is one of the important schools in Buddhism. In the 2nd century A.D. Nagarjuna founded the School of the Mean (*Madhyamika*) to develop the Great Vehicle.¹⁰² The concept of emptiness or *śūnyatā* is an important teaching of this school. Nagarjuna asserted the idea that emptiness or *śūnyatā* is not separate from but identical with the apparent world.¹⁰³ This understanding of *śūnyatā* demands a redefinition of the human-Earth relations. Berry enumerates that ideas are not awakened in response to external stimulation rather ideas are the causes for the appearance of the external world. So Berry encourages a re-imagination of the world, particularly human relationship with the Earth.¹⁰⁴ Thus, this demand for new understanding of human-Earth relationship in the context of the universe becomes ecologically relevant in the context of environmental crisis.

1.2.5.3 Hinduism

Hinduism is a religion as well as a philosophical system originated in India. The Indian tradition is generally seen as eco-friendly. There is little doubt that many master perceptions underlying the Vedic and the Hindu civilizations, if properly used can offer a solid philosophical and theological foundation for

¹⁰⁰ Cf. Thomas Berry, *Evening Thoughts* (San Francisco: Sierra Club Books, 2006), 85.

¹⁰¹ A.S. Rosso and C.B. Jones, "Buddhism" in *New Catholic Encyclopaedia*, Vol. 2 (New York: Gale, 2003), 657.

¹⁰² A.S. Rosso and C.B. Jones, "Buddhism," 661.

¹⁰³ Cf. Christopher Key Chapple, "Thomas Berry on Yoga, Buddhism and Carl Jung," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 55.

¹⁰⁴ Cf. Chapple, "Thomas Berry on Yoga," 56.

modern ecological concerns.¹⁰⁵ The important teachings of Hinduism can be found in *Vedas* and *Upanishads*. The word *upanishad* means literally to sit near to, and was used to signify secret doctrine containing the key to life, handed on from master to disciple and they contain all those profound ideas that were to germinate in the Indian soul and to inspire Hindu religion and philosophy down to the present day.¹⁰⁶ The *Upanisadic* seers continued to ask questions about the ultimate origin and nature of the universe and of the human and through a process of introspective meditation combined with rational speculation they arrived at a clear intuition that the self of the human is an expression of the universal self, or the world spirit, and is even identical with it.¹⁰⁷ Therefore human is in unity with the cosmos. For Berry, the *Upanisads* set forth the key promises of Hindu theology, beginning with the phrase *Tat Tvam Asi* or Thou Art That and commenting on this aphorism Berry writes that the deepest subjective reality is identical with the objective reality and unity with cosmos is the goal of the human quest for meaning in Hindu faith, entails a merging of subjectivity (*Atman*) with the absolute support of all phenomenal reality or Brahman.¹⁰⁸ Thus the Hindu concepts of *Tat Tvam Asi*, the deepest subjective reality is identical objective reality and human unity with the cosmos that is merging of *Atman* with Brahman makes the universe-centric understanding of reality.

1.2.6 INDIGENOUS THOUGHT

Indigenous thought is the concepts and philosophies of the Indigenous populations. World Health Organization¹⁰⁹ describes the Indigenous populations as communities that live within, or are attached to, geographically distinct traditional habitats or ancestral territories, and who identify themselves as being part of a distinct cultural group, descended from groups present in the area before modern states were created and current borders

¹⁰⁵ Cf. G. Gispert-Sauch, "Vasudhaiva Kutumbakam: Sounding into the Indian Contribution to Ecology," *Vidyajyoti Journal of Theological Reflection* 62, no. 12 (December 1998): 920.

¹⁰⁶ B. Griffiths and K.R. Sundararajan, "Hinduism," in *New Catholic Encyclopaedia*, Vol. 6 (New York: Gale, 2003), 842.

¹⁰⁷ Cf. Jose Kalapura, "Environment Crisis," 447.

¹⁰⁸ Cf. Chapple, "Thomas Berry on Yoga," 49.

¹⁰⁹ Hereafter the short form WHO shall be used.

defined.¹¹⁰ The indigenous peoples have an important role as the guardians of global biodiversity. There are about 370 million members of Indigenous Peoples worldwide, serving as effective guardians of 80% of global biodiversity, including various plant and animal species.¹¹¹ Indigenous Peoples can be the best models for ecological sustainability in which humans recovered their capacities to promote the flourishing of life in the Earth community. Berry elucidates that the Indigenous lifestyles and worldviews not only relied on bioregions as a resource, but also nourished that community of life through reciprocal relatedness threaded through their life-ways. In this cycle of sustainability they constituted a mutual whole as well as a viable way into the future. For Berry indigenous peoples in all their diversity were exemplary models for his vision of a future Ecozoic Era¹¹² in which humans recovered their capacities to promote the flourishing of life in the Earth community.¹¹³ Thus ecological importance of Earth community of indigenous people endorses a holistic approach.

1.2.7 BERRY'S MEADOW

Meadow experience was a personal encounter with nature that influenced Berry deeply. Mary Evelyn Tucker, John Grim, and Andrew Angyal, biographers of Berry mention that this experience deepened his profound sensitivity to nature, a disposition that became increasingly normative for him over his lifetime. The integrity of the meadow became apparent to him, with its variety of independent life forms. It was complex, beautiful, and vibrant ecosystem that needed to be preserved.¹¹⁴ Berry recalls one particular day, at age eleven, he walked into the meadow near the home where he grew up in

¹¹⁰ "Indigenous Populations" WHO, accessed on 22 May, 2021. https://www.who.int/topics/health_services_indigenous/en/

¹¹¹ Cf. Hazel T. Biana and Virgilio A, "Intersectional Environmentalism: Toward an Indigenous Peoples-Inspired Planetary Ethics," *Journal of Dharma* 46, no. 2 (April-June 2021): 184.

¹¹² Ecozoic era for Berry, the fourth biological era to succeed the Palaeozoic, the Mesozoic, and the Cenozoic. Since we are terminating the last of these periods, there is need for a fourth term in the same line of expression. This fourth term we designate as the emerging Ecozoic. Cf. Thomas Berry and Brian Swimme, *The Universe Story* (New York: HarperSan Francisco, 1994), 241-242.

¹¹³ Cf. John Grim, "Thomas Berry and Indigenous Thought," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 126.

¹¹⁴ Cf. Mary Evelyn Tucker, John Grim, and Andrew Angyal, *Thomas Berry: A Biography* (New York: Columbia University Press, 2019), 16-17.

North Carolina, and he became poignantly aware of the effulgence of life and the beauty of wild Earth encompassing him. This experience influenced the Berrian themes such as the power of differentiation¹¹⁵ and diversity of creatures, the mysterious depth of each creature declaring itself to the universe and the profound sense of oneself as connected to nonhuman creatures, as a mode of the Earth itself, rooted in an immense planetary community.¹¹⁶ This understanding of planetary community is an important concept for preservation of the planet. The UN Resolution #50 on “Transforming our world: the 2030 Agenda for Sustainable Development,” notes that “We can be the first generation to succeed in ending poverty; just as we may be the last to have a chance of saving the planet. The world will be a better place in 2030 if we succeed in our objectives.”¹¹⁷ This understanding of planetary community is important in ecological ethics. Human beings as moral beings must take innovative steps for a vision and mission of a planetary ethics, an ethics that cater for the well being of all human beings, other living beings, and future generations. A planetary ethics for sustainable development promoting prosperity and peace of the People and the Planet is the needed.¹¹⁸ The planetary ethics becomes paramount to understanding of universe-centric approach.

1.3 THE NEW STORY OF THE UNIVERSE

Stories are part parcel of every human society. A story can be understood as events and people that the writer or speaker has invented in order to entertain people. It also means an account of what happened to somebody or of how something happened.¹¹⁹ The stories are also old as human language and can influence human attitude. The storytelling is an art that entertains people of all ages. It is as old as language. All stories are subject to change by the teller and by the writer, who may publish a new collection or may edit an old one. Stories are constantly changing, and the anecdote of today may become

¹¹⁵ Differentiation highlights the distinctiveness of every species and indeed of every individual creature. Cf. Scheid, *The Cosmic Common Good*, 74.

¹¹⁶ Cf. Scheid, *The Cosmic Common Good*, 77.

¹¹⁷ UN, *Transforming our World: 2030 Agenda for Sustainable Development* (New York: UN, 2015), <https://sdgs.un.org/2030agenda>

¹¹⁸ Cf. Nandhikkara, “Planetary Ethics,” 123-124.

¹¹⁹ *Oxford Advanced Learner’s Dictionary*, 2nd ed., s.v. “story.”

folklore tomorrow.¹²⁰ The ecological crisis has become so acute with climate change having a drastic impact that human displacement has become a staggering reality. The World Metrological Organization¹²¹ reported that in 2020, the world has witnessed 33.4 million new internal displacements across 145 countries and territories in 2019, triggered by complex socioeconomic vulnerabilities and, often concurrently occurring, environmental degradation and climate-related disasters.¹²² Humanity cannot shun away from taking responsibility for this crisis. One of the principal causes of present ecological crisis is the unjust treatment of the planet Earth by humans.¹²³ The ecological trouble is due to the lack of story that can influence human moral attitudes towards the nature. Berry explains that Humanity of today is between stories. The old story, the account of how the world came to be and how humans fit into it, is no longer effective. A radical reassessment of the human situation is needed, especially concerning those basic values that give to life some satisfactory meaning.¹²⁴ Thus it is important to have a story that can show human's place in the nature. The play by its concern with various categories of natural environment in relation with humans can show the place of humans within nature. It is with the help of such narratives that hold the faith of people, literature has immense capacity to contribute to the cause of environment.¹²⁵ Thus a new story of the universe can inculcate human moral attitudes towards the universe in general and the Earth in particular.

The universe is a general term that is used to describe the reality known to humans. The universe as consist of all the matter, light, and other forms of radiation and energy that have been discovered by human, universe also consists of everything that man believes to be present somewhere in space and time as a result of his theories.¹²⁶ The term universe is understood in distinct to cosmos. In contrast to the cosmos, our present universe represents

¹²⁰ Cf. Sara H. Wheeler, "Storytelling," in *Word Book Encyclopaedia*, Vol. 17 (Chicago: Fiedk Enterprises Educational Corporation, 1970), 714.

¹²¹ Hereafter short form WMO shall be used.

¹²² Cf. WMO, *State of Global Climate 2020 Provisional Report* (Geneva: WMO, 2020), https://library.wmo.int/doc_num.php?explnum_id=10444

¹²³ Cf. Mary Julit Mandumpala, "Groaning Nature and Humanity," *Word and Worship* 54, no. 1 (January-March 2021): 52.

¹²⁴ Cf. Berry, *Selected Writings on the Earth Community*, 12-13.

¹²⁵ Cf. Dwivedi, "Exploring the Ethic," 142.

¹²⁶ A. G. W. Cameron, "Universe," in *Word Book Encyclopaedia*, Vol. 19 (Chicago: Fiedk Enterprises Educational Corporation, 1970), 153.

our own expanding bubble of space and time, everything that is in principle visible to our telescopes. It refers to the entire span of space and time accessible to our instruments, now and in the future.¹²⁷ An integral approach to the universe is necessary for a genuine ecological action. An over reaching holistic worldview that helps develop an new holistic consciousness to replace our restricted individualistic anthropocentric mindset and fosters conversion to an integral way of life with appropriate structures compatible with the rhythms of creation is crucial for a sustainable future.¹²⁸ It is also ecologically imperative to have an understanding of human as integral with the universe. Berry expounds that at present the story of the universe is in fragments rather than in its integrity. Both a competence and willingness to engage in the immense effort required to tell the story is now needed. It is the comprehensive text of human self understanding. This universe story incorporates the human into the irreversible historical sequences of universe transformations.¹²⁹ This new understanding must take into consideration the modern scientific understandings and highlight the importance of interconnectedness in the universe. With our contemporary understanding of the scientific origin of the universe revealing that everyone and everything is interconnected and interdependent, it is imperative to go beyond a restricted anthropomorphic understanding of compassion and include all species, even all stars and galaxies, nay the whole universe.¹³⁰ Thus the universe story by Berry along with Brian Swimme¹³¹ is an ecological paradigm that includes all species, even all stars and galaxies. It includes, Primordial flaring forth, Galaxies, Supernovas, Sun, Living Earth, Eukaryotes, Plants and animals, Human emergence, Neolithic village, Classical Civilizations, Rise of Nations, Modern Revelations, and Ecozoic era.

¹²⁷ Cf. Joseph Mathew, *In Search of Cosmic Origins: The Great Sage of the Universe* (Bangalore: Asian Trading Corporation, 2014), 71.

¹²⁸ Cf. Olalekar, "Cocreate Cosmic Compassion," 540.

¹²⁹ Cf. Berry and Swimme, *The Universe Story*, 237-238.

¹³⁰ Cf. Olalekar, "Cocreate Cosmic Compassion," 550.

¹³¹ Brian Swimme is a scholar in science who understood Berry's idea of the need for a story of evolution. Their collaboration resulted in the first telling of the epic of evolution in the Universe Story. Cf. Tucker, John Grim, and Andrew Angyal, *Thomas Berry; A Biography*, 122-123.

1.3.1 PRIMORDIAL FLARING FORTH

The universe has had a beginning. According to US based National Aeronautics and Space Administration,¹³² the universe, on the other hand, appears to be about 13.8 billion years old. Scientists arrived at that number by measuring the ages of the oldest stars and the rate at which the universe expands. The universe contains all the energy and matter. Much of the observable matter in the universe takes the form of individual atoms of hydrogen, which is the simplest atomic element, made of only a proton and an electron.¹³³ One of the prominent theories of the beginning of the universe is the Big Bang models. The Big Bang models described the evolution of our Universe from a state of extreme pressure and energy density, when it was very much smaller than it is now. At the very beginning the Universe was in a state of extreme heat and pressure, occupying an exceedingly small volume.¹³⁴ The primordial flaring forth is said to be beginning of the procedure of the evolving universe. Berry explained that originating power brought forth a universe. Though the originating power gave birth to the universe fifteen billion years ago, this realm of power is not simply located there at that point of time, but is rather a condition of every moment of the universe, past, present, and to come. Particles, light and time emerged in the beginning. Space too unfurled out of potentiality and has continued to unfurl each instant of cosmic existence. In the beginning space foamed forth to create the vast billowing event of the expanding universe.¹³⁵ This understanding of the beginning of the universe calls for a rediscovery of human cosmic vision of inner-connectedness with the universe as an organism. The Einstein's theory of relativity and quantum physics conceives the world as a field of energies creating and recreating a web of relationships more like an organism. This new scientific vision of the universe has led to the rediscovery of a neglected

¹³² Hereafter short form NASA shall be used.

¹³³ Cf. "What is Universe," NASA, accessed on 24 May 2021, https://exoplanets.nasa.gov/what-is-an-exoplanet/what-is-the-universe/#otp_how_old_is_the_universe?

¹³⁴ Cf. Matts Roos, *Introduction to Cosmology* (West Sussex: John Wiley and Sons, 2003), 113.

¹³⁵ Cf. Berry and Swimme, *The Universe Story*, 17.

and dimension of spirituality called the Cosmic Vision.¹³⁶ This inner-connectedness with the universe calls for a human moral responsibility and ecological obligation. Human relationship with nature is not merely ontological, but also moral. Humans have an ought relationship to the nature, that is to say, an ethical imperative and a moral responsibility towards it. By our very being as microcosm we cannot escape our God-given ecological obligation towards the material world.¹³⁷ Thus the understanding of the beginning of the universe as inter-connected organism demands human moral responsibility and ecological obligation.

1.3.2 GALAXIES

The galaxies are the collection of astronomical objects held together by gravity. According to NASA galaxy is a huge collection of gas, dust, and billions of stars and their solar systems, all held together by gravity.¹³⁸ The universe is said to be the collection of galaxies. In contemporary cosmology, the universe is identified with the population of galaxies.¹³⁹ Galaxies form part of the universe. The galaxy is a very large system of stars, nebulae and other celestial bodies, comparable with but assumed to be independent of our own; an island universe.¹⁴⁰ Galaxies are the second stage in the development of the universe. Berry explains that the power that evoked the universe evoked a new power in the form of the galactic cloud. This dynamic of a power evoking beings with new modes of power happened both in the birth of the primordial atoms and in the birth of galaxies and is a fundamental theme throughout fifteen billion years of cosmic development.¹⁴¹ It is observed that there is a unity and integration in the continued differentiation in the evolutionary process. With regard to the cosmic dimension of reality, an inclusive evolutionary understanding must displace an exclusive creation-centredness.

¹³⁶ Cf. Desmond De Sousa, "Towards a Christian Perspective on Environment and Ecology," *Vidyajyoti Journal of Theological Reflection* 58, no. 9 (September 1994): 587.

¹³⁷ Cf. R. J. Raja, "As it was in the Beginning...; Eco-Spirituality in the Book of Revelation," *Vidyajyoti Journal of Theological Reflection* 55, no. 12 (December 1991): 696.

¹³⁸ "What is Galaxy," NASA, accessed on 24 May 2021, <https://spaceplace.nasa.gov/galaxy/en/>

¹³⁹ Milton K. Muniz, "Universe," in *Encyclopedia Americana*, vol. 27 (Danbury: Grolier Incorporated, 1991), 780.

¹⁴⁰ Cf. *Webster Comprehensive Dictionary*, 1st ed., s.v. "Galaxy."

¹⁴¹ Cf. Berry and Swimme, *The Universe Story*, 34.

What is essential here is to establish the fundamental unity in the continuous differentiation and integration of the evolutionary processes.¹⁴² It is ecologically relevant to emphasise the wholeness and unity in the universe. The ecological consciousness reaffirms the wholeness of and unity of all, and reassures us that we are legitimate dwellers of the cosmos, not some kind of cosmic freaks.¹⁴³ Thus the explication on the second stage in the new story of the universe, the formation of the galaxies affirms the need for human ecological consciousness to recognize wholeness and unity of the universe.

1.3.3 SUPERNOVAS

The third stage in the new story of the universe is supernovas. A supernova is the explosion of a star. The supernova as a star that explodes and loses a large amount of mass, temporarily increasing in brightness by as much as 100 million times. Supernovae occur in a galaxy once every few hundred years.¹⁴⁴ Supernova is the explosion of a star, when there is a change in its core. According to NASA it is the largest explosion that takes place in space. A supernova happens where there is a change in the core, or center, of a star.¹⁴⁵ The Supernovas give rise to new stars and planets. Berry elucidates that eventually, in a million years or in several billion years, each star's resources against the collapse are all used up. If the mass of a star at this point is large enough, its gravitational pressures will destroy the star. The remaining materials will rush toward each other. And yet in the great violent collapse of the star give rise to the supernova. Not everything is pulled into the nothingness of the black hole. The neutrinos, those wispy and seemingly unimportant elementary particles, escape the collapse. As the star implodes, the neutrinos rush out in all directions to blow off the outer layers of the star, which contain the carbon and oxygen and nitrogen and other elements. Freed from the gravitational death of the star, these elements journey into the night

¹⁴² Cf. Rudolf C. Heredia, "Towards an Ecological Consciousness: Religious, Ethical and Spiritual Perspectives," *Vidyajyoti Journal of Theological Reflection* 55, no. 9 (September 1991): 501.

¹⁴³ Cf. L. Stanislaus, "Ecology: An Awareness for Mission," *Vidyajyoti Journal of Theological Reflection* 63, no. 8 (August 1990): 576.

¹⁴⁴ Bart J. Bok, "Supernova," in *Encyclopedia Americana*, vol. 26 (Danbury: Grolier Incorporated, 1991), 34.

¹⁴⁵ "What is Supernova," NASA, accessed on 25 May 2021. <https://www.nasa.gov/audience/forstudents/5-8/features/nasa-knows/what-is-a-supernova.html>

sky, eventually to be drawn together with other elements. Under their own attraction, they form an entirely new system. A new star forms, new planets form.¹⁴⁶ This unfolding of the universe reveals continuing connectedness in reality. As nature around unfolds to reveal level upon level of structured complexity, humans are coming to see that humanity inhabit a densely connected ecological universe.¹⁴⁷ This understanding of intrinsic relationship in reality posits a human duty that is ecological and cosmic one. Our starting point is the intrinsically valued and non-instrumental relationships that this understanding posits between all dimensions of reality, so that no reality, nothing which exists, is ever purely a means, and all reality, everything real, has a value itself as end. This will imply human rights for every member of the human community, and correspondingly their cosmic duties which will encompass the entire ecological and cosmic one.¹⁴⁸ Thus the explanation of third stages in the new story of the universe the supernovas, reminds of intrinsic relationship in reality and demands a human duty that is ecological and cosmic one.

1.3.4 SUN

The fourth stage in the new story of the universe is the formation of Sun. Sun is the center of the solar system, for the Earth and all the other planets move in great circles around it, yet sun is only one among countless billions of stars in the heavens.¹⁴⁹ The Sun as the central controlling body of the solar system. It is by far the largest member of the system, being 740 times more massive than its nine major planets together and 10 times wider than the largest planet Jupiter.¹⁵⁰ The sun is considered as a dwarf star. According to NASA the Sun is a yellow dwarf star, a hot ball of glowing gases at the heart of our solar system. The Sun and the rest of the solar system formed from a giant, rotating

¹⁴⁶ Cf. Berry and Swimme, *The Universe Story*, 48.

¹⁴⁷ Cf. Kasi, "Anthropology versus Cosmology," 181.

¹⁴⁸ Cf. Rudolf C. Heredia, "Towards and Ecological Consciousness: Religious, Ethical and Spiritual Perspective (II)," *Vidyajyoti Journal of Theological Reflection* 55, no. 10 (October 1991): 574.

¹⁴⁹ Harlan T. Stetson and R. Will Burnett, "sun," in *Word Book Encyclopaedia*, Vol. 17 (Chicago: Field Enterprises Educational Corporation, 1970), 780.

¹⁵⁰ Cf. R. Grant Athay, "Sun," in *Encyclopedia Americana*, vol. 26 (Danbury: Grolier Incorporated, 1991), 11.

cloud of gas and dust called a solar nebula about 4.5 billion years ago.¹⁵¹ The sun belongs to the later generation stars. Berry explains that the stars of second, third, and higher generations arise out of a fundamentally different galactic matter. In the Milky Way galaxy four and a half billion years ago, the disc of stars was relatively rich in all the elements. As these invisible waves spun, they drew forth millions of star bursts, each new star with its own particular destiny. In the area of space-time where the sun emerged, the destiny wave passed through every one hundred million years.¹⁵² The explanation on the fourth stage in the new story of the universe, the formation of the Sun as part of the evolving of the universe highlights the importance of cosmic intelligence and cosmic conscience. The cosmic intelligence is the capacity to see the cosmos as it is in the light of reason and the manner of being compatible with this vision. Cosmic conscience is to be aware of the universe and the place of human beings in it.¹⁵³ The understanding of the emergence of the sun as part of the evolving of the universe demands cosmic intelligence, which in turn leads to cosmic conscience and ecological care.

1.3.5 LIVING EARTH

The fifth stage in the new story of the universe is the living Earth. The Earth is said to be 4.5 billion years old. The Earth coalesced about 4.5 billion years ago from a cold dust cloud. Warmed by the heat of the sun and by internal heat generated from its own radioactive elements, then may have become partially molten, enabling the materials of the core and the mantle to differentiate and the radioactive elements to collect near the surface.¹⁵⁴ The Earth is the home to all the known living beings. According to NASA, Earth as a planet is the third planet from the Sun, and the only place we know of so far that's inhabited by living things. When the solar system settled into its current layout about 4.5 billion years ago, Earth formed when gravity pulled swirling gas and dust in to

¹⁵¹ "Our Sun," NASA, accessed on 25 May 2021. <https://solarsystem.nasa.gov/solar-system/sun/in-depth/>

¹⁵² Cf. Berry and Swimme, *The Universe Story*, 63-64.

¹⁵³ Cf. Kasi, "Anthropology versus Cosmology," 173.

¹⁵⁴ Cf. J.T. Wilson, "Earth," in *Encyclopedia Americana*, vol. 9 (Danbury: Grolier Incorporated, 1991), 541.

become the third planet from the Sun.¹⁵⁵ The solar system is evolved as part of a process. The beginning of infant Sun was completely surrounded by hydrogen, carbon, silicon, and other elements disbursed by the supernova explosions. As they drifted through space these elements would brush against each other and begin to cohere into tiny balls of dust. Over millions of years these planetesimals¹⁵⁶ continued accreting and growing until they were the size of boulders and then as large as mountains. Not all collisions resulted in larger bodies. Many were so violent that they tore both bodies apart. But over millions of years these planetesimals continued to absorb all the loose matter circling about. Solar system with its eight planets, its band of asteroids, and its one infant Sun, slowly came into being.¹⁵⁷ Thus the planets of the solar system were formed.

It took several other processes for the formation of Earth, Berry elucidated that for several hundred million years Earth suffered the shock of collisions with meteors and planetoids. Just as anvil when it is struck repeatedly by heavy blows from a sledge hammer will grow hot to the touch, so too Earth melted under the heat and boiled day and night for half a billion years. When the long period of collision ceased, and Earth cooled just enough for ultra basic rocks to solidity on the surface, plumes of glowing mantle rose up and scattered this solid ground into great chunks that one more melted down and sank into a boiling Earth. Chemical compositions forged in the interior of Earth were released at the surface so that each day the chemistry of Earth's air was new. Gigantic electrical storms, thunder that crisscrossed every point of Earth's surface and immense lightning bolts all charged Earth for a hundred million years, propelling the planet through chemical gateways to a radically new branch of cosmogenesis¹⁵⁸.¹⁵⁹ Thus the fifth stage of the new

¹⁵⁵ "Earth," NASA, accessed on 25 May 2021. <https://solarsystem.nasa.gov/planets/earth/in-depth/>

¹⁵⁶ In the beginning the infant Sun was completely surrounded by hydrogen, silicon, and other elements disbursed by the supernova explosions. As they drifted through space these elements would brush against each other and begin to cohere into tiny balls of dust. Cf. Brian Thomas Swimme and Mary Evelyn Tucker, *Journey of the Universe* (New Haven: Yale University Press, 2011), 35-36.

¹⁵⁷ Cf. Swimme and Tucker, *Journey of the Universe*, 36.

¹⁵⁸ Cosmogenesis denotes that the universe changes, develops, and emerges only over unfathomable stretches of time, even as it appears to our limited human gaze and powers of comprehension as stable. Cf. Scheid, *The Cosmic Common Good*, 68.

¹⁵⁹ Cf. Berry and Swimme, *The Universe Story*, 84-85.

story of the universe the emergence of Earth in the context of development of universe clearly emphasises the connectedness in reality. Ecology is the study of connectedness, study of relationships. It began its intellectual history as the holistic study of the myriad niches and crannies in which life has taken hold on this planet, but its destiny was to be much greater. It has eventually come to see the entire earth as a remarkable cosmic niche intricately connected with the grand hierarchy of systems we call the universe.¹⁶⁰ Thus the Earth is part of this great reality universe that it must be respected and preserved.

1.3.6 EUKARYOTES

The sixth stage of new story of the universe is Eukaryotes. Eukaryote is cell or organism that has a nucleus. The Eukaryote is any cell or organism that possesses a clearly defined nucleus. Eukaryotes are thought to have evolved between about 1.7 billion and 1.9 billion years ago. The earliest known microfossils resembling eukaryotic organisms date to approximately 1.8 billion years ago.¹⁶¹ It was the first form of life on the face of the Earth. On Earth, the first simple cells appeared some four billion years ago. After another two billion years the more complex cells those with nuclei, began to appear.¹⁶² Eukaryotes were the first living cells. The eukaryotes cells, the first living cells were fragile with nuclei and internal structures bounded by membranes developed about 1.5 billion years ago.¹⁶³ Thus the sixth stage of the new story of the universe explained the formation of life on Earth in the context of development of the universe highlights the importance of cosmocentric view point. In a cosmocentric viewpoint, the goal-in-itself of the development on our planet is the biosphere, not human, i.e., all the living with all its great diversity, which maintains a hardly attainable equilibrium with its environments. Human is merely a part of this great diversity which has been created not by him or her and therefore does not belong to him or her and human must bow to it and serve the purpose of its preservation.¹⁶⁴ Thus the

¹⁶⁰ Cf. Kasi, "Anthropology versus Cosmology," 181.

¹⁶¹ Cf. *Encyclopaedia Britannica*, 15th ed., s.v. "Eukaryote," accessed on 25 May, 2021. <https://www.britannica.com/science/eukaryote>

¹⁶² Cf. Swimme and Tucker, *Journey of the Universe*, 47-48.

¹⁶³ Cf. Mathew, *In Search of Cosmic Origins*, 200.

¹⁶⁴ Cf. Kasi, "Anthropology versus Cosmology," 171.

Eukaryote is one of most significant moment in the development process of the universe. Berry explains that the eukaryotic cell, the first radically new creation within the oxygenated Gaian system, is the single greatest transformation in the entire history of the Earth, only overshadowed in significance by the emergence of life itself.¹⁶⁵ Thus it is ecologically important to recognize human being as only a part of this great biosphere of the Earth not the final goal.

1.3.7 PLANTS AND ANIMALS

The seventh stage in the new story of the universe is the plants and animals. The plants evolved from the algae. The botanists now believe that plants evolved from the algae; the development of the plant kingdom may have resulted from evolutionary changes that occurred when photosynthetic multi-cellular organisms invaded the continents.¹⁶⁶ The animal forms first appeared in the oceans. Animals first appeared about 635 million to 541 million years ago, soft-bodied forms that left traces of their bodies in shallow-water sediments.¹⁶⁷ The life was brought forth from the center of rich energy. Berry explains that the Earth took its quantum of nuclear energy given by the supernova Tiamat¹⁶⁸ and created a cybernetic system that kept itself in a rich meta-stability. In the center of such rich energy, life brought forth the wonders of the eukaryotic cell, meiotic sexuality, eco-systemic communities, and multi-cellular beings. The animals grew and diversified to become the early jellyfish, sea pens, and flat worms of six hundred million years ago. All such animals entered the visible scale and their expansions in size quickly met the upper limits inherent to cosmological dynamics. The emerging animals strove to increase in size until they entered the range of their optimal existence.¹⁶⁹ The plants animals were the inhabitants of the Earth, even before humans were in existence, but humans have become the cause for the

¹⁶⁵ Cf. Berry and Swimme, *The Universe Story*, 100.

¹⁶⁶ Cf. *Encyclopaedia Britannica*, 15th ed., s.v. "Evolution and Pleobotany," accessed on 26 May, 2021. <https://www.britannica.com/plant/plant/Evolution-and-paleobotany>

¹⁶⁷ Cf. *Encyclopaedia Britannica*, 15th ed., s.v. "Evolution and Paleontology," accessed on 26 May, 2021. <https://www.britannica.com/animal/animal/Evolution-and-paleontology#ref31756>

¹⁶⁸ Supernova explosion of the star Tiamat gave birth to our stellar system. Cf. Berry and Swimme, *The Universe Story*, 49.

¹⁶⁹ Cf. Berry and Swimme, *The Universe Story*, 113-114.

extinction of many plant and animal species. Millions of years ago, our planet had a very hostile environment, where survival of life forms was unthinkable. Slowly and steadily through numerous evolutionary and corrective measures, there formed astonishing biodiversity on this planet. There was a rhythm, recycling of materials, and balance in nature. Periodically there were also calamities which have played a role in restoring the balance of nature whenever there were disruptions in normality. The so-called masters of the Earth, the human beings, disrupted this delicate balance of Mother Nature.¹⁷⁰ The human apathy has caused great damage to bio-diversity. The reckless human activities have led to large-scale destruction of forests as well as polluted the land, air and water. This in its turn has impaired the balance of the ecosystem and led to loss of bio-diversity in many regions.¹⁷¹ Humans must recognize the importance of plants and animals. The processes of evolution are most complicated and the complexity of the composition of plant and animal life is amazing.¹⁷² Thus the plants and animals must be protected from extinction. Berry expounds that the thousand fold voices of the natural world became inaudible to many humans. The forests are considered as simply so many board feet of timber to be harvested as objects used for human benefit. Animals are no longer the companions of humans within the single community of existence. They are denied not only their inherent dignity but even their right to habitat.¹⁷³ Thus the seventh stage highlights the plants and animals as the important part of the development of the universe with a complicated and complexity of the composition. Hence plants and animals must be respected and preserved from extinction caused by human interference.

1.3.8 HUMAN EMERGENCE

The eighth stage in the new story of universe is human emergence. There are different opinions with regards to the human emergence. The human beings

¹⁷⁰ Cf. Suma Sarojini, "Sustainable Approach to Life in Waters: Science and Ethic of Oceans," *Journal of Dharma* 46, no. 2 (April-June 2021): 237.

¹⁷¹ Cf. Paulose Mangai, "Christian Ecological Perspective: From Original Blessing to LS," *Vidyajyoti Journal of Theological Reflection* 80, no. 3 (March 2016): 182.

¹⁷² Cf. P. M. Meagher, "In the Beginning," *Vidyajyoti Journal of Theological Reflection* 63, no. 1 (January 1999): 70.

¹⁷³ Cf. Berry, *Evening Thought*, 18.

are the result of an evolutionary procedure. The present evidence suggests that humans evolved from small apelike primates that lived between 15 million and 8 million years ago, human ancestors had become fully adapted for moving about on the open savanna on their hind legs in the distinctive human manner. Humans however, did not start out, as humans. Their roots, like those of the other living primates, lie in ancient times and in less specialized biological creatures; their development was influenced by the same evolutionary processes.¹⁷⁴ Though human beings are frail comparing to many of the other creatures of the animal kingdom, what is substantial about human is the brain development. Berry elucidates that in its beginning, and in its early development, the human was so frail, so unimpressive, a creature hardly worth the attention of the other animals in the forest. But these early humans were on a path that would in time explode with unexpectedly significant new power, a power of conscious whereby Earth, and the universe as a whole, turned back and reflected. The most elemental physical transformations leading to human identity can be indicated as increase in brain size, upright posture, bipedal walking, frontal focus of eyes and countenance, development of the arm and hand in relation to the eye, increased capacity of the hands for grasping, and incidental use of nature-shaped stones as implements.¹⁷⁵ The eighth stage, the human emergence in the context of the development of the universe highlights that humans are integral with the universe. The current environmental crisis is not simply a calamity or disaster or a crisis of certain particular phenomenon in the world. The root of this crisis remains on the inability of the human being to place him/her self within a broadly conceived ecological context.¹⁷⁶ Thus it is important to realize that humans are part of this cosmic evolution. The human beings are part of this cosmic evolution, not in opposition to it.¹⁷⁷ Thus, humans are integral with the universe.

¹⁷⁴ Cf. William A. Haviland, *Cultural Anthropology* (New York: Harcourt Brace College Publishers, 1999), 59-60.

¹⁷⁵ Cf. Berry and Swimme, *The Universe Story*, 143-145.

¹⁷⁶ Cf. Saji Mathew Kanayankal, "Being in Harmony: Biblical Vision of Interconnected Existence," *Journal of Dharma* 36, no. 3 (July-September 2011): 275.

¹⁷⁷ Cf. Heredia, "Towards an Ecological Consciousness," 502.

1.3.9 NEOLITHIC VILLAGE

The ninth stage of the new story of the universe is the Neolithic village. Neolithic is a stage where humans started using polished stone tools and the time of hunting and gathering economy. The Neolithic, the New Stone Age as used at first to denote the stage of culture at which humans adopted polished stones tools, the term has come to refer to the supplanting of hunting and gathering economy by domestication of plants and animals.¹⁷⁸ It was the time of village settlements. The Neolithic village as People became more firmly rooted to their village settlements than ever before. They had to tend the crops between planting and harvesting and so could not wander off for months at a time. They also had to work out ways of cooperating with each other to clear the land, to ensure the regular tending of crops, the storing of harvests, the sharing of stocks, and the rearing of children. Whole new patterns of social life developed and, with them, new ways of viewing the world, expressed in various myths, ceremonies and rituals.¹⁷⁹ The villages began to be developed and number of persons in the village increased. Berry explains, the Neolithic phase of the human species emerged in the long sequence of its transformations, only now at a vastly increased rate of change. After 8000 B.C.E. small settlements were growing beyond temporary encampments or cave dwellings into sustained forms of village life, consisting at first of a few hundred and later of several thousand people.¹⁸⁰ It was stage of change in the life-style of humans.

Neolithic stage was a dramatic shift in the life style of humans. Roughly about 10,000 years ago, our species made a radical shift in its way of life. Human became farmers than hunter-gatherers, setting in motion a momentous chain of events that could not have been foreseen in time. Although this decision to control the food supply is what propelled into the modern world, such a dramatic shift in lifestyle had a downside.¹⁸¹ Thus the

¹⁷⁸ Cf. Frank H. H. Roberts, "Neolithic," in *Encyclopedia Americana*, vol. 20 (Danbury: Grolier Incorporated, 1991), 95.

¹⁷⁹ Cf. Chris Harman, *A People's History of the World* (London: Bookmarks, 2002), 11.

¹⁸⁰ Cf. Berry and Swimme, *The Universe Story*, 163.

¹⁸¹ Cf. Josph Patmury, "Violence to Nature," *Word and Worship* 1, no. 1 (October-December 2010): 200.

ninth stage of the new story of the universe Neolithic is characterised by the beginning of village life based on agriculture and decision to control food supply was the beginning of modernity. Thus it is paramount for humanity to shift from the attitudes of selfish modernism to listen to the ecological voices for joint effort for the Earth. Our effort to listen to the ecological voices of the Earth should lead us to the broad issues which confront all who work for peace and justice on Earth today.¹⁸² It is high time that humanity must together stand for the environment by listening to the ecological voices and stand for the well-being of the Earth community.

1.3.10 CLASSICAL CIVILIZATIONS

The tenth stage in the new story of the universe according to Berry is classical civilization. Civilization is associated with human societies. The civilization means a state of human society that is very developed and organized.¹⁸³ Generally civilization is associated with developed style of human life. The Civilization in the strict sense of people living in cities, goes back just over 5,000 years. Civilizations as the learned behaviour of human who belong to unusually changeable and complex societies.¹⁸⁴ Civilizations start off with human inventions that change life style of society. Even more amazing is the fact that they were built by peoples who a few generations previously had known nothing but a purely rural life based on fairly rudimentary agriculture. Now they were in possession of elaborate construction skills, capable of quarrying, transporting, erecting and carving huge chunks of rock, and then decorating them with elaborate artistic works, of developing scripts with which to describe how they behaved and felt.¹⁸⁵ The technology played an important role in the development of the civilization. Berry enumerates that the primary technological inventions were pushing on to ever-greater power and productivity at this stage. The natural world as a resource for human use was being discovered. This period at the close of the fourth and throughout the

¹⁸² Cf. Jyoti Sahi, "Eve: Ecological Voices of the Earth," *Vidyajyoti Journal of Theological Reflection* 52, no. 7 (July 1988): 345.

¹⁸³ *Oxford Advanced Learner's Dictionary*, 2nd ed., s.v. "Civilization."

¹⁸⁴ Cf. William H. McNeil, "Civilization," in *Encyclopedia Americana*. vol. 7 (Danbury: Grolier Incorporated, 1991), 1.

¹⁸⁵ Cf. Harman, *A People's History of the World*, 17.

first half of the third millennium B.C.E. was a decisive period in the advance of the human in its basic technologies.¹⁸⁶ Thus the tenth stage of the new story of the universe classical civilizations was a period of advancement of the human in its basic technologies. The natural world as seen as a resource was the discovery of this period and thus lead to the exploitation of the nature. The exploitative attitude towards nature arising from the ideology of domination and subjugation has produced a kind of techno-centrism along with the system of industrial capitalism.¹⁸⁷ The environmental problems demand a refocus of humanity from exploitation based technology to the eco-friendly attitudes. The solutions to our present problem do not lie with science and technology, but with human attitude to one another and to our mother Earth. Nature provides for our every need and there is enough in the world for every one's need but not enough for even one person's greed.¹⁸⁸ Thus human must respect the nature. Berry explains that the modern world, with its scientific technologies, its industrial processes, and its commercial establishments, functions with amazing arrogance in its attitude toward the natural world. The human is seen as supreme reality. Every other being is available for exploitation.¹⁸⁹ Thus it is ecologically paramount to change the human attitude of exploitation of other beings and human misunderstanding of oneself as supreme and learn to recognize the importance of the nature for humans own survival.

1.3.11 RISE OF NATIONS

The eleventh stage in the new story of the universe is the rise of the nations. Nation is community of large number of peoples. The nation is a large number of people who see themselves as a community or group and who generally place loyalty to the group above any conflicting loyalties.¹⁹⁰ The Nation is also a country with a particular government. The nation means a country considered as a group of people with the same language, culture and history,

¹⁸⁶ Cf. Berry and Swimme, *The Universe Story*, 183-184.

¹⁸⁷ Cf. Tomas Puthenpurackal, "Ecology and Justice," in *Perspective of Justice* (Bangalore: Vinai, 1998), 89.

¹⁸⁸ Cf. Patmury, "Violence to Nature," 203.

¹⁸⁹ Cf. Berry, *Evening Thought*, 21.

¹⁹⁰ Cf. John A. Armstrong, "Nation," in *Encyclopedia Americana*. vol. 19 (Danbury: Grolier Incorporated, 1991), 751.

who live in a particular area under one government.¹⁹¹ The progress, freedom, limitless rights, and private property of human persons are the main characteristics of democratic nations. Berry enumerates that to achieve human identity and freedom within the democratic setting of the nation has been considered the basic mission of the nineteenth century for the various peoples. Nationalism, together with progress, democratic freedoms, and limitless rights to private property and economic gain, might be considered the pervasive mystique of the late eighteenth, the nineteenth, and the twentieth centuries. But in reality, four of these ideologies would be recognized as the anthropocentric basis for a temporary human improvement that would eventuate in the ruin that humans would bring upon the natural world.¹⁹² Thus the concept of nation in eighteenth, nineteenth and twentieth centuries was centered on anthropocentric rights, hence brought ruin to the nature. With the emergence of state, environment protection is seen as a subject matter of law. The law's failure can be attributed to the simple fact that it has not been able to create an inner sense of responsibility in human beings that requires them to protect the environment; that demands them to consider themselves as just a part of environment.¹⁹³ The concept of nation has alienated humanity from the nature. Berry explains that the difficulty of the present is not only that the individual nations see themselves and their own well-being as the ultimate referent as regards reality and value, but also that the human tends to establish a discontinuity between itself and the natural world. In this manner nonhuman world is reduced to being objects to be used and by humans for their own purposes, rather than functioning as participants in a single integral community of existence.¹⁹⁴ Thus the human became the center of concern for the nation-state and brought ruin to the nature. It is only an inner sense of human responsibility based on realization that humanity as part of universe can bring a paradigm shift in environmental protection.

¹⁹¹ *Oxford Advanced Learner's Dictionary*, 2nd ed., s.v. "Nation."

¹⁹² Cf. Berry and Swimme, *The Universe Story*, 212.

¹⁹³ Cf. Manjeri Subin Sunder Raj, "Fostering Humanity in Protecting the Environment: Role of Religion and Growth of Environmentalism," *Journal of Dharma* 39, no. 2 (April-June 2014): 183-184.

¹⁹⁴ Cf. Berry, *Evening Thought*, 82.

1.3.12 THE MODERN REVELATIONS

The twelfth stage in the new story of the universe is the modern revelations. Revelation is the new information. The Revelation means a fact that people are made aware of, especially one that has been secret and is surprising.¹⁹⁵ Modern revelations are the scientific data especially about the emergence of the universe. Berry elucidates the data of the universe that humans possess based on the entire scientific venture from Copernicus to the present is best understood in terms of a narrative telling of the sequence of transformation that the universe has gone through in its self-shaping emergence throughout space and time. This self-shaping processes contain in itself its own directions and its own fulfilment as it has moved over vast periods of time in the larger arc of its process toward a greater differentiation and more intimate bonding, toward a greater variety and intensity in its psychic modes of expression.¹⁹⁶ Thus there is intimate bonding in the universe in spite of greater differentiation. Einstein writes in February of 1950 that:

A human being is part of a whole, called by us the Universe, a part limited in time and space. He experiences himself, his thoughts and feelings, as something separated from the rest — a kind of optical delusion of his consciousness. This delusion is a kind of prison for us, restricting us to our personal desires and to affection for a few persons nearest us. Our task must be to free ourselves from this prison by widening our circles of compassion to embrace all living creatures and the whole of nature in its beauty.¹⁹⁷

The twelfth stage, the modern revelations, which is the scientific understanding that provides with a holistic understanding of the universe. This necessitates new human understanding, attitude and action towards the environment. Berry explains that humanity see these early years of the twenty-first century as the period when humans discover the great community of the Earth, a comprehensive community of all the living and nonliving components of the planet. Humans are just discovering that the human project is itself a component of the Earth project, that human intimacy with the Earth is our way to intimacy with each other. Such are the foundations of human journey into

¹⁹⁵ *Oxford Advanced Learner's Dictionary*, 2nd ed., s.v. "Revelation."

¹⁹⁶ Cf. Berry and Swimme, *The Universe Story*, 236.

¹⁹⁷ Cf. Maria Popova, "Einstein on Widening Our Circles of Compassion," *Brainpickings*, accessed on 13 October, 2021. <https://www.brainpickings.org/2016/11/28/einstein-circles-of-compassion/>

future.¹⁹⁸ Thus human intimacy with the Earth is the only way forward for human survival. Hence humanity must learn to live in harmony with the Earth.

1.3.13 THE ECOZOIC ERA

The Ecozoic is a term coined by Berry to indicate the need for a new era of mutually enhancing human-Earth relationships.¹⁹⁹ The eco-civilization is the only way forward for humanity to exist on the face of the Earth. The care for the welfare of the future generation is necessary for an eco-civilization. In an eco-civilization human beings and their actions would be in tune with nature. We would be conscious of the repercussions of our action.²⁰⁰ It is also important for humanity to recognize the mistake of exploitation of nature in an eco-civilization. Berry explains that the ecological significance of Universe Story is that the past provides a response to the present and guidance for the future. The natural world has become a resource for human utilization. Progress has been measured by the extent of human control over the nonhuman world and benefits that emerged for humans. Therefore it has become necessity to remedy the devastation of the planet by entry into the new period of the Ecozoic era.²⁰¹ It is ecologically critical moment for humanity to enter into new era of responsibility to the nature. The preamble to the *Earth Charter*²⁰² adopted by the Earth Charter Commissioners in 2000 at Paris enumerates that humanity stand at a critical moment in Earth's history, a time when humanity must choose its future. As the world becomes increasingly interdependent and fragile, the future at once holds great peril and great promise. We must join together to bring forth a sustainable global society founded on respect for nature, universal human rights, economic justice, and a culture of peace. Towards this end, it is imperative that we, the peoples of Earth, declare our responsibility to one another, to the greater community of

¹⁹⁸ Cf. Berry, *Evening Thought*, 141.

¹⁹⁹ Cf. Anne Lonergan and Stephen Dunn, glossary to *Befriending the Earth*, 149.

²⁰⁰ Cf. Shampa I. Dev, "Jurisprudential Basis of the Right to Clean and Healthy Environment," *Journal of Dharma* 39, no. 2 (April-June 2014): 146.

²⁰¹ Cf. Berry and Swimme, *The Universe Story*, 241-242.

²⁰² Hereafter for *Earth Charter* short EC shall be used.

life, and to future generations.²⁰³ Humanity cannot shun away from this ecological responsibility.

It is important for humanity to enter into the Ecozoic era, the ecological age. Berry used the term ecological in its primary meaning as the relation of an organism to its environment, but also as an indication of the interdependence of all the living and nonliving systems of Earth.²⁰⁴ The ecological harmony is the only way forward for humanity. Prashant Olankar explains there is a growing awareness that collaborating and networking for ecological harmony is the path to a sustainable future.²⁰⁵ The main thrust of this era must be universe-centric-ecology. Berry enumerates:

The integral functioning of the planet must be preserved. The well-being of the planet is a condition for the well-being of any component members of the planetary community. To preserve the economic viability of the planet must be the first law of economics. To preserve the health of the planet must be the first commitment of medical profession. To preserve the natural world as the primary revelation of the divine must be the basic concern for religion. To think that the human can benefit by a deleterious exploitation of any phase of the structure or functioning of the Earth is an absurdity. The well-being of the Earth is primary. Human well-being is derivative.²⁰⁶

The human well-being is intrinsically connected to the well-being of the nature. The human as a being is depending on others and many other living as well as non-living beings and systems, one can neither compartmentalise nor radically separate his/her well-being from the wellbeing of nature; rather both are integrally interconnected and thus go hand in hand.²⁰⁷ In the universe-centric ecology the primary concern must be the well-being of the planet Earth, that human existence depend on the well-being of the universe in general and the Earth in particular.

1.4 ECO-PRINCIPLES OF THE NEW STORY OF THE UNIVERSE

The new story of the universe has a great ecological importance. The preamble of the Earth Charter reflected the comprehensive context of the Universe

²⁰³ Cf. Earth Charter Commission, *EC* (Costa Rica: Earth Charter International, 1992), <https://earthcharter.org/read-the-earth-charter/preamble/>

²⁰⁴ Cf. Berry, *Selected Writings on the Earth Community*, 157.

²⁰⁵ Cf. Olalekar, "Cocreate Cosmic Compassion," 553-554.

²⁰⁶ Berry and Swimme, *The Universe Story*, 243.

²⁰⁷ Cf. Kanayankal, "Being in Harmony," 287.

Story. It states humanity is part of a vast evolving universe. Earth, our home, is alive with a unique community of life. The forces of nature make existence a demanding and uncertain adventure, but Earth has provided the conditions essential to life's evolution.²⁰⁸ The important aspect of Berry's methodology is integral ecological perspective. Berry's new story, born out of his own intellectual formation as a cultural historian of the West, turning toward Asian religions, examining indigenous tradition, and finally culminating in the study of the scientific story of the universe itself.²⁰⁹ The integral perspective has a great importance in ecological ethics. A perspective is always a particular stance that one takes in relation to an issue. This stance is determined by the place or position from where one views the issue. An optimistic, or hopeful stance or a pessimistic, or despairing stance. Perspective is crucial. A Christian perspective must always be from the position of the victims. But it must be a hopeful perspective.²¹⁰ Thus it is important to draw Christian ecological principles from the perspective of reality known to humans. The principles for an environmental ethic is to be derived from a cosmotheandric understanding of reality. Neither utilitarian calculations, nor individualist constraints, neither the vain hopes of progressivism nor the romanticization of nature, can find any really ecological sensitive ethic, but in cosmotheandric understanding of human rights and cosmic duties.²¹¹ The term cosmos is vague comparing to universe. The terms universe and cosmos are often used interchangeably to refer to totality. In the contemporary scenario the term cosmos is to be referred to entirety of physical reality. On the other hand the term universe would be used to signify our present physical world which would be an insignificant region of this totality.²¹² Thus it is significant to draw new ecological principles based on the new understanding of the universe. The universe-centric-ecology based on the new story of the universe provides relevant ecological principles for the genuine ecological action. This part of the chapter is an attempt to explain the eco-principles of universe-centric-ethic.

²⁰⁸ Earth Charter Commission, *EC* (Costa Rica: Earth Charter International, 1992), <https://earthcharter.org/read-the-earth-charter/preamble/>

²⁰⁹ Cf. Tucker, "Thomas Berry and the New Story," 14.

²¹⁰ Cf. De Sousa, "Towards a Christian Perspective," 584-585.

²¹¹ Cf. Heredia, "Towards an Ecological Consciousness," 574.

²¹² Cf. Mathew, *In Search of Cosmic Origins*, 70.

1.4.1 PSYCHIC-SPIRITUAL UNIVERSE

The human obligation towards nature arises from the fact of order and harmony of the universe. There is a cosmic symphony played out by all creatures, material, vegetative, and animal, creatures seemingly insignificant and great and it is the incumbent duty of beings endowed with intelligence and freedom not merely not to play havoc with this cosmic music by wanton destruction of nature, but also not to bring about discord and disharmony in the symphony in disturbing the rhythm of this music of the universe.²¹³ The universe has physical as well as psychic nature. Teilhard De Chardin points out that it is admitted that evolution is an ascent towards consciousness. That is no longer contested even by the most materialistic or at all events by the most agnostic of humanitarians.²¹⁴ There is a psychic dimension of creation. There is a mystical element here that seeks to repossess the numinous psychic dimension of creation, so alive in primordial society, and to recapture our lost sense of revelation in nature.²¹⁵ Thus all the reality has physical-psychic nature.

The universe has a psychic nature; it is not mere collection of objects. Berry elucidates the qualities that is identified with the humans are also qualities that can be observed throughout the natural world. Even at the level of the elements the self-organizing capacities can be observed, also the capacity for intimate relationships. These reveal astounding psychic abilities. These are so impressive that it must be considered that modes of consciousness exist throughout the universe in a vast number of qualitatively diverse manifestations. Above all it can be discovered that every being has its own spontaneities that arise from the depths of its own being. These spontaneities express the inner value of each being in such a manner that it must be said of the universe that is communion of subjects, not a collection of objects.²¹⁶ The universe also has a spiritual dimension. Berry enumerates the universe has had a spiritual dimension from the beginning, that spirituality is inherent to it and is not conferred by humanity. In fact, humans as derivative

²¹³ Cf. Raja, "As it was in the Begining," 689.

²¹⁴ Cf. Chardin, *The Phenomenon of Man*, 258.

²¹⁵ Cf. Heredia, "Towards an Ecological Consciousness," 498.

²¹⁶ Cf. Berry, *The Great Work*, 82.

from within cosmogenic processes, join in the spiritual and religious expression of the cosmos rather than the cosmos joining in or being defined according to the spiritual or religious dimension of humans.²¹⁷ Thus primary contribution of the new story of the universe lies in the recognition of the psychic and spiritual nature of the universe. The consequence of this understanding is that universe is not mere physical reality to be used and abused. It is physical, psychic and spiritual from the beginning, thus it must be respected and preserved.

1.4.2 THE HUMAN AS INTEGRAL WITH THE UNIVERSE

It is ecologically paramount to understand human as integral with the universe. It is imperative to go beyond the mindset that separates humanity from the environment and envision humanity as an integral part of the whole.²¹⁸ Humanity is deeply embedded with the universe. Cosmologists have increasingly come to recognize that human existence is deeply ingrained into the constitution of the universe.²¹⁹ The humanity is integral with the universe. Berry expounds humans as quintessentially integral with the universe. In humanity the universe is revealed to itself as humans are revealed in the universe. Such a statement could be made about any aspect of the universe in its entirety.²²⁰ Thus it important to have ecology based anthropology. It is significant and necessary to shift in our anthropology to an ecological anthropology that is more biocentric and less anthropocentric, and as such, less likely to foster behaviours that are destructive to Earth.²²¹ Thus human as integral with the universe demands an eco-centric anthropology, a new vision. Since as a microcosm humanity is part of the macrocosm, human vocation and call is to fight for the protection and preservation of this macrocosm.²²² The goal of the eco-centric anthropology is human equilibrium with its environment. The Earth provides with all that human being need to exist. But Humans took advantage and exploited the Earth for profit. The abuse and

²¹⁷ Cf. Berry, *The Sacred Universe*, 128; O'Hara, "Thomas Berry's Understanding," 94.

²¹⁸ Cf. Olalekar, "Cocreate Cosmic Compassion," 551.

²¹⁹ Cf. Mathew, *In Search of Cosmic Origins*, 216.

²²⁰ Cf. Berry, *Selected Writings on the Earth Community*, 18.

²²¹ Cf. O'Hara, "Thomas Berry's Understanding," 94-95.

²²² Cf. Raja, "As it was in the Begining," 697.

destruction of the Earth has increased to the point where humanity has not only poisoned the Earth and its creatures, but themselves. Humans are part of the Earth and harm done to the Earth is also harm to themselves as well as to future generations.²²³ Thus, it can be derived from the new story of the universe is that humanity is integral to universe which demands an eco-centric anthropology, a vision for the protection of the environment.

1.4.3 UNIVERSE AS THE PRIMARY BEARER OF RELIGIOUS EXPERIENCE

The respect for nature arises from the fact that reality has a divine seal upon it. If God created all things, it means that before creation, all things existed in the divine world of ideas, and continue to endure in divine mind after creation. And so, all things have eternally divine imprint or seal. If Gods sanctions the being of a thing, human beings should not for no justifiable reason hamper or obliterate it.²²⁴ The universe is the primary referent in all human understanding. Berry argues that since the human's religious capacities emerges out of this cosmological process, then the universe itself can be considered the primary bearer of the religious experience. The universe is the primary referent in all human understanding.²²⁵ The universe has the spiritual dimension. The Earth as a symbol that sums up all the gifts of life and love which God shares with humankind and all living beings. It is not so much a thing or object as a relational reality, vibrant and alive, dynamically mediating life and love from heart to heart. Therefore the Earth may not be slighted, abused, wasted, conquered, plundered, privatised, and destroyed. It deserves to be treated with reverence and tenderness.²²⁶ Thus another ecological principle that can be derived from the new story of the universe is the eco-spirituality. The spirituality of the Earth refers to a quality of the Earth itself, not a human spirituality with special reference to the planet Earth.

²²³ Cf. Patmury, "Violence to Nature," 205.

²²⁴ Cf. Cletus U Obijiaku, "The Immortal Divine Spirit in All Things (Wis 11:21-12:2)," *Asian Horizons* 9, no. 4 (December 2015): 680.

²²⁵ Cf. Berry, *Selected Writings on the Earth Community*, 72-73.

²²⁶ Cf. Samuel Rayan, "The Earth is the Lord's," *Vidyajyoti Journal of Theological Reflection* 54, no. 3 (March 1990): 124.

1.4.4 THE EARTH AS A LIVING PLANET

The Earth is precious and unique. The Earth as precious. It is precious in itself. It is unique; the only one of its kind.²²⁷ The importance of the planet Earth arises from the fact of the origin and development of the universe. Berry explains that the sensitive experience of the universe and the planet Earth leads to appreciate the ten billion years required for the universe to bring Earth into existence and another four billion years for Earth to shape itself in such splendour. The present Earth is not Earth as it always was and always will be. It is Earth at a highly developed phase in its continuing emergence. Thus the origin moment of the universe presents us with a stupendous process that we begin to appreciate in its magnificence as it unfolds through the ages. After the universe's origin moment, a sequence of other transformational moments took place culminating in the present form of life on Earth.²²⁸ Though part of this great universe, the Earth is the only living planet. This Earth is human's home in the universe. It is the only planet in the solar system, where living beings can thrive. It has many features which are life-friendly. The Earth has the right sort of temperature, the right sort of atmosphere, a plentiful supply of water, and a climate which is stable for a very long time. The Earth's orbit round the Sun does not depart much from the circular form. All these and many other features render it life-supportive and a suitable home for human.²²⁹ Thus the Earth can be considered as living planet. This Earth is seen today more and more like a living being. An increasingly popular scientific hypothesis suggests that the planet's chemistry, biology, and ecology is to be viewed as a single living system. The rhythm of day and night might be considered as the pulse of the planet. The enormous masses of liquid rock churning within the planet provide the minerals essential for life.²³⁰ Thus in reality Earth can be viewed as a living planet. It is inevitable for the Earth to exist as it is for the survival of life-forms. The principle of Earth-sensitivity become inevitable in all activities of humans.

²²⁷ Cf. Rayan, "The Earth is the Lord's," 123.

²²⁸ Cf. Berry, *Selected Writings on the Earth Community*, 18-19.

²²⁹ Cf. Mathew, *In Search of Cosmic Origins*, 198.

²³⁰ Cf. Stanislaus, "Ecology: An Awareness," 575.

1.4.5 THE UNIVERSE BASED JURISPRUDENCE

Jurisprudence as understood today deals only with the rights of human person. The fundamental rights are deemed essential to protect the rights and liberties of the people against encroachment of the power.²³¹ The Earth has rights, it must be respected. The environment must be protected for the sake of environment in its own interest. It is an interest that needs protection. The bearer of the right cannot waive it, extinguish it, or leave it unenforced.²³² The rights of the Earth are not the violation of human rights. The recognition of the rights of nature, non-human nature may not lead to the violation of any stage of conventional human existence or the denial of its rights. Rightly understood, the extension of guarantees in law to non-human forms of life also means more thorough legal guarantees for any facet of human life.²³³ Earth jurisprudence is the recognition of rights of the nature. The Earth jurisprudence is an approach that underscores the urgency of reconstructing civilization on ecological principles of sustainability and collaborative relationships with the natural world. It is Berry's philosophical thought that provides the theoretical basis for the Earth jurisprudence claiming the rights of nature.²³⁴ Earth Jurisprudence bases the universe as the source of all the rights. Berry elucidates the natural world on planet Earth has rights that come with existence itself. These rights come from the same source from which humans receive their rights, from the universe that brought them into being.²³⁵ The new story of the universe proposes a new understanding of rights from the perspective of the universe; the Earth jurisprudence as derivative from the Universe.

1.4.6 REINVENTING HUMAN IN THE CONTEXT OF THE UNIVERSE

The human ecological conversion is inevitable at the time of this great devastation of nature. Nothing short of a radical ecological conversion is the

²³¹ Cf. J. N. Pandey, *Constitutional Law of India* (Allahabad: Central Law Agency, 2014), 53.

²³² Cf. Dev, "Jurisprudential Basis," 144.

²³³ Cf. Inchody, "Ecological Crisis," 311.

²³⁴ Cf. Ji-Yeon Im and Yunho Seo, "Gia Earth Justice: Earth as a Natureculture for Harmony with Nature," *Journal of Dharma* 46, no. 2 (April-June 2021): 224.

²³⁵ Cf. Berry, *Evening Thoughts*, 110.

need of the hour. A paradigm shift to one that is compassionate is called for. Ecological education to change our mindsets, leading to change structures is badly needed.²³⁶ It is urgent to find an educational approach that can promote human environmental responsibility. Today everyone, regardless of social status or religion, is called to participate in an educational approach that summons all to environmental responsibility as an urgent and immediate concern for the survival of the planet. Only such a critical, substantial education can effect attitudinal changes.²³⁷ Human renewal only can bring solution to ecological imbalances. The renewal of human beings and the renewal of created realities go hand in hand.²³⁸ Thus fundamental change in human attitude towards the nature can end the imbalances in ecosystem. The moral responsibility cannot be satisfied with minor technical solutions. It does not mean simply reducing the rate of growth or passing some anti-pollution legislation. What is required is a fundamental change in our value system, attitudes, and power structure so as to bring an end to the imbalances in ecosystem.²³⁹ Therefore human ecological conversion can be achieved by the process of reinventing human at the species level in the context of the universe story. Berry expounds that the historical mission can be achieved by reinvent the human, at the species level, with critical reflection, within the community of life systems, in a time-development context, by means of a story and shared dream experience.²⁴⁰ Thus the human ecological conversion can be achieved only by reinventing human in the context of the universe.

1.4.7 THE EVOLUTIONARY PRINCIPLES OF THE UNIVERSE

The evolution is a process of development and change. The evolution as an irreversible process of developmental change in time, which during its course generates novelty, diversity, and higher levels of organization.²⁴¹ It is

²³⁶ Cf. Olalekar, "Cocreate Cosmic Compassion," 553.

²³⁷ Cf. Shalet Mendonca, "An Integral Ecology; Women Religious in India Responding to *Laudato Si*," *Vidyajyoti Journal of Theological Reflection* 81, no. 3 (March 2017): 186.

²³⁸ Cf. Raja, "As it was in the Beginning," 692.

²³⁹ Cf. Puthenpurackal, "Ecology and Justice," 97.

²⁴⁰ Cf. Berry, *The Christian Future and the Fate of the Earth*, 117. Cf. Berry, *Selected Writings on the Earth Community*, 165.

²⁴¹ Cf. R. J. Nogar, "Evolution" in *New Catholic Encyclopaedia*, Vol. 5 (New York: Gale, 2003), 492.

significant to view the reality through new ecological perspective in order to assess human impact on nature. Viewing the natural world through these ecological perspectives, can give humanity another prism through which they can understand how their actions cause global changes.²⁴² Thus, it is imperative in ecological ethics to view the reality through new evolutionary ecological perspectives. It is important to extent moral sensitivity beyond the individual to the entire ecological community and the evolving cosmos as well, so that the ecological ethics will comprehend not just human survival but an ecologically sustainable development, responsible for the well-being of the cosmic whole.²⁴³ The evolutionary perspective provides the most inclusive context to understand the reality. For Berry, the perspective of evolution provides the most comprehensive context for understanding the human phenomenon in relation to other life forms.²⁴⁴ Thus it is significant to draw ecological principle based on evolutionary understanding. Berry highlighted three principles of evolution. They are cosmogenesis, creativity, and celebration.

1.4.7.1 Cosmogenesis

Cosmogenesis is the evolutionary principle that explains the development process of the cosmos. The cosmogenesis is describing the cosmological process of creation.²⁴⁵ Cosmogenesis is also understood as the process of order in the universe. Berry explains “the Cosmogenetic Principle refers to the dynamic of building up order.”²⁴⁶ The Process of cosmogenesis demonstrates the intrinsic value for the cosmos that must be regarded by human. The first evolutionary principle according to Berry, cosmogenesis denotes that the universe changes, develops, and emerges only over unfathomable stretches of time, even as it appears to limited human gaze and powers of comprehension as stable, solid and eternal. At every level of existence, the universe is marked by change. The story of the emergent universe ought to heighten human appreciation of not only that numinous mystery but also the mysterious

²⁴² Cf. Kasi, “Anthropology versus Cosmology,” 172.

²⁴³ Cf. Heredia, “Towards an Ecological Consciousness (II),” 569.

²⁴⁴ Cf. Mary Evelyn Tucker, “Thomas Berry and the New Story,” 10.

²⁴⁵ Cf. Kasi, “Anthropology versus Cosmology,” 170.

²⁴⁶ Berry and Swimme, *The Universe Story*, 68.

cosmos, which is its own temporal source.²⁴⁷ Therefore, principle cosmogenesis demands re-examination of human attitude towards the nature. A cosmocentric worldview requires not only a new way of understanding the universe itself, but also a re-examination of many, if not most, of the tenets of faith and the moral life. Notions such as frugality and sufficiency in our use of natural resources, the viability of human life and the earth's ability to sustain it will all play indispensable roles in theological thinking.²⁴⁸ Thus the evolutionary principle of cosmogenesis necessitates reassessment of human attitudes and principles towards the nature.

1.4.7.2 Creativity

Creativity is the evolutionary principle that holds the energies of the universe in an order. Berry enumerates that throughout the entire world there exists a discipline that holds the energies of the universe in the creative pattern of their activities, although this discipline may not be immediately evident to human perception.²⁴⁹ The principle of creativity brings balance in the universe. The creativity as that lies in the balance between discipline and wildness, the two guiding forces of the universe.²⁵⁰ The planet Earth represents the best possibility of principle of creativity. Berry expounds that only Earth became a living planet filled with those innumerable forms of geological structure and biological expression that is observed throughout natural world. Only Earth held a creative balance between the turbulence and the discipline that are necessary for creativity. Whereas, the excess of discipline suppressed the wildness of other planets the creativity was lost by excess of one over the other.²⁵¹ The principle of creativity underlines the uniqueness of the planet Earth and highlights human responsibility of preservation of the Earth. The Earth is only common home, it is uniquely precious for all beings in the world – human, living, and non-living beings; but human beings as *homo custos* have the additional responsibility of peace and prosperity of this uniquely delicate

²⁴⁷ Cf. Scheid, *The Cosmic Common Good*, 68.

²⁴⁸ Cf. Kasi, "Anthropology versus Cosmology," 173.

²⁴⁹ Cf. Berry, *The Great Work*, 51.

²⁵⁰ Cf. Scheid, *The Cosmic Common Good*, 69.

²⁵¹ Cf. Berry, *The Great Work*, 52.

and precious home.²⁵² The Principle of creativity which is the source of beauty on Earth also induces human ethical norms. Aesthetic qualities induce ethical norms of preservation and conservation of a 'thing of beauty' in the observer's mind.²⁵³ Thus the evolutionary principle of creativity highlights the uniqueness of the Planet Earth and human responsibility of preservation of the Earth.

1.4.7.3 Celebration

Celebration is part of human life. The celebration means the act of celebrating something.²⁵⁴ Creation can be understood as a celebration. The Creation is the celebration of life; it is an epiphany of life.²⁵⁵ The evolutionary principle of celebration means human as part of the development process of the universe. The human celebration of planetary and cosmic beauty is the human participation in the universe's own pre-existent and ongoing celebration.²⁵⁶ It is ecologically paramount for human to participation in the celebration of the universe. Berry expounds that human capacity for celebration, which inevitably bring coordination in human affairs, demonstrates the importance of human participation with the universe.²⁵⁷ Human participation that stretches across the universe is vital at this time of ecological crisis. The ecological crisis as exemplified in global climate change is forcing humanity to face is a quest for a community that is equitable, sustainable, and participative even as it stretches across space and time.²⁵⁸ The evolutionary principle of celebration necessitates human participation in the universe. Humans are beings of the Earth, housed in the intricate web of multiple relationships that make up the cosmos. In our goal of building eco-just society, humanity has to fight against all forms of greed, individual, collective and structural.²⁵⁹ Thus the principle

²⁵² Cf. Nandhikkara, "Planetary Ethics," 125.

²⁵³ Cf. Dwivedi, "Exploring the Ethic," 130.

²⁵⁴ *Oxford Advanced Learner's Dictionary*, 2nd ed., s.v. "Civilization."

²⁵⁵ Cf. Kochapilly, "All for Life," 336.

²⁵⁶ Cf. Scheid, *The Cosmic Common Good*, 70.

²⁵⁷ Cf. Berry, *The Great Work*, 17.

²⁵⁸ Cf. Rudolf C. Heredia, "Eco-Ethics for an Eco-Ceisis," *Vidyajyoti Journal of Theological Reflection* 62, no. 6 (June 1998): 403.

²⁵⁹ Cf. S. Arokiasamy, "The Challenges of Eco-Just Society," *Vidyajyoti Journal of Theological Reflection* 65, no. 3 (March 2001): 164.

of celebration demands humanity to shun from all forms of greed and participate in the process of the universe.

1.4.8 THE UNIVERSE BASED PRINCIPLES OF ETHICAL FORMATION

The ecological crisis of today is multi-facet. The global ecological crisis that is faced today is a multi-dimensional one, which confronts at many levels.²⁶⁰ The ecological ethic demands relevant ethical principles. The ecological ethic cannot be effective merely as a matter of personal preference. To be viable it must be articulated in the structure and values of a society, in a new paradigm that is maintained by and within this ethic, so radically alien from the present one.²⁶¹ Thus it is important to draw moral principles that are creation-centric. The Christian morality generally, many of which have sidestepped the concern for ecological issues. The Christian morality of today often tends toward a focus on the human as the measure of all things rather than being shaped by a creation-centred vision.²⁶² Therefore universe-centric principles of differentiation, subjectivity, and communion can be vital in human ethical formation. Berry expounds that the ethical formation required is governed by three basic principles: differentiation, subjectivity, and communion. The present course is a violation of each of these three principles in their most primordial expression.²⁶³ Thus the activation of the principles of differentiation, subjectivity and communion in ecological age is necessary even for human survival on Earth.

1.4.8.1 Differentiation

Differentiation is the principle of variety and identity of creation. The differentiation speaks to the way in which the universe articulates itself in infinite variety and form, granting a particular identity to every living thing. Thus differentiation is an alternative way of speaking about the diversity of creatures in creation. Other terms that Berry used to describe differentiation include diversity, complexity, variation, disparity, multiform nature,

²⁶⁰ Cf. Heredia, "Towards an Ecological Consciousness," 491.

²⁶¹ Cf. Heredia, "Towards an Ecological Consciousness (II)," 576.

²⁶² Cf. Shalet Mendonca, "An Integral Ecology," 190.

²⁶³ Cf. Berry, *The Christian Future and the Fate of the Earth*, 120.

heterogeneity, articulation.²⁶⁴ The principle of differentiation entails the respect for the absolute value of each reality. Berry explains that the basic direction of the evolutionary process is toward constant differentiation within a functional order of things. In an acceptable cultural context, it must be respected that the unique properties of each reality determine its absolute value both for the individual and for the community. These are fulfilled in each other. Violation of the individual is an assault on the community.²⁶⁵ Differentiation highlights the uniqueness of every species. The differentiation highlights the distinctiveness of every species and indeed of every individual creature. Berry extends this traditional teaching by linking it to the cosmic story and the emergent cosmogenesis. Differentiation grants uniqueness to every being, asserting that its individual contribution to the wondrous cosmic story must be respected.²⁶⁶ Thus the principle of differentiation underscores the ethical significance of all living, non-living individuals of the universe. To accept the species impartiality means to apply it in the human and non-human contexts. In other words, every individual living creature or ecosystem have a moral significance whose intrinsic value is to be recognised. Ecosystem and living beings can be seen as matrices within which intrinsically valuable individuals emerge.²⁶⁷ Thus the principle of differentiation allows the other to be truly other, and it challenges and resists all forms of or attempts at absorption in to the self. Hence it calls for respect for all individuals in nature.

1.4.8.2 Subjectivity

Subjectivity is the individual identity and autonomy of every creature. By arguing subjectivity, Berry locates a sacred dimension of autonomy and individual identity within every creature, which may remain inaccessible to human person.²⁶⁸ It is significant to respect every individual organism in eco-centric perspective. The eco-centric view of this earth helps us to see life-systems as a web of interdependent unit wholes and, hence, individual

²⁶⁴ Cf. Scheid, *The Cosmic Common Good*, 73-74.

²⁶⁵ Cf. Berry, *Selected Writings on the Earth Community*, 168. Cf. Berry, *The Christian Future and the Fate of the Earth*, 120.

²⁶⁶ Cf. Scheid, *The Cosmic Common Good*, 74.

²⁶⁷ Cf. Iyer, "A Cross-Cultural Dialogue," 205.

²⁶⁸ Cf. Scheid, *The Cosmic Common Good*, 74.

organisms are seen and respected as intrinsically beneficial to each other.²⁶⁹ Ecological caring requires the recognition of identity of each individual entity in the universe. To be ecologically caring is also to be cognizant that all entities, from protons to living cells to animals and galaxies are formed by their relations to their environments. Caring for creation entails, thus, the recognition that all living beings, humans and non-humans alike, are neighbours. This can help human beings to see more vividly that wisdom, responsibility, justice and caring comprise the essence of humankind's relationship with other creatures.²⁷⁰ The Ethical principle of subjectivity is that every individual being in the universe has its own inner articulation. Berry explains subjectivity as sacred depth of the individual. As second ethical imperative subjectivity as derived from the cosmological process, it is found that each individual is not only different from every other being in the universe but also has its own inner articulation.²⁷¹ Thus Berry formulated a new ecological principle called subjectivity allows the other to be for itself and it should not be violated by others. Thus eco-caring based on the principle of subjectivity demands the recognition of the individual identity of all creatures.

1.4.8.3 Communion

Communion is the simultaneous and intrinsic connection among each entity in the universe. The communion as each entity in the universe is simultaneously and intrinsically connected to everything else.²⁷² There is interrelationship of every individual being in the universe. Another realm of the relationship between earth and life is its evolving nature. Nature is being and becoming, and as such, it manifests, and is related to, the dynamism of the interrelationship of each and every being in the world.²⁷³ Therefore, the principle of communion is the bonding together of the universe. Berry explains that the third ethical imperative of communion reminds that the entire universe is bonded together in such a way that the presence of each individual

²⁶⁹ Cf. Thomas Manickam, "Holistic Ethics and Global Environmental Crisis," *Journal of Dharma* 33, no. 2 (April-June 2008): 112.

²⁷⁰ Cf. Inchody, "Ecological Crisis," 308.

²⁷¹ Cf. Berry, *The Christian Future and the Fate of the Earth*, 120-121. Cf. Berry, *Selected Writings on the Earth Community*, 168.

²⁷² Cf. Scheid, *The Cosmic Common Good*, 75.

²⁷³ Cf. Inchody, "Ecological Crisis," 313.

is felt throughout the entire spatial and temporal range of the universe. This capacity for bonding of the components of the universe with each other enables the vast variety of beings to come into existence in that gorgeous profusion.²⁷⁴ The separated and disconnected understanding of reality is a falsehood. The isolated and unconnected individual is a myth and an aberration. The human being as interrelated to the eco-system radically depends on the Earth.²⁷⁵ This insight about reality calls for a radical shift in human mentality. The call for a radical shift from the current mentality of I, me, mine to one that includes concerns beyond our narrow egoistic framework to those that are more universal. The goal is to move from the self-centredness and individualism that undergird the ladder model to the communitarian consciousness and eco-social concern of the circular model.²⁷⁶ Thus the third ecological principle of communion is a community of beings in relationship to each other demands an eco-social concern.

1.5 CONCLUSION

The Earth, once a gorgeous place has become a difficult place to live in. Berry, geologist being concerned about the environment believed that the present human world view would not suffice for the real environmental action. Nature is declining globally at rates unprecedented in human history. Velocity of environmental destruction, which is the signs of the time pose a challenge for having a human ecological awakening. Christians can make a valuable contribution to the preservation of the ecosystem when they care for creation. Religion and theology cannot shun away from this ecological responsibility as in the past. The Christian concept of God, the Trinity need to be understood in the context of the nature. It is also ecologically paramount to understand the universe as a single community and redefine the role human beings. The ecological imbalances also demand a shift from democracy to bioc-racy and new perspectives of justice. Only an integral human approach can address all these ecological issues. Thus a universe-centric approach based on the new

²⁷⁴ Cf. Berry, *The Christian Future and the Fate of the Earth*, 121.

²⁷⁵ Cf. Puthenpurackal, "Ecology and Justice," 96.

²⁷⁶ Cf. Olalekar, "Cocreate Cosmic Compassion," 545.

story of the universe can bridge the unequalled discrepancy in environmental action.

The universe centric approach based on the new story of the universe of Berry is founded on multi-disciplinary, multi-religious and multi-cultural theoretical backgrounds. The concepts such as of God, reality, and other ideas of classical theologians like Augustine and Aquinas have great ecological importance. The evolutionary understanding of Teilhard Chardin is indispensable for any Christian ecological thinking. The modern scientific and cosmological thought also is important in the understanding of the ecological reality. Asian religions, such as Confucianism, Buddhism, and Hinduism also contain great wisdom for ecological awakening. Berry's personal experience of working with indigenous populations and the meadow experience along with the above mentioned factors form theoretical base for the new story of the universe.

The new story provides a new impetus for future ecological understanding and action that humans are part of this great process of the universe. The new story of the universe is in thirteen stages. The primordial flaring forth, galaxies, supernovas, sun, living earth, eukaryotes, plants and animals, human emergence, neolithic village, classical civilizations, rise of nations, the modern revelations, and the ecozoic era provide an comprehensive understanding of the origin and development of the universe to human alienation of the nature and to the need to enter into an future ecozoic era. The ecological significance of the new story of the universe arises from the fact that it challenges the human attitudes and action that bring ecological degradation. It also provides solutions and possibility of developing an integral approach that is universe-centric.

The principles derived from new story of the universe are ecologically relevant. It provides a new universe-centric ecological perspective. The primary contribution is that the recognition of psychic-spiritual nature of the universe that it must be respected and protected. The universe story proposes the new understanding of human as integral with the universe which questions the tyrannical anthropocentric attitudes. It also reveals the universe as bearing religious experience which demands a formation of a relevant eco-spirituality. The new story also redefines the value

of the Earth and demand the recognition of Earth rights. It also becomes paramount to re-invent human in the context of the universe. The evolutionary principles of cosmogenesis, creativity, celebration reveals the basic nature of the universe and demands new understanding of reality. The ethical principles of differentiation, subjectivity and communion provide a new ethical impetus for the formation of human ecological attitudes. Thus new story of the universe provide a new perspective to ecological ethics that is universe-centric approach.

CHAPTER II
CHURCH'S ECOLOGICAL ETHIC AND BERRY'S UNIVERSE-
CENTRIC-APPROACH

2.0 INTRODUCTION

The ecological degradation has become a major issue. The effects of this great catastrophe can be found in all the spheres of life and systems on Earth. It is not only the life of plants and animals affected. The humanity also experiences the punch of ecological repercussions. The Church herself cannot be alien to this phenomenon of ecological imbalances. The situation is so serious that daily lives of people are affected by the side effects. This situation necessitates the intervention of the Church to the environmental issues. Though Church was forerunner in various justice issues that affect human life, the ecological justice issues gained momentum in the era of recent pontificates, such as Popes St John Paul II, Benedict XVI and Francis. The Catholic ecological ethics is still in its developmental phase. Berry, Catholic religious priest is a pioneer in addressing the ecological issues in the light of modern ecological degradation. The ecological approach of Berry is explained on the basis of the developmental story of the universe. The ecological praxis cannot be fully realized without changing the patterns of modern human thinking. Christianity has a great role to play in ecological endeavour. The human attitudes of anthropocentrism, consumerism, and objectification of the reality contribute greatly the environmental degeneration. The Church has a special role to play in bringing about drastic changes in the attitudes and tendencies that are widespread in human dealing with the nature. This Chapter is an attempt to understand the importance of the ecological approach of Berry on the basis of the teachings of the Church in the Catholic Ecological thought.

2.1 COMPARATIVE ANALYSIS OF CHURCH'S ECOLOGICAL JUSTICE AND ECOLOGY OF BERRY

The ethics in general and Christian ethics in particular was not concerned about the ecological questions. Traditionally, the subject matter of ethics and morality was considered to be the personal and interpersonal realms of human

existence. Very little attention has been paid to the regulation of human being's relation with the nature and other beings.¹ But the environmental concern has gained a greater prominence in the modern theological developments. The seventh commandment enjoins respect for the integrity of creation (CCC 2415). This respect for integrity of creation demands a Christian human care for the living and non-living realities. The *Compendium of the Social Doctrine of the Church*² expounds that the care for the environment represents a challenge for all of humanity. It is a matter of a common and universal duty, that of respecting a common good, destined for all, by preventing anyone from using with impunity the different categories of beings, whether living or inanimate; animals, plants, the natural elements (CSDC 466).³ Subsequently the Christian environmental care must be praxis oriented. The Christian environmental ethics is not built on smug appeals. Instead, it tries to provide orientation concerning individual and societal conflicts that need to be resolved. For this purpose, there must be first of all a precise analysis of cause-and-effect connections, risks, and prospects. Only then can guiding principles be effective (*Docat* 256). Thus it is imperative that the ecological ethics must be holistic, and integral. Berry explains that the present urgency is to begin thinking in the context of the whole planet, the integral Earth community with all its human and other-than-human components. The discussion on the principles of ethics must be understood to mean values that govern that comprehensive community. Human ethics concerns the manner whereby it gives expression at the rational level to the ordering principles of that larger community.⁴ Thus the environmental ethics must be integral, praxis oriented and Earth based; it must be from the perspective of comprehensive community. This part of the chapter makes comparative analyses of the Church's ecological ethics and universe centric ecology of Berry.

¹ Cf. Puthenpurackal, "Ecology and Justice," 89.

² Hereafter the short form *CSDC* shall be used.

³ Pontifical Council for Justice and Peace, *CSDC* (Mumbai: Pauline Publications, 2005).

⁴ Cf. Berry, *The Great Work*, 105.

2.1.1 CONCEPT OF ECOLOGICAL JUSTICE

Ecological justice issues are of latest development in Christian theology. The ecological justice concern is the latest phenomenon in Catholic theology, though there are traces of such concerns in the traditional theology; they were either neglected or sidelined.⁵ The Christian ecological justice bases itself on human moral principles in order to find solutions to the challenges posed by the environmental degradation. It begins from human love and spirituality to proceed to justice. Today Christians are scrambling to piece together an environment ethics from neglected traditions that appreciated nature. They are also proceeding indirectly by extending to nature ethical norms originally used to inform human moral problems. The starting point for Christian environmental ethics is to be in love. This is not something the self can perform alone. It is something God performs in cooperation with the self. Christian environmental ethics starts therefore in spirituality, but it does not end there. The human love that inspires acts of justice in society and nature also pushes the self to specific acts in particular situations.⁶ The ecological justice in general is understood in relation to human justice. It is a small voice of creation which reminds humanity that human justice is linked with the integrity of creation, that the human being does not live in a vacuum, but in a responsible relationship with the Earth.⁷ However in ecological justice it is vital to listen to the voice of creation. *Gaudium et Spes*⁸, Pastoral Constitution on the Church in the Modern World, challenges the human attitude that material being does not depend on God and that human can use it as if it had no relation to its creator, then the falsity of such a claim will be obvious to anyone who believes in God. In any case believers, no matter what their religion, have always recognized the voice and the revelation of God in the language of creatures (*GS* 36).⁹ Thus it is ecologically paramount that the

⁵ Cf. Saji Mathew Kanayankal, "Renewal of Theology and Ethics in an Era of Ecological Crisis" in *Indian Moral Theology: Historical Studies and Future Prospects* ed. Mathew Illathuparampil (Bangalore: Dharmaram Publications, 2017), 161.

⁶ Cf. Martin-Schramm and Stives, *Christian Environmental Ethics*, 33-35.

⁷ Cf. Sahi, "Eve: Ecological Voices of the Earth," 341.

⁸ Hereafter the short form *GS* shall be used.

⁹ All the reference to the document of the Second Vatican Council are from *Vatican II: The Conciliar and Post Conciliar Documents*, ed. Austin Flannery (Mumbai: St Paul Publications, 2004).

concept of justice in general must be based on ecological imperative more so the environmental justice. Berry explains that the ecological community is not subordinate to the human community, more so the ecological justice. Nor is the ecological imperative derives from human ethics. Rather, human ethics are derivative from the ecological imperative. The basic ethical norm is the well-being of the comprehensive community and the attainment of human well-being within that community.¹⁰ Thus the ecological justice need a universe based imperative rather than a humanity based imperative, for finding a proper solution for the environmental dilapidation.

2.1.2 UNDERSTANDING OF ENVIRONMENTAL ISSUES

The Environmental issues are related to the disintegration of the Earth. The environmental degradation as the disintegration of the Earth or deterioration of the environment which occurs when Earth's natural resources are depleted and environment is compromised in the form of extinction of species, pollution in air, water and soil, and rapid growth in population.¹¹ Ecological issues are adversely affecting the balance in the eco-system. The reckless destruction of nature and pollution of the Earth have caused an ecological crisis. This means that the very delicate and fragile balance between the different eco-systems that support life on the Planet Earth is on the verge of being irreparably destroyed.¹² Human exploitation and alienation of nature is the real cause for ecological degradation. It is the oppressive exploitation and dehumanizing alienation in the human community that is at the root of the degradation and disintegration of the ecological one.¹³ The ecological degradation is often perceived from human perspective. Paul VI in *Octogesima Adveniens*¹⁴ points out that Human is suddenly becoming aware that by an ill-considered exploitation of nature human risks destroying it and becoming in his/her turn the victim of this degradation (OA 21).¹⁵ However it is ecologically most significant to realize the adverse intensity of environmental degradation in

¹⁰ Cf. Berry, *The Great Work*, 105.

¹¹ Cf. D. J. Margaret, "Interrelated Option for the Poor and the Earth," *Asian Horizons* 9, no. 4 (December 2015): 661.

¹² Cf. De Sousa, "Towards a Christian Perspective," 585.

¹³ Cf. Heredia, "Towards an Ecological Consciousness," 490.

¹⁴ Hereafter the short form *OA* shall be used.

¹⁵ Cf. Paul VI, *OA* (Vatican: Libreria Editrice, 1971).

itself than its impact assessment on humanity. Berry explains that humans are acting on a geological and biological order of magnitude. The chemistry of the planet is being changed. The great hydrological cycles are being altered. The ozone layer that shields from cosmic rays, are being weakened. Humans are saturating the air, the water and the soil with toxic substances so that it cannot be brought back to their original purity. Human beings are upsetting the entire Earth system that has over some billion years and through an endless sequence of experiments, produced such a magnificent array of living forms, capable of seasonal self-renewal over an indefinite period of time.¹⁶ Thus, it is human attitude and actions that has caused the great ecological crises. Thus, ecological ethics cannot be mere human-problems-centric, ignoring the real causes of the ecological issues. The global environmental crisis is fundamentally an ethical problem. It reflects also a crisis in human value system.¹⁷ Therefore only a paradigm shift in human value system towards the Earth can bring an amicable solution to this ecological crisis.

2.1.3 HUMAN AND SOCIAL EXPRESSIONS OF ENVIRONMENTAL ISSUES

The environmental issues also have an effect on human societal life. The poor are becoming poorer and the world peace or order is disrupted not only by the arms of race, regional and national conflicts and continued injustices among people and nations, but also by a lack of due respect for the earth. The plundering of natural resources and oppression of the poor causes the decline in the quality of the Earth and human life.¹⁸ The environmental degradation not only affects the life of plants and animals, it has an adverse impact on the social life of humans. Pope Francis in *LS* emphasises the effect of environmental degradation on the humans, especially the poor:

The human environment and the natural environment deteriorate together; we cannot adequately combat environmental degradation unless we attend to causes related to human and social degradation. In fact, the deterioration of the environment and of society affects the most vulnerable people on the planet: Both everyday experience and scientific research show that the gravest effects of all attacks on the environment are suffered by the poorest.

¹⁶ Cf. Berry, *The Dream of the Earth*, 206.

¹⁷ Cf. Thomas Manickam, "Holistic Ethic and Global Environmental Crisis," *Journal of Dharma* 33, no. 2 (April-June 2008): 111.

¹⁸ Cf. Margaret, "Interrelated Option," 659.

For example, the depletion of fishing reserves especially hurts small fishing communities without the means to replace those resources; water pollution particularly affects the poor who cannot buy bottled water; and rises in the sea level mainly affect impoverished coastal populations who have nowhere else to go. The impact of present imbalances is also seen in the premature death of many of the poor, in conflicts sparked by the shortage of resources, and in any number of other problems which are insufficiently represented on global agendas (*LS*, 48).

The environmental issues have an adverse impact on human societal life. But in reality it is human attitude of exploitation that is adversely affecting environment and human societal life. Berry explains that the extravagant expectation of a future built on human plundering of Earth's natural resources is largely responsible for the oppression of humans under our modern economic institutions. It is not only natural resources that are involved in this effort but also human resources. The consequence is an ever greater exploitation of the weaker by the stronger, of the less competent by the more competent, of those who owns nothing by those who owns everything.¹⁹ Therefore it is important to respect every form of being; both living and nonliving. Berry points out that to reduce any mode of being simply to that of a commodity within the community of existence is a betrayal. While the nonliving world does not have a living soul as a principle of life, each member of the nonliving world does have the equivalent as its inner principle of being. In a more intimate way the nonliving world provides the mysterious substance that transforms into life.²⁰ So the ecological awakening demands a drastic change in human attitude towards one another and the nature. The solution to the present problem does not lie with science and technology, but with the human attitude to one another and to mother Earth.²¹ Thus human ecological awakening is essential not only for ecological preservation but also for human social life.

2.1.4 CREATION TO NATURE

The Christian understanding of environment is that of creation. The natural resources of God's creation land, water, air, animal, and plant life are given to

¹⁹ Cf. Berry, *Selected Writings on the Earth Community*, 113-114.

²⁰ Cf. Berry, *Evening Thoughts*, 40.

²¹ Cf. Patmury, "Violence to Nature," 203.

humans to give glory to God.²² The Christian understanding of creation has also been challenged in the wake of environmental In the face of the massive degradation of the environment, experts and religious leaders have been drawn to re-examine critically the biblical text that is often been quoted to justify human's exploitative tendencies of the resources of the earth.²³ Thus it is ecologically important to reconsider different concepts. In search for a plausible response to environmental crises, humanity has to retrieve or reconsider different premises on human superiority and various hypotheses philosophical, theological, and religious on their existence and role in the universe. In this pursuit, the religious symbols, traditions and practises of Christianity have also been challenged.²⁴ The understanding of environment as nature gives it an intrinsic meaning. The nature in as much as it represents a conscious self-transcending process, has value in itself. The dynamics of evolution and its progressive march reveal a potency which is a sort of ultimacy. Ultimacy as potentiality is, thus, the ontological ground of nature-as-meaning.²⁵ Thus it is important to redefine Christian understanding of environment. The major contributions of theology of ecology would be a renewed look at and interpretation of the Bible that helped to bring new insights and vision to the church and society.²⁶ The exploitive attitude towards the nature alienates humanity from the nature. John Paul II in *Redemptor Hominis*²⁷ enumerates exploitation of the Earth for industrial, military purposes and the uncontrolled development of technology outside the framework of a long-range authentically humanistic plan often bring with them a threat to human's natural environment, alienate them in their relations with nature and remove them from nature. Humans often seem to see no other meaning in his natural environment than what serves for immediate use and consumption (*RH* 15).²⁸ The lack of proper vision on nature is the cause of

²² Cf. Kalapura, "Environment Crisis and Religions," 452-453.

²³ Cf. Awajiusuk Finomo Julia, "Genesis 1:26-28- A Panacea to environmental degradation in Negar Delta, Nigeria," *Asian Horizons* 6, no. 2 (June 2012): 249.

²⁴ Cf. Kanayankal, "Being in Harmony," 275.

²⁵ Cf. Manickam, "Holistic Ethics," 126.

²⁶ Cf. Kanayankal, "Renewal of Theology," 167-168.

²⁷ Hereafter the short form *RH* shall be used.

²⁸ J. Neuner and J. Dupis, *The Christian Faith in the Documents of the Catholic Church*, ed. Jacques Dupuis, 7th ed. (Bangalore: TPI, 2004), 2172. Henceforth, referred to as *ND*.

disrespect and exploitation by humanity of the environment. Benedict XVI in *Caritas in Veritate*²⁹ expounds that in nature, the believer recognizes the wonderful result of God's creative activity, which we may use responsibly to satisfy our legitimate needs, material or otherwise, while respecting the intrinsic balance of creation. If this vision is lost, we end up either considering nature an untouchable taboo or, on the contrary, abusing it (CV, 48).³⁰ Consequently it is ecologically important to recognize the intrinsic balance of natural world. Berry enumerates that the natural world is subject as well as object. The natural world is the maternal source of human being as earthlings and the life-giving nourishment of human physical, emotional, aesthetic, moral, and religious existence. The natural world is the larger sacred community to which humanity belong. To be alienated from this community is to become destitute in all that makes human. To damage this community is to diminish human existence.³¹ Thus it is ecologically vital to have ethical understanding of the natural world. An ethical understanding of the environment will lead us to responsible caring for the Earth and sustainable prosperity.³² Therefore it is ecologically important to recognize intrinsic value of the nature. Berry explains that the basic Christian understanding of the universe is one in which human community and the natural world are seen as unified single community with an overarching purpose. The natural world is the primary revelation to humanity of the divine. This understanding expands rather than contracts our understanding of scriptural and theological statements.³³ Thus the new understanding of the nature recognizes the intrinsic value of the environment.

2.1.5 UNIVERSAL COMMUNION AND HARMONY OF CREATION

The universe has had a great harmony of creation before the present environment degradation. The environment that was a source of happiness for humans and fellow creatures has now degraded, bringing insurmountable

²⁹ Hereafter the short form *CV* shall be used.

³⁰ Benedict XVI, *CV* (Trivandrum: Carmel International Publications, 2009).

³¹ Cf. Berry, *The Deam of the Earth*, 81.

³² Cf. Leena P. Kuriakose, "A Culture for Agriculture for Sustainable Prosperity: A Prophetic Voice of Wendell Berry," *Journal of Dharma* 46, no. 3 (July-September 2021): 337.

³³ Cf. Berry, *The Christian Future and the Fate of the Earth*, 66.

sorrow in human lives.³⁴ Thus, it is ecologically important to recognize mutual connections in the ordered system of the universe. John Paul II in *Sollicitudo Rei Socialis*³⁵ expounds that appropriateness of acquiring a growing awareness of the fact that one cannot use with impunity the different categories of beings, whether living or inanimate simply as one wishes, according to one's economic needs. On the contrary, one must take into account the nature of each being and of its mutual connections in an ordered system (*SRS* 34, *ND* 2189c). Pope Francis in *LS* states that, all reality is linked by unseen bonds and together forms a kind of universal family, a sublime communion which fills with a sacred, affectionate and humble respect. He writes:

when our hearts are authentically open to universal communion, this sense of fraternity excludes nothing and no one. It follows that our indifference or cruelty towards fellow creatures of this world sooner or later affects the treatment we mete out to other human beings. We have only one heart, and the same wretchedness which leads us to mistreat an animal will not be long in showing itself in our relationships with other people. Every act of cruelty towards any creature is contrary to human dignity. We can hardly consider ourselves to be fully loving if we disregard any aspect of reality (*LS*, 92).

Therefore universal communion is vital for a proper ecological action. In the light of the ecological crisis of present times, people are becoming more and more aware of the interrelatedness of everything and everyone in the universe. This is the key to understand the delicate and decisive web of community found in creation. All things are important and significant in their own place. Invariably, all contribute to the well-being of all. This is the foundation for the sense of creation and the sense of community of creation.³⁶ Berry was successful in providing an impetus by which this universal communion can be achieved. Tucker and Grim expounds that the new story of Berry is a new paradigm, a coherent evolutionary story that say that humans have emerged out of these evolutionary processes and not an addendum. Rather humans are the self-reflective consciousness of Earth itself. Humans are related to all other species, sharing their genetic coding. The evolutionary story is a unifying epic that would ignite an awareness of a deep connection with the universe and

³⁴ Cf. George Peter Pittappillil, "Ecology and Sustainability," in *Asian Horizons* 6, n: 2 (June 2012), 329.

³⁵ Hereafter the short form *SRS* shall be used.

³⁶ Cf. Paulachan Kochappilly, "Community, Celebration, and Communion: The Future of Christian Ethics in India," *Asian Horizons* 4, no. 1 (June 2010): 69.

Earth and human place as a species among other species. As humanity appreciate the immense diversity of the Earth community, human beings would come more fully in to communion with Earth's ecosystems and life forms.³⁷ Thus universal communion is a reality that must be recognized. Berry explains that the intimate genetic relationship of the human with the non-human world is now known with new clarity and comprehension. It is understood especially that each being in the universe is what it is only because every other being is what it is. Nothing is itself without everything else. There is distinction. There is no separation. Otherwise the universe ceases to exist. Throughout its vast extent in space and its consequence transformations in time the universe remains single multiform reality.³⁸ Thus, the understanding of universal based communion of creation gains great ecological significance.

2.1.6 TYRANNICAL ANTHROPOCENTRICISM

The anthropocentrism is human-centeredness. Anthropocentrism is human-centred, that all human beings, like all other species are species-centric are no surprise. Individuals of all species concentrate on survival and reproduction and so unconsciously promote the well-being of their own kind. They are normally interested in individuals of another species only as a resource, otherwise they are indifferent. The Jewish and Christian traditions have also contributed to anthropocentrism. The doctrine of creation in both traditions place humans at the apex of the creative processes. Strong anthropocentric attitudes are inappropriate in the present context when humans have the power to exploit all ecosystems.³⁹ The unlimited anthropocentrism heartens the environmental exploitations. Some commentators on environmental crises have accused the Judeo-Christian Holy Writ and doctrine of unlimited anthropocentrism that encourages and supports human exploitation of other creatures.⁴⁰ The strong anthropocentric attitude has caused great devastation to the environment. John Paul II in *Centesimus Annus*⁴¹ expounds that at the root

³⁷ Cf. Mary Evelyn Tucker and John Grim, "Introduction," in *Thomas Berry; Selected Writings on the Earth Community* (New York: Orbis Books, 2014), 11-12.

³⁸ Cf. Berry, *The Christian Future and the Fate of the Earth*, 53.

³⁹ Cf. Martin-Schramm and Stives, *Christian Environmental Ethics*, 17-18.

⁴⁰ Cf. Obijiaku, "The Immortal Divine Spirit," 671.

⁴¹ Hereafter the short form *CA* shall be used.

of the senseless destruction of the natural environment lies in an anthropological error. Human beings, who discover their capacity to transform and in a certain sense create the world through their own work, forget that this is always based on God's prior and original gift of the things. Instead of carrying out their role as co-operators with God in the work of creation, they set themselves up in place of God and thus end up provoking a rebellion on the part of the nature (CA 37, ND 2195c). Pope Francis, in his encyclical *LS* highlighted the problem of modern anthropocentrism especially in the ecological context:

modern anthropocentrism has paradoxically ended up prizing technical thought over reality, since the technological mind sees nature as an insensate order, as a cold body of facts, as a mere 'given', as an object of utility, as raw material to be hammered into useful shape; it views the cosmos similarly as a mere 'space' into which objects can be thrown with complete indifference. The intrinsic dignity of the world is thus compromised. When human beings fail to find their true place in this world, they misunderstand themselves and end up acting against themselves: Not only has God given the earth to man, who must use it with respect for the original good purpose for which it was given, but, man too is God's gift to man. He must therefore respect the natural and moral structure with which he has been endowed (*LS*, 115).

Thus it is ecologically crucial to redefine anthropocentrism. It is only the anthropology that emphasizes the interdependent nature of the human person with the environment and other people through the concept of solidarity and fraternity can help elaborate on the kind of person and care for creation.⁴² Therefore eco-centric-anthropology is ecologically significant to recognize the different roles and qualitative difference in reality. Berry explains anthropocentrism as a big word and a big issue of present times. It is important to guard against being anthropocentric, or hierarchical. On the other hand egalitarianism in the sense is a levelling of things. What is indeed needed is equal opportunity to be different selves as the roles are different. There has to be equality of opportunity for things to be what they are, but that does not make an egalitarian society in which members lose their qualitative differences, the distinctive grandeur that each possesses in a unique manner

⁴² Cf. Stephanie Puen, "Contribution of Catholic Social Thought to Doughnut Economics to Achieve a Vision of Flourishing of Creation," *Journal of Dharma* 46, no. 3 (July-September 2021): 298.

and to a unique degree.⁴³ So what is ecologically important is to recognize the distinctiveness or uniqueness of all the creatures through an eco-centric-anthropology which is different from anthropocentrism or egalitarianism.

2.1.7 INTEGRAL ECOLOGY

Integral ecology is a holistic vision. The integral ecology as a vision that entails an understanding of ecology that analyzes holistically the intricate interdependence of all living things, human and non-human, and considers the particular environment matrix from which they emerge.⁴⁴ Integral ecology can also mean an ecology that sees the connectedness between society and environment and finds an integral solution, a solution that will bring justice, peace, and joy both to society and to the environment.⁴⁵ Integral perspective of ecology makes it clear that the condition of social institutions affects the environment. As all things are related, the health of a society's institutions *ipso facto* affects the environment and the quality of human life.⁴⁶ An integral approach towards ecology is the duty of humanity. The *CCC* encourages all humans to understand that their dominion over animate and inanimate beings is not absolute, it is limited by concern for the quality of life of his/her neighbour, including generations to come; it requires a religious respect for the integrity of creation (*CCC* 2415). A universal communion and mutual concern for nature is important in integral ecology. Pope Francis in *Fratelli Tutti*⁴⁷ enumerates that when we speak of the need to care for our common home, our planet, we appeal to that spark of universal consciousness and mutual concern that may still be present in people's hearts (*FT* 117).⁴⁸ Integral ecology takes into consideration the interrelatedness of reality. Pope Francis in *LS* explicates that since everything is closely interrelated, and today's problems call for a vision capable of taking into account every aspect of the global crisis, it is important to consider some elements of an integral ecology, one which clearly respects its human and social dimensions (*LS* 137). Thus the vision of integral

⁴³ Cf. Berry and Clarke, *Befriending the Earth*, 102.

⁴⁴ Cf. Shalet Mendonca, "An Integral Ecology," 173.

⁴⁵ Cf. F. Antonisamy, *Integral Ecology* (Mumbai: St. Pauls, 2021), 24.

⁴⁶ Cf. Jeffrey Goh, "The Place of the Poor in *Laudato Si*," *Asian Horizons* 9, no. 4 (December 2015): 651-652.

⁴⁷ Hereafter the short form *FT* shall be used.

⁴⁸ Cf. Francis, *FT* (Mumbai: St. Pauls, 2020).

ecology demands the recognition of the inner-bond of the reality. It is more than urgent to recognize the bonds that link us together in our common home and demand the participation of all.⁴⁹ Thus it is important to understand the reality as single Integral community in the integral vision of ecology. Berry explains that:

in reality there is a single integral community of the Earth that includes all its component members whether human or other than human. In this community every being has its own role to fulfil, its own dignity, its own spontaneity. Every being has its own voice. Every being declares itself to the entire universe. Every being enters into communion with other beings. This capacity for relatedness, for presence to other beings, for spontaneity in action, is a capacity possessed by every mode of being throughout the entire universe.⁵⁰

Subsequently, the understanding of the integral community of reality completes the vision of integral ecology.

2.1.8 ECOLOGICAL SPIRITUALITY

The environmental degradation is a challenge to the present understanding of spirituality. The ecological crisis also challenges our faith. It is the very dream of God as creator that is threatened. It is the entire world, the one God put in the hands of humankind to keep and preserve, which is in real danger of destruction.⁵¹ The genuine ecological spirituality is necessary for environmental action. Within a framework of such a creation spirituality, any and every ruthless plundering of creation for unbridled human consumption becomes a serious matter, not only in a spiritual sense, but also materially.⁵² Thus ecological spirituality demands a human ecological conversion. Pope Francis in *LS* emphasized the importance of internal conversation for a genuine ecological action. He writes:

the external deserts in the world are growing, because the internal deserts have become so vast. For this reason, the ecological crisis is also a

⁴⁹ Cf. Leocadie Lushombo, “Deforestation in the Democratic Republic of Congo and Climate Change: An Ethical Analysis in Light of *Laudato Si*,” *Asian Horizons* 9, no. 4 (December 2015): 731.

⁵⁰ Berry, *Great Work*, 4.

⁵¹ Cf. Sali Augustine, “Healing our Broken Environment: Reflections on Eco-Faith Concerns of the Church after the 3.11-Japan’s Nuclear Disaster,” *Asian Horizons* 6, no. 2 (June 2012): 345.

⁵² Cf. Vimal Tirimanna, “The FABC and Ecological Issues,” in *Asian Horizons* 6, n: 2 (June 2012), 296.

summons to profound interior conversion. It must be said that some committed and prayerful Christians, with the excuse of realism and pragmatism, tend to ridicule expressions of concern for the environment. Others are passive; they choose not to change their habits and thus become inconsistent. So what they all need is an ecological conversion, whereby the effects of their encounter with Jesus Christ become evident in their relationship with the world around them. Living our vocation to be protectors of God's handiwork is essential to a life of virtue; it is not an optional or a secondary aspect of our Christian experience (*LS*, 217).

The human conversion based on ecological spirituality recognizes the transcendental meaning of creation. Benedict XVI in *CV* expounds that our nature, constituted not only by matter but also by spirit, and as such, endowed with transcendent meaning and aspirations (*CV* 48). Thus it is important in ecological spirituality to generate a spiritual intimacy with the nature. Berry explains that humanity need to move from a spirituality of alienation from natural world to a spirituality of intimacy with the natural world, from a spirituality of the divine as revealed in the written scriptures to a spirituality of the divine revelation as revealed in the visible world, from a spirituality concerned with justice only for humans to a spirituality of justice for the devastated Earth community, from spirituality of the prophet to the spirituality of shaman. The sacred community must now be considered the integral community of the entire universe and, more immediately, the integral community of the planet Earth.⁵³ Thus the ecological spirituality based on intimacy with the nature can be a real source for genuine environmental action.

2.1.9 ECOLOGICAL DREAM

The ecological dream is a paradigm for ecological action. The ecological dream as the proper understanding of the causes and effects of environmental issues and to provide a paradigm that would guide the genuine ecological ethics for a concrete attitude and action.⁵⁴ The ecological dream is not only of the future perspective but also of facing the present challenges. The attempt at overcoming those deeply embedded cultural and philosophical-theological biases are envisioned not only in order to de-colonize ecological engagement but aimed at a re-casting of cultural and religious resources in the continuing

⁵³ Berry, *The Sacred Universe*, 133.

⁵⁴ Cf. Kanayankal, "Renewal of Theology," 172.

struggle not only for the future but for the present too where environmental justice and human rights belong to the most pressing tasks our generation needs to address.⁵⁵ It is ecologically significant to devise models of development that values creation. Pope Francis in *Lumen Fidei*⁵⁶ expounds that faith, on the other hand, by revealing the love of God the Creator, enables us to respect nature all the more, and to discern in it a grammar written by the hand of God and a dwelling place entrusted to our protection and care. Faith also helps us to devise models of development which are based not simply on utility and profit, but consider creation as a gift for which we are all indebted (*LF* 55).⁵⁷ Thus the ecological dream must be holistic and inclusive of reality. Pope Francis in *Querida Amazonia*⁵⁸ explains that the care of people and the care of ecosystems are inseparable, this becomes especially important in places where the forest is not a resource to be exploited; it is a being, or various beings, with which we have to relate. To abuse nature is to abuse our ancestors, our brothers and sisters, creation and the Creator, and to mortgage the future. We are water, air, earth and life of the environment created by God. For this reason, we demand an end to the mistreatment and destruction of mother Earth. The land has blood, and it is bleeding; the multinationals have cut the veins of our mother Earth (*QA*, 42).⁵⁹ Thus only human participation in the nature can materialize the ecological dream. Berry presents the ecological dream as:

our genetic coding, through the ecological movement and through the biological vision, is providing us with a new archetypal world. The universe is revealing itself to us in a special manner just now. Also the planet Earth and the life communities of the earth are speaking to us through the deepest elements of our nature, through our genetic coding. The relation to the earth, we have been autistic for centuries. Only now have we begun to listen with some attention and with willingness to respond to the earth's demands that we cease our industrial assault, that we abandon our inner range against the conditions of our earthly existence, that we renew our human participation in the grand liturgy of the universe.⁶⁰

⁵⁵ Cf. Randy J. C. Odchigue, "Recasting Christian and Cultural Resources for Environment and Sustainability," *Asian Horizons* 6, no. 2 (June 2012): 286.

⁵⁶ Hereafter the short form *LF* shall be used.

⁵⁷ Pope Francis, *LF* (Trivandrum: Carmel International, 2013).

⁵⁸ Hereafter the short form *QA* shall be used.

⁵⁹ Francis, *QA* (Mumbai: St. Pauls, 2020).

⁶⁰ Berry, *The Dream of the Earth*, 215.

Thus dream for the future of the Earth must be based on the thoughtfulness for deepest element of nature that is human participation in the nature by responding to Earth's demands and abandoning human inner range against the nature.

2.1.10 CHRISTIAN RESPONSIBILITY TOWARDS CREATION

Humanity has responsibility towards creation. The Earth is gifted to humans as their common house, which they must look after and in which they must live in communion with one another. In fact the word ecology is derived from the Greek word *oikos*, meaning house.⁶¹ The Christian responsibility for creation arises from faith in Trinity. As faithful disciples of the Trinitarian God engaged in and with creation, Christians should commit themselves constructively to protect the wholeness of the environment.⁶² Human responsibility towards the nature also arises from human dignity. John Paul II in *Evangelium Vitae*⁶³ points out that human has a specific responsibility towards the environment in which he or she lives, towards the creation which God has put at the service of his personal dignity, of his life, not only for the present but also for future generations (*EV* 42).⁶⁴ The human moral obligation towards the nature is divinely ascertained. In *CCC* it can be seen that the dominion granted by the Creator over the mineral, vegetable, and animal resources of the universe cannot be separated from respect for moral obligations, including those toward generations to come (*CCC* 2456). The understanding of interdependence of reality is vital in fulfilling the Christian ecological responsibility. The *CSDC* emphasises the importance for Christians in developing attitudes, sustained by a renewed awareness of the interdependence of all the inhabitants of the Earth, will contribute to eliminating the numerous causes of ecological disasters as well as guaranteeing the ability to respond quickly when such disasters strike peoples and territories. The ecological question must not be faced solely because of the

⁶¹ Cf. Julian Saldanha, "From Garden to City," *Asian Horizons* 6, no. 2 (June 2012): 263.

⁶² Cf. Andrea Vicini, "New Insights in Environmental and Sustainable Ethics," *Asian Horizons* 6, no. 2 (June 2012): 313.

⁶³ Hereafter the short form *EV* shall be used.

⁶⁴ Cf. John Paul II, *EV* (Vatican: Libreria Editrice, 1995).

frightening prospects that environmental destruction represents; rather it must above all become a strong motivation for an authentic solidarity of worldwide dimensions (CSDC 486). Thus change in human attitude towards the nature is most important in Christian ecological responsibility. Berry explains that the task of renewing the Earth belongs to Earth, as the renewal of any organism takes place within. Yet humans have a special, leading role in the renewal, just as humanity had a dominant role in the devastation. Humanity can fulfil this role by moving basic life orientation from dominant anthropocentrism to a dominant eco-centrism. In effecting this change it is important to listen to the voices of Earth and its multitude of living and non-living modes of expression.⁶⁵ Thus Christian responsibility towards nature can be fulfilled by listening to the voices of the Earth, which is possible by attitudinal shift from anthropocentrism to eco-centrism.

2.2 THE ECOLOGY OF BERRY: A CHALLENGE TO CHRISTIANITY

The Christianity is accused of having responsibility in the ecological crisis. Environmental activists and philosophers sharply criticize that Christianity, assigning to the humans the role of subduing the Earth and dominating it, promoted unbridled exploitation of the nature leading to the present crisis.⁶⁶ Some environmentalists fault the anthropology of the Judeo-Christian Scripture or religion, accusing it of tyrannical anthropocentrism, which encourages humans to exploit the environment all the more.⁶⁷ However the Christian concept of God as creator necessitates a common relationship with the reality. The God as the Creator of everything that exists: rocks and water, weeds and trees, insects and elephants, moons and stars, and every woman and man who has ever passed time here on earth. The common source of creation means a common relationship that is essential and life-giving.⁶⁸ Thus human have a special responsibility to build community of all reality. The humans are as part of this gigantic web has a great responsibility to build a community

⁶⁵ Cf. Berry, *The Christian Future and the Fate of the Earth*, 73.

⁶⁶ Cf. Shaji George Kochuthara, "Environment and Sustainability," *Asian Horizons* 6, no. 2 (June 2012): 221.

⁶⁷ Cf. Obijiaku, "The Immortal Divine Spirit," 670.

⁶⁸ Cf. Alex Muyebe and Peter Henriot, "what *Laudato Si* Means to Malawi," *Asian Horizons* 9, no. 4 (December 2015): 742.

where all are protected and free to grow. No one can have exclusive dominance over others. As a part of the large web of life, everyone has an important function to play. There is a great need to break the ego barriers, which divide communities and isolate species from another.⁶⁹ The Christians cannot shun away from this ecological responsibility. The spiritual progress is not an escape from what human being is, but a generous reclamation of the world as destined for transformation. Humanity cannot set nature aside, for it is our own flesh and blood. Loving our neighbour means loving the whole cosmic and planetary neighbourhood of our existence.⁷⁰ Therefore the ecological challenge prompts a real Christian responsibility. Berry explains that the Christian future will depend above all on the ability of Christians to assume their responsibility for the fate of the Earth. The present disruption of all the basic life systems of the Earth has come about within a culture that emerged from a biblical-Christian matrix.⁷¹ This part of the chapter tries to understand the ecology of Berry as a challenge to Christianity. It is explained on the basis of themes; such as the dream of the Earth, the Christianity's great work, the challenge to theologians, spirituality of ecology, the role of the Church, Christianity and Ecology, and the challenge of contemporary Christianity.

2.2.1 THE DREAM OF THE EARTH

The task of Christian ecological thought is to flourish human and ecological harmony. The ecological task of Christian theology is to enhance and enrich the different spheres of relationships that promote the human and ecological flourishing. It prioritises the human responsibility and its obligation to promote the rights and dignity of all beings in the cosmic community.⁷² Thus human harmony with nature is ecologically important. In Hinduism, the order which makes life and the universe possible is expressed by the fundamental concepts of *rta* or *dharma*. This is the cosmic order which unites and

⁶⁹ Cf. Reginald Alva, "Laudato Si Challenges Irrational Rationalization," *Asian Horizons* 9, no. 4 (December 2015): 721.

⁷⁰ Anthony J. Kelly, "An Integral Eucharistic Ecology," *Asian Horizons* 9, no. 4 (December 2015): 692.

⁷¹ Cf. Berry, *The Christian Future and the Fate of the Earth*, 35.

⁷² Cf. Kanayankal, "Being in Harmony," 286-287.

maintains the ethical and physical worlds. For this reason, the key to peace and happiness lies in harmony of humans among themselves and with God and nature.⁷³ The dream of the Earth is based on understanding of the human harmony with cosmos and human place within it. The Dream of the Earth, Berry was laying a different kind of curriculum, one based on an understanding of the cosmos itself and the human place within it.⁷⁴ The humanity cannot exist without the Earth and universe. Berry explains that humans cannot discover themselves without first discovering the universe, the Earth and the imperatives of one's own being. Each of these has a creative power and a vision far beyond any rational thought or cultural creation of which humanity is capable. Humans cannot think of these as isolated from oneself or from the human community. Humans have no existence except within the Earth and within the universe.⁷⁵ Thus the human survival is possible only within the harmony of Earth system. Berry expounds that the survival is possible only within the Earth system itself. In the integrity of Earth's functioning within the genetic coding of the biosphere, the physical coding of Earth process, and within those comprehensive vast coding that enable the universe to continue as an emergent creative reality.⁷⁶ Therefore ecological dream in the wake of environmental crisis must be Earth-centric or Universe-centric not anthropocentric. This Earth-centric or universe-centric ecological dream is holistic vision. The holistic vision draws our attention towards the deeper interconnectedness of the entire ecosystem which invites us to value things and gives each existing being its due respect and concern.⁷⁷ Thus the dream of the Earth is a challenge for Christian ecological ethics to formulate holistic vision that is Earth centric or universe-centric.

2.2.2 THE CHRISTIANITY'S GREAT MORAL RESPONSIBILITY

The Christian morality is truly human morality. The Christian ethics is truly catholic; it should have something applicable to all. Christian morality is in

⁷³ Cf. Saldanha, "From Garden to City," 265.

⁷⁴ Cf. Allan Combs, "The University of the Earth; An introduction to Thomas Berry," in *Thomas Berry Dreamer of the Earth*, ed. Erwin Laszlo and Allan Combs (Rochester: Inner Traditions, 2011), 2.

⁷⁵ Cf. Berry, *The Dream of the Earth*, 195.

⁷⁶ Cf. Berry, *The Dream of the Earth*, 213.

⁷⁷ Cf. Kanayankal, "Being in Harmony," 286.

essence identical with true human morality. Human morality is essentially autonomous.⁷⁸ The moral theology also reflects on human relationship with the nature. The Moral theology reflects on the human person and his or her relationships with God, with one another and with the nature.⁷⁹ The inequality and injustice affect not only community but also creates imbalances in creation. As inequality and injustice fragment and destroy the fabric of the human community, so do the disruption of the rhythm of nature and the creation of imbalances in its functioning.⁸⁰ Thus the Christianity has a great responsibility towards the Earth. Berry points out that the Church could be a powerful force in bringing about the healing of a distraught Earth. The Church could provide an integrating reinterpretation of the new story of the universe.⁸¹ Therefore great work of Christianity is to respond to the distraught of the Earth. Berry Explains that morally there is a well developed response to suicide, homicide and genocide. But now it is confronted with biocide, the killing of the life systems, and genocide, the killing of the planet Earth in its basic structures and functioning. These are deeds of much greater evil than anything that is known until present, but deeds for which there are no ethical or moral principles of judgement.⁸² Thus the challenge before Christianity is to bring forth new principles that will confront the human distraught of the Earth.

2.2.3 THE CHALLENGE TO THEOLOGIANS

The ecological crisis threatens the very existence of life on Earth. The reckless destruction of nature and pollution of the Earth have caused an ecological crisis. This means that the very delicate and fragile balance between the different eco-systems that support life on planet Earth is on the verge of being irreparably destroyed.⁸³ The challenge to theologians is to respond to the great devastation of the natural world. Berry points out that the contemporary

⁷⁸ Cf. Osamu Takeuchi, "The Heart of *Wa* and Christian Ethics," *Asian Horizons* 4, no. 1 (June 2010): 123.

⁷⁹ Cf. Shaji George Kochuthara, "Moral Theology in Asia," *Asian Horizons* 4, no. 1 (June 2010): 3.

⁸⁰ Cf. Felix Wilfred, "Theological Significance of *Laudato Si*," *Vidyajyoti Journal of Theological Reflection* 79, no. 9 (September 2015): 647.

⁸¹ Cf. Berry, *Selected Writings on the Earth Community*, 109.

⁸² Cf. Berry, *The Christian Future and the Fate of the Earth*, 44.

⁸³ Cf. De Sousa, "Towards a Christian Perspective," 585.

theologians remain concerned with scriptural interpretation, spiritual disciplines, ministerial skills, liturgy, the history of Christianity, the psychology of religion, and religious pedagogy. None of these areas of study has a direct concern for the natural world as the primary source of religious consciousness. This is one of the basic reasons why both the physical and spiritual survival of the Earth has become imperilled.⁸⁴ It is ecologically inevitable for humanity to break the comfort zones. Humans have learnt in modern science that cosmology is governed by the laws of physics and all things including human beings are subjected to these laws, such awareness is enough to crush down our comfort zones.⁸⁵ Theologians cannot shun away from this ecological responsibility. Berry laments that the moral theologians have not been able to deal with abuse of the natural world. After dealing with suicide, homicide, and genocide, the Christian moral code collapses completely; it cannot deal with biocide or genocide. Nor have the church authorities made any sustained protest against the violence being done to the planet.⁸⁶ It is high time that theology as a discipline to respond to the problems of the natural world. Theology can make great contribution in the ecological action. Berry explains that the antagonism toward an evolutionary universe has significantly diminished in Christian theology. The limitation of theologians in speaking the language of this new cosmology is evident. Though, in the conceptions of the divine and the relations of the divine to the phenomenal world, much has been done in the realm of systematic theology, but little has been done in the empirical study of the cosmos itself as religious expression.⁸⁷ So the magnitude of ecological destruction challenges the theologians to respond to the particular challenge of explaining the religious expression of cosmos. The scientific solutions are not enough for solving ecological crises, though we cannot solve them without science either; science is as much part of the problem as it is part of the solution. Science is to be complemented by all branches of knowledge; for, ecological crisis is not just a scientific issue to be left only to scientific investigations for solutions. It is a

⁸⁴ Cf. Berry, *The Sacred Universe*, 118-119. Cf. Berry, *Selected Writings on the Earth Community*, 69.

⁸⁵ Cf. Kasi, "Anthropology versus Cosmology," 173.

⁸⁶ Cf. Berry, *The Dream of the Earth*, 77.

⁸⁷ Cf. Berry, *The Sacred Universe*, 121.

moral issue which needs response from ethical and religious perspectives.⁸⁸ Thus it is great challenge to theologians to formulate ecologically sensitive theology based on science and cosmology to find religious and moral solutions to ecological crisis.

2.2.4 SPIRITUALITY OF ECOLOGY

The human ecological conversion is vital for ecological action. The nonhumans are to be treated with respect, while avoiding self-centred and merely-utilitarian inclinations. It is human activities that cause most of the crises; and many of them are avoidable if humans could change attitude. All religious leaders and their collaborators should wake up to the urgency of calling humanity to environmental conversion.⁸⁹ The Christian ecological ethical concerns are also spiritual concerns. The current ecological crisis challenges ethically. It is also a spiritual crisis. They invite us to remember that the Christian tradition never separated our ethical commitment from our spiritual experience.⁹⁰ Consequently the ecological spirituality must be justice-based. Being eco-minded and eco-sensitive is answering the call that is imperative. Human vocation then becomes a prophetic vocation and our spirituality a prophetic spirituality which is justice-based.⁹¹ Therefore ecological ethical concerns demand an ecological conversion based on ecological spirituality of wholeness. A spirituality of wholeness takes into account the interdependence and interconnections of all created things. It calls humankind to change attitude of domination to one of respect for the Earth and its creatures.⁹² Thus the proper understanding of spirituality of the Earth is important in Christian holistic ecological spirituality. Berry explains that the spirituality of the Earth refers to a quality of the Earth itself, not a human spirituality with special reference to the planet Earth. Earth is the material principle out of which humans are born and from which humanity derive all that humans are and all that human beings have. Humanity comes into being in and through Earth. The Earth is the origin, the nourishment, the educator, the

⁸⁸ Cf. Nandhikkara, "Human beings-in-solidarity," 123.

⁸⁹ Cf. Obijiaku, "The Immortal Divine Spirit," 683.

⁹⁰ Cf. Vicini, "New Insights," 326.

⁹¹ Cf. Raja, "As it was in the Beginning," 697.

⁹² Cf. Shalet Mendonca, "An Integral Ecology," 171.

healer, the fulfilment. At its core, even human spirituality is Earth derived. The human and the Earth are totally implicated, each in the other. If there is no spirituality in the Earth, then there is no spirituality in humanity. Christianity's failure to recognize the Earth's spiritual qualities constitutes a significant challenge.⁹³ Thus the challenge is to formulate a proper Christian spirituality of the Earth for ecological action. Berry expounds that What is needed is a new spiritual, even mystical, communion with Earth, a true aesthetic of Earth, sensitivity to Earth's needs, a valid economy of Earth. The need is a way of designating the Earth-human world in its continuity and identity rather than exclusively by its discontinuity and difference. It is need to recognize the numinous qualities of Earth. What is needed is a spirituality that emerges out of a reality deeper than humanity, a spirituality that is born out of the solar system and even out of the heavens beyond the solar system.⁹⁴ Therefore it is a great challenge to Christian ecology to redefine our understanding of the material world. It is high time to realise the spiritual nature of the universe. Thus the challenge is to recognize the numinous qualities of the Earth and enter into communion with Earth with a proper understanding of spirituality of ecology.

2.2.5 THE ROLE OF THE CHURCH

The ecological crisis is result of human moral crises. The ecological crises in reality are a symptom of the disharmony with in the arena of human relationship, of deep moral crises within the human relationship, and of deep moral crises within the human person.⁹⁵ Humanity has played a significant role in the devastation of the Earth. Berry explains that there is one simple cause for the devastating situation in of the nature. Humans have replaced universe as the primary referent concerning reality and value in the phenomenal world with the human as the supreme referent of reality and value. Humans have rejected the divinely established order of the universe and are attempting to establish a contrived human order in its place, under the

⁹³ Cf. Berry, *The Sacred Universe*, 69.

⁹⁴ Cf. Berry, *Selected Writings on the Earth Community*, 30. Cf. Berry, *The Sacred Universe*, 74.

⁹⁵ Cf. R. Arasakumar, "Sin as Triple Alienation," *Vidyajyoti Journal of Theological Reflection* 56, no. 7 (July 1995): 433.

assumption that humanity knows better than nature how the universe and planet Earth should function. No pathology ever invented could be so perverse and so devastating to the delicate balance of life and existence on this planet. Along with this distortion of the order of the universe humans have broken the unity of the universe and especially of the life systems on Earth. Humanity has established a discontinuity between the nonhuman and the human components of the universe and has given all rights to the human. Humans have considered the universe as composed of objects to be exploited rather than as subjects to be communed with.⁹⁶ It is ecologically paramount that humanity re-establishes its relationship with the nature. The human relationality calls for an affirmation of human relatedness to everyone as well as everything. The greedy human who indiscriminately exploits and plunders the universe causes the deterioration which results in an ecological crisis.⁹⁷ Thus humanity has an obligation to respect the natural order of things. The human beings ought to care for their environment and protect it from pollution and over-exploitation. They have an obligation to respect the natural order of things and make judicious use of non-renewable resources, keeping in mind also the future generations.⁹⁸ Therefore the role of the Church is to rebuild a genuine human relationship with the Earth. The mission is to create a new relationship with the Earth, for inner core of eco-theology is interrelatedness and interdependence of all beings.⁹⁹ The greatest challenge in Church's ecological action in the present scenario is to foster Earth-human relationships. Berry explains that Human relationship with Earth involves something more than pragmatic use, academic understanding, or aesthetic appreciation. A truly human intimacy with Earth and with the entire natural world is needed. Humanity needs to present themselves to the planet as the planet presents itself, in an evocatory rather than a dominant relationship. There is need for a

⁹⁶ Cf. Berry, *Selected Writings on the Earth Community*, 109. Cf. Berry, *The Christian Future and the Fate of the Earth*, 44.

⁹⁷ Cf. James Panthalanickal, "Relationality as the Source of Justice," in *Perspective of Justice* (Bangalore: Vinai, 1998), 12.

⁹⁸ Cf. Thomas Menaparampil, "The Eucharist as Mission, Mission as Dialogue," *Vidyajyoti Journal of Theological Reflection* 80, no. 3 (March 2016): 174.

⁹⁹ Cf. Naiju Jose Kalambukattu, "Eco-Theological Vision and the Syro-Malabar Eucharistic Celebration," *Vidyajyoti Journal of Theological Reflection* 82, no. 4 (April 2018): 315.

great courtesy toward Earth.¹⁰⁰ It is great human challenge to be intimate with the Earth. It is the greatest ecological challenge that Church ought to respond. Without facing this challenge all the ecological action remains mere verbal jugglery. The most important ecological conversion is the human-Earth intimacy.

2.2.6 THE CHRISTIAN UNDERSTANDING OF THE UNIVERSE

It is ecologically vital that the universe must be understood in its own terms. The humans create the world through human art and culture. Humans give it meaning. On the other hand humans have to respect the universe and its processes and live in harmony with it. This is necessary not only for human well-being but also for human survival.¹⁰¹ The new perceptions of reality demand relearning of human concepts of universe. In the light of new perceptions humans have to relearn the value of human relatedness and situate it in the interconnectedness of everything.¹⁰² It is a challenge before Christianity to accept the new world view and promote the understanding of single community of the universe for the real ecological action. Berry explains that the human community as integral in its structure and functioning with the larger universe. There is no human community in any manner separate from the larger community of all those living and non-living beings and on which humans totally depend for every breath that we breathe. The created world forms a single community with Earth itself. So intimate is the human with every other being on the planet that humanity must say that the human community and the natural world will go into future as a single sacred community or neither will survive.¹⁰³ The universe must be recognized as a community. The Asian cultural and religious traditions recognize a community of life with nature. The world of nature is not filled with dead material objects. It is peopled with living beings of all kinds that deserve respect.¹⁰⁴ Thus it is ecologically significant to have real Christian understanding of the universe as

¹⁰⁰ Cf. Berry, *Selected Writings on the Earth Community*, 34.

¹⁰¹ Cf. M. Amaladoss, "An Emerging Indian Theology II," *Vidyajyoti Journal of Theological Reflection* 58, no. 9 (September 1994): 561.

¹⁰² Cf. Arokiasamy, "The Challenges of Eco-Just Society," 163.

¹⁰³ Cf. Berry, *The Christian Future and the Fate of the Earth*, 71-72.

¹⁰⁴ Cf. M. Amaladoss, "Listen to the Spirit," *Vidyajyoti Journal of Theological Reflection* 66, no. 2 (February 2002): 143.

a single community. Berry explains that the basic Christian understanding of the universe is one in which human community and the natural world is seen as unified, single community with an overarching purpose. Every element in Christian belief and moral teaching, every aspect of our sacramental system, of our patterns of worship, and our spirituality depend on the world about us. Indeed natural world is primary revelation to humanity of the divine.¹⁰⁵ The challenge before Christianity is to recognize the universe as single community of all the living and non-living beings.

2.2.7 CHRISTIAN COSMIC MISSION

The cosmic compassion is important for global harmony. In a highly competitive world it is a major challenge to play a countercultural role of co-creating cosmic compassion for global peace and harmony.¹⁰⁶ It is important to understand ecology from cosmic, human and divine perspectives. The ecology is to be seen from cosmic, human and divine perspectives; not as three separate perspectives.¹⁰⁷ The cosmic vision of Christianity was lost to the anthropocentric vision. Berry points out that the historical emphases on Christ as having endured the passion and the cross gradually took precedence over the understanding of Christ as cosmic redeemer.¹⁰⁸ The biblical idea, that of a people chosen by God in relation to the land, lost its cosmological anchor and became an affirmation of humans apart from the Earth.¹⁰⁹ The Christian understanding of divine transcendence over creation has caused human alienation of nature. The Christianity has been overly concerned with the transcendence of the divine over the created order and with the transcendence of the human over the natural world. This attention to the transcendence of the divine has meant a corresponding loss of understanding that there is a primary and inherent relationship between the human and the divine within the natural

¹⁰⁵ Berry, *The Christian Future and the Fate of the Earth*, 66.

¹⁰⁶ Cf. Olalekar, "Cocreate Cosmic Compassion," 554.

¹⁰⁷ Cf. Jose Nandhikkara, "Theanthropocosmic Vision of the Holy Bible; An Alternative to the Cosmocentric and anthropocentric Vision," *Journal of Dharma* 39, no. 4 (October-December 2014): 401.

¹⁰⁸ Cf. Berry, *The Christian Future and the Fate of the Earth*, 106.

¹⁰⁹ Cf. Berry, *The Christian Future and the Fate of the Earth*, 109.

world itself.¹¹⁰ Thus it is ecologically vital to explain Christian mysteries in the light of cosmic perspectives to reach out to the universe. A cosmic convergence and a Christic emergence go together, so it is important to speak of the emergence of the Cosmic Christ. It is a communion of love that respects the freedom of the humans, but also reaches out to the universe.¹¹¹ Thus the Christianity has an ecological mission to establish awareness of the unity of human affairs with the functioning of the universe and Earth in the cosmic context. Berry explains that the liturgy of the Christian world was woven over the years into cosmological patterns. Liturgical celebrations were coordinated with the hours of the day, especially with the dawn and sunset, as well as with the seasons of the year. The nativity was coordinated with the solstice. The resurrection was celebrated at the time of the spring equinox. Within the Christian focus on the presence of the divine reality in the person of human being, a cosmological underpinning provided stability, especially in the deep psychic commitments of Christian liturgy. However, the Christian faith has lost a significant part of its vigour. Its mission to establish a divine presence within the human community has become exceedingly difficult. The devastation of the Earth and the loss of a sense of the sacred seem to be profoundly related. Humanity need to understand that the purpose of the universe is not focused on any single being, but depends upon the entire multiplicity of beings. What is needed is to once again establish awareness of the unity of human affairs with the functioning of the universe and Earth. This unity finds expression in the threefold cosmological cycles; daily, seasonal and planetary. The call is to return to the universe as vibrant cosmic liturgy.¹¹² Therefore the Christian cosmic mission is to re-establish the divine-human relations in the context of the cosmos, thus reaching out to universe.

¹¹⁰ Cf. Cristina D. Vanin, "Understanding the Universe as Sacred: The Challenge for Contemporary Christianity," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 108.

¹¹¹ Cf. Michael Amaladoss, "The Cosmic Christ," *Vidyajyoti Journal of Theological Reflection* 83, no. 3 (March 2019): 200.

¹¹² Cf. Berry, *The Christian Future and the Fate of the Earth*, 114-116.

2.2.8 THE CHALLENGE OF CONTEMPORARY CHRISTIANITY

The ecological crises are also a challenge to Christian faith. The ecology and the Christian Faith are integrally related.¹¹³ Thus the Christians are called to be in communion with the universe. The Christians are also aware that they are called to communion with the divine source of our being, with the whole human community, and with the universe itself.¹¹⁴ Therefore it is a challenge for Christianity to develop proper model of the nature. It is an oversight on the part of Christianity when it fails to include nature as one of the recipients of the Christian praxis that opts for the poor, oppressed and the needy, or when it fails to develop a subject-subjects model for nature as part of its expression of faith.¹¹⁵ The Christian perspective of ecology demands in contemplating the sacredness of creation. The simple and profound Christian perspective on ecology has evolved in the course of the history of salvation. It consists in seeing, loving, and going for the truth, goodness, and beauty of creation, which means contemplating the sacredness of creation.¹¹⁶ Therefore the universe must be considered as the manifestation of the sacred. Berry explains that the universe is the supreme manifestation of the sacred. This notion is fundamental to establishing a cosmos, an intelligible manner of understanding the universe, or even any part of the universe. Humanity must remember that it is not only the human world that is held securely in this sacred enfoldment, but the entire planet.¹¹⁷ Thus the challenge of contemporary Christianity is to recognize the sacred nature of the universe so that the Earth is respected and cared, not used and abused by humanity.

2.3 CONCLUSION

The Catholic ecological ethics, though a recent in origin, through various official teachings has analysed and highlighted various environmental problems of today and suggested measures that could improve the situation.

¹¹³ Cf. Biju Michael, "Focus on Ecology and the Ongoing Renewal of Moral Theology," *Asian Horizons* 9, no. 1 (March 2015): 94.

¹¹⁴ Cf. Vanin, "Understanding the Universe as Sacred," 110-111.

¹¹⁵ Cf. Jaene C. Peracullo, "Justice as Cry of the Earth," *Journal of Dharma* 39, no. 1 (January-March 2014): 105.

¹¹⁶ Paulachan Kochapilly, "All for Life, Life for All," 352.

¹¹⁷ Cf. Berry, *Selected Writings on the Earth Community*, 31-32.

But it has not yet comprehended the reality of environmental issues as it tries to look at it from human moral perspective. Berry as a pioneer in the field of modern Catholic ecological field, developed an ecological paradigm by which issues of ecological degradation can be addressed and solution can be reached. Though the Catholic Ecological thought has had a great development in the recent official teachings of the Church, the contribution of Berry to Catholic ecological ethics is very significant. He uses his Christian background to understand the problems and suggests ways in which the Christianity could become powerful instrument in ecological action.

The ecological degradation has become a major issue that affects not only human community but also all the spheres of life systems on Earth, which necessitates that Church's environmental ethics to be integral, praxis oriented and Earth based. Thus Church's ecological ethics must be from the perspective of comprehensive community as proposed by Berry. The Christian ecological justice being a new phenomenon applies human moral principles to the problems of the environment, whereas the ecological justice need a universe based imperative rather than a humanity based imperative. In order to achieve this goal, it is ecologically most significant to realize the adverse intensity of environmental degradation in itself than its impact assessment on humanity. The understanding of environment as nature which gives an intrinsic value in nature itself becomes paramount in Church's ecological ethics. It is also ecologically vital to recognize human as integral with the natural world and natural world as the primary revelation to humanity of the divine. This understanding of universe based communion of creation gains great ecological significance as the root of the senseless destruction of the natural environment lays on an anthropological error. It becomes ecologically important to recognize the distinctiveness or uniqueness of all the creatures through an eco-centric-anthropology. Thus an integral approach towards ecology is the duty of humanity in general and Church in particular. Therefore it is important to understand the reality as single integral community as in the integral vision of Berry. This approach also proposes ecological spirituality to generate a spiritual intimacy with the nature. Thus the dream for the future of the Earth must be based on genetic coding, the deepest element of nature. Therefore the

Christian responsibility towards nature can only be fulfilled by listening to the voices of the Earth through a universe-centric-approach.

The universe-centric-approach based on ecology of Berry poses a great challenge to Christian ecological ethics to respond to the reality of environmental crises. Christianity has been accused of being responsible for the environmental degradation. Thus the task of Christian ecological ethics is to flourish human and ecological harmony through the dream of the Earth. The real challenge before Christianity is to bring forth new principles that will confront the human distraught of the Earth. Theologians are to formulate ecologically sensitive theology based on science and cosmology to find religious and moral solutions to ecological crises. The Church through a proper understanding of spirituality of ecology is called to recognize the numinous qualities of the Earth and enter into human communion with Earth. Thus the great role of the Church is the human ecological conversion that is human-Earth intimacy. It is ecologically vital that the universe must be understood in its own terms. Thus the challenge before Christianity is to recognize the universe as single community of all the living and non-living beings and to re-establish the divine-human relations in the nature in the context of the universe-centric-approach of Berry.

CHAPTER III

BERRY'S UNIVERSE-CENTRIC APPROACH AS A NEW RESPONSE FOR CATHOLIC ECOLOGICAL ETHICS

3.0 INTRODUCTION

Berry being a Catholic religious priest, who was involved in ecological action, realized that the Church has an important role to play in this era of environmental crises. The eco-justice of Berry is based upon multidiscipline, multi-religious influences. The Church has a great role in highlighting the issues of environmental degradation. Berry proposed ways by which Church could contribute in the great ecological endeavour. The Church could become an instrument in bring a paradigm shift in the ecological conversion. The Earth based anthropology could play an important role in Church' ecological Justice. The Church also could highlight the relevance of spirituality for ecological action. The cosmic vision and universal community becomes a real mission to be actualized by the Church. The ethical principles based on the cosmological and evolutionary understanding could from good impetus of Church's ecological ethics. This chapter enumerates importance of the universe-centric-approach of Berry as a response of the Church's ecological justice to environmental issues.

3.1 BERRY'S ETHICAL VISION

The Catholic ecological ethical vision is to be comprehensive and holistic. The *Docat* points out that genuine ecology is at the same time protection of the environment, human ecology, social ecology, and cultural ecology (*Docat* 261). Therefore, Berry's ethical vision is based on the study of cosmology, world religions and cultures. Berry enlarged his study of the world religions and cultures to include the study of ecology and cosmology. He began to see human cultures within the context of ecosystems and bioregions as well as within geological and cosmological time.¹ Christian faith also has great influence on Berry's ecological ethics. Berry, a catholic priest, whose views were infused with his religious faith, which is reflected in the *LS* of Pope

¹ Cf. Tucker, Grim and Angyal, *Thomas Berry A Biography*, 112.

Francis.² It is ecologically vital that the Christian ethics must take into consideration the environmental context in which humans live. The *CSDC* expounds that a vision of human and things that is sundered from any reference to the transcendent has led to the rejection of the concept of creation and to the attribution of a completely independent existence to human and nature. This rupture has also resulted in separating human from the world and, more radically, has impoverished human's very identity. Human beings find themselves thinking that they are foreign to the environmental context in which they live (*CSDC* 464). Thus Catholic ecological ethics must establish human-Earth relationship. Therefore it is ecologically vital to think in the context of the Earth community. Berry explains that the present urgency is to begin thinking within the context of the whole planet, the integral Earth community with its entire human and other than human components. The ethics must be understood to mean the principles and values that govern that comprehensive community. Human ethics concerns the manner whereby it gives expression at the rational level to the ordering principles of that larger community.³ Thus Berry's ethical vision is based on the integral Earth community with its living and nonliving components. Hence the Catholic ecological vision must be based on the integral Earth community and ethics must give expression to the principles of Earth community as a whole not just human-centric.

3.2 ECO-JUSTICE AND IMPORTANCE OF BERRY

The Christian justice ought to transcend an individual morality and respond to the pace of change in the world. The *GS* elucidates that the pace of change is so far-reaching and rapid nowadays that no one can allow oneself to close eyes to the course of events or indifferently ignore them and wallow in the luxury of a merely individualistic morality (*GS* 30). This is a call for a Catholic eco-justice to be based on new principles and understandings. Benedict XVI in *CV* enumerates that "In order to protect nature, it is not enough to intervene with economic incentives or deterrents; not even an apposite education is sufficient. These are important steps, but the decisive issue is the overall moral tenor of

² Cf. Im and Seo, "Gaia and Earth Justice," 226.

³ Cf. Berry, *Great Work*, 105.

society” (CV 51). The eco-justice must be able to bring a moral tenor of the society for genuine ecological action. Pope Francis in *LS* called for a unified effort, “Moreover, when our hearts are authentically open to universal communion, this sense of fraternity excludes nothing and no one” (*LS* 92). Thus the challenge for eco-justice is to transcend individual morality to give a proper moral tenor to society for ecological action, which is based on universal communion. Berry’s ecology can be classified as the one that fulfils the holistic vision of eco-justice. Because Berry was a renovator, reminding of the great insights of the past and making connections between economics, culture, and science that have given new life to the field of environmental ethics. In his prodigious life work was modelled on the importance of learning vast varieties of languages and belief systems and the mysteries of science.⁴ Consequently, Berry’s eco-justice is based on the well-being of the comprehensive ecological community. Berry explains that the ecological community is not subordinate to the human community. Nor is the ecological imperative derivative from human ethics. Rather, human ethics are derivative from the ecological imperative. The basic ethical norm is the well-being of the comprehensive community and the attainment of human well-being within that community.⁵ Hence there is a need to redefine Catholic ecological justice from human perspective to ecological perspective. Fruitfulness of Catholic ecological justice depends rather on applying of integral Earth community based morality, not blindly applying human moral principles to environmental issues.

3.3 THEO-CENTRISM IN ECOLOGY OF BERRY

The every created reality is intrinsically related to God. Nothing is so small and unimportant that it has no spirit given by God.⁶ Thus, the Catholic ecological ethics ought to give expression to God’s relation to creation. The *CSDC* elucidates that the world, in fact, reveals the mystery of God who created and sustains it. If the relationship with God is placed aside, nature is stripped of its profound meaning and impoverished (*CSDC* 487). Ecologically

⁴ Cf. Chapple, “Thomas Berry on Yoga,” 51

⁵ Cf. Berry, *Great Work*, 105.

⁶ Cf. Kasi, “Anthropology versus Cosmology,” 171.

Christian concept of God is presented as God who is proactive in the efforts of making environment regenerative. *Docat* enumerates that God is there in various efforts to see the plundered earth as creation again and to make regenerative environments possible (*Docat* 268). Thus it is ecologically significant to understand God in relation to creation. Berry preserves a critical role for the divine and sacred source of the universe. For Berry, the universe is not only the primary revelation of the divine, but it is also in many ways the foundational sacrament and the primary sacred reality that can help humanity recover a sense of the sacred and human capacity to wonder. Berry prefers to speak of the numinous presence or the divine. Berry comments that the word God is overused and refers to a mystery that exceeds human understanding. On the other hand, his modesty in naming the divine as definitively Christian has an advantage, that Berry is able to describe cosmos's intrinsic goodness in a way that can find affirmation and approval both in non-Christian religious traditions and among environmentalists.⁷ The understanding of the concept of God in relation to creation becomes inevitable to Christian ecology. Berry explains that humanity would have no sense of the divine without the creation. Speculatively, talk about God as being prior to or outside creation or independent of creation, but in actual fact there is no such being as God without creation. When a person associates the creation with the divine, it is existential fact that there is no God without creation and there is no creation without God.⁸ The uniqueness of Berry's ecology comparing with many of the modern ecologists, is the place that he has given for numinous, the divine. Therefore the challenge before catholic ecological ethic is to present the concept of God in relation to creation, which prompts a greater care and respect for the Earth and environment.

3.4 COSMIC-VISION FOR ECOLOGICAL ETHICS

All that is created has goodness and order and humanity must respect it. The *GS* elucidates that for by the very circumstance of their having been created, all things are endowed with their own stability, truth, goodness, proper laws and order. Human must respect these as he or she isolates them by the

⁷ Cf. Scheid, *The Cosmic Common Good*, 65.

⁸ Cf. Berry, *Befriending the Earth*, 10.

appropriate methods of the individual sciences or arts (*GS* 36). The Cosmos reveals ultimate truths to human intelligence. The *CCC* points out that the material cosmos is so presented to Human's intelligence that human person can read there traces of its creator. Light and darkness, wind and fire, water and earth, the tree and its fruits speak of God and symbolize both his greatness and his nearness (*CCC* 1147). Cosmotheandric vision emphasizes unity of all reality and human's unique place in it. The cosmotheandric vision is a new interpretation and a more comprehensive religious understanding of the inter-relationship and basic unity of all reality, and human's unique place in it.⁹ The most prominent contribution that Berry makes to Catholic ecological ethics is his articulation of the new story of the universe, the cosmic story. Berry remains the most influential source for eco-theologians to take the account of cosmic development and human origin as described by the sciences and insist that these facts and processes are best understood in terms of a coherent narrative. Berry weaves the scientific data into a mythic, and revelatory story with the power to transform humanity and human relationship to the Earth.¹⁰ Thus the cosmic vision can transform human relationship to the Earth. Berry explains that humans live deeply alienated from the cosmological order, the phenomenal world, the world of the shining forth. Humans live in a world, a world where all our values are human. The natural world is experienced as subservient to the human. Its reality has diminished as the human has been magnified.¹¹ Therefore the challenge before the Catholic ethics is to re-establish human-Earth relation in the context of cosmic order. Thus, Ecology of Berry ushers the importance of cosmological impetus for the Catholic ecological thought, which can act as a strong foundation for transforming human relationship with the Earth.

3.5 EVOLUTIONARY-CENTRIC ECOLOGICAL ETHICS

The genuinely scientific methodical investigations do not conflict with faith. The *GS* enumerates that if methodical investigation within every branch of learning is carried out in a genuinely scientific manner and in accord with

⁹ Cf. Heredia, "Towards an Ecological Consciousness," 505.

¹⁰ Cf. Scheid, *The Cosmic Common Good*, 66.

¹¹ Cf. Berry, *Evening Thought*, 117. Cf. Berry, *Befriending the Earth*, 10. Cf. Berry, *Selected Writings on the Earth Community*, 55.

moral norms, it never truly conflicts with faith, for earthly matters and the concerns of faith derive from the same God (*GS* 36). The ultimate purpose of creatures is not for humanity. Pope Francis in *LS* elucidates that the ultimate purpose of other creatures is not to be found in humanity. Rather, all creatures are moving forward with and through humans towards a common point of arrival, which is God, in that transcendent fullness where the risen Christ embraces and illumines all things (*LS* 83). Thus it is important to formulate principles that explain human relationship with nature in the context of universe. Berry elucidates that ultimately the well-being of Earth and the well-being of the human must coincide, since a disturbed planet is not conducive to human well-being in any of its concerns. A new referent in terms of human moral activity is indicated here. If formerly the moral norm was simply that a being should act according to its fixed nature, this norm must undergo extensive consideration in a world of developmental process where natures are not fixed but in process.¹² Thus it is important for Catholic ecological ethics to formulate evolutionary principles that would define human participation with the nature.

Berry proposes evolutionary principles for the ecological ethics. The first evolutionary principle is cosmogenesis. The cosmogenesis denotes that the universe changes, develops. At every level of existence there is tendency toward self-organization, which is always in process, and it is a power that belongs to the cosmos itself.¹³ Thus it is important for humanity to recognize the universe as more cosmogenesis. Berry explains the universe in the phenomenal order is self-emergent, self-sustaining, and self-fulfilling. The universe is the only self-referent mode of being in the phenomenal world. Every other being is universe-referent in itself and in its every activity. Awareness that universe is more cosmogenesis than cosmos might be the greatest change in human consciousness that has taken place since the awakening of the human mind.¹⁴ Thus the evolutionary principle of cosmogenesis demands human recognition of the universe as the self-referent mode and participation in the process of the universe.

¹² Cf. Berry, *The Christian Future and Fate of the Earth*, 31.

¹³ Cf. Scheid, *The Cosmic Common Good*, 68.

¹⁴ Cf. Berry, *Great Work*, 190.

The second evolutionary principle is creativity. Creativity marks the process from lesser to the greater. The evolutionary history of the cosmos reveals a general process from lesser to greater complexity, and from lesser to greater consciousness, which are the marks of its vigorous creativity.¹⁵ The evolutionary principle of creativity is the balance in the universe. Berry explains that creativity lies in the balance between discipline and wildness, the two guiding forces of the universe. The planet Earth represents how an ideal balance between the forces of discipline and wildness allows the possibility of creativity.¹⁶ The evolutionary principle of creativity demands human recognition of the balance in the universe and it must not be altered for human purposes.

The third evolutionary principle is celebration. The principle of celebration could be considered a norm of morality. The celebration is the fountain, force, and focus of ethics. The function of ethics is to help people celebrate their life. Celebration which takes into account one's inherent relationship with God, human beings, and creation could be considered a norm of morality.¹⁷ The principle of celebration requires a human participation in the process of the universe. To be human is not to discover and celebrate the wonder of creation as it presents itself, more properly the human celebration of planetary and cosmic beauty is the human participation in the universe's own pre-existent and ongoing celebration.¹⁸ Human participation in the process of the universe is ecologically significant. Berry explains ultimately the universe throughout its vast extent in space and its sequence of transformation in time was seen as a single, multiform, celebratory expression. The proposal has been made that no effective restoration of a viable mode of human presence on the planet will take place until such intimate rapport with the Earth community and the entire functioning of the universe is re-established on an extensive scale.¹⁹ Thus the evolutionary principle of celebration calls for human participation in the entire functioning of the universe. These three evolutionary principles of cosmogenesis, creativity and

¹⁵ Cf. Scheid, *The Cosmic Common Good*, 69.

¹⁶ Cf. Berry, *Great Work*, 52.

¹⁷ Cf. Kochappilly, "Community, Celebration," 72.

¹⁸ Cf. Scheid, *The Cosmic Common Good*, 70.

¹⁹ Cf. Berry, *Great Work*, 18-19.

celebration of Berry gives Catholic ecological thought moral evolutionary principles to re-establish human-Earth relationship in the context of the universe.

3.6 UNIVERSAL COMMUNITY AND HUMAN-EARTH RELATIONS

Humans ought to appreciate the order that is in the universe. John XXIII in *Pacem in Terris*²⁰ enumerates that a marvellous order predominates in the world of living beings and in the forces of nature, is the plain lesson which the progress of modern research and the discoveries of technology teach us. And it is part of the greatness of human that human person can appreciate that order (*PT* 2). The universal communion demands a proper care for the nature. Pope Francis in *LS* elucidates that as part of the universe, called into being by one Father, all of us are linked by unseen bonds and together form a kind of universal family, a sublime communion which fills us with a sacred, affectionate and humble respect. God has joined us so closely to the world around us that we can feel the desertification of the soil almost as a physical ailment, and the extinction of a species as a painful disfigurement (*LS* 89). Thus the universal communion is important in the ecological vision. The ecological vision demands a human appreciation of the universe. Berry explains that it is because humans are so alienated from the universe in its unfolding reality that human beings do not appreciate human place or role in this process. Humans live and function in a cultural tradition, in an economic order, in a world of political allegiance, not in a physical universe or in what a natural world.²¹ The human appreciation of the natural world is ecologically significant. Taking in to account existential interconnection of all entities in the natural world is fundamental to an ecological vision.²² The ecological vision must be based on human-Earth relationship. Berry enumerates that humanity is in the third stage of relationships from human evolution. The first was the human-Divine relationship, the second was the human-human

²⁰ John XXIII, *Pacem in Terris* (Bombay: St. Paul's, 1963). Hereafter the short form *PT* shall be used.

²¹ Cf. Berry, *Selected Writings on the Earth Community*, 111. Cf. Berry, *The Christian Future and the Fate of the Earth*, 84.

²² Cf. Jose Nandhikkara, "Ecosophy a Fundamental Responsibility," *Journal of Dharma* 39, no. 4 (October-December 2014): 314.

relationship, and now the third must be the human-Earth-Divine relationship.²³ Thus the role of the Church is to recognize and establish human-Earth-Divine relationship by making the universe as the referent. Berry explains that the talk of the role of the Church in the twenty-first century must begin with the natural world on which humans depend for physical and spiritual sustenance. The basic question is no longer human-divine relations, nor is inter-human relations. The basic issue is human-Earth relations. There is one simple cause for the devastating situation. Humans have replaced the universe as the primary referent concerning reality and value in the phenomenal world with the human as the supreme referent of reality and value. Human beings have rejected the divinely established order of the universe and are attempting to establish a contrived human order in its place. Along with the distortion of the order of the universe humans have broken the unity of the universe and especially of the systems of the Earth.²⁴ Thus the Church cannot shun away from this great responsibility, it has an important role to play in this great task for human Earth relationship. This relationship can be brought forth only by adequate understanding of the universe.

3.7 ECOLOGICAL CONVERSION

Human attitude is the cause of environmental destruction. Much of what brought environmental destruction is the way human beings think of themselves at the centre of everything, necessarily bringing about the exploitative stance on nature.²⁵ Thus it is ecologically significant to review human life-style. Benedict XVI in *CV* points out that the way humanity treats the environment influences the way it treats itself, and vice versa. This invites contemporary society to a serious review of its life-style (*CV* 51). Thus the best ecology consists in the change of human life style. Pope Francis *QA* elucidates that the best ecology always has an educational dimension that can encourage the development of new habits in individuals and groups. A sound and sustainable ecology, one capable of bringing about change, will not

²³ Cf. Carolyn W. Toben, *Recovering a Sense of the Sacred: Conversations with Thomas Berry* (Whitsett: Timberlake Earth Sanctuary Press, 2009), 55.

²⁴ Cf. Berry, *The Christian Future and the Fate of the Earth*, 46-47.

²⁵ Cf. Ferdinand D. Dagmang, "Praxis and Theory of Environmental Marxism," *Journal of Dharma* 39, no. 4 (October-December 2014): 323.

develop unless people are changed, unless they are encouraged to opt for another style of life, one less greedy and more serene, more respectful and less anxious, more fraternal (*QA* 58). The ecological conversion demands human recognition that humanity is not disconnected from rest of the creation. Pope Francis in *LS* enumerates that the conversion calls for a number of attitudes which together foster a spirit of generous care, full of tenderness. It also entails a loving awareness that humans are not disconnected from the rest of creatures, but joined in a splendid universal communion. By developing individual, God-given capacities, an ecological conversion can inspire humanity to greater creativity and enthusiasm in resolving the world's problems (*LS* 220). The ecological conversion can be achieved only by human participation in the process of the universe. Berry explains that the historical mission is to reinvent the human, at the species level, with critical reflection, within the community of life systems, in a time-development context, by means of a story and shared dream experience. The humanity is at an impasse because humans have brought the entire set of life systems of the planet to an impasse. The viability of the human is in question. Humans must work at the species level because human problems are primary problems of species. Human knowledge needs to be a creative response to the natural world rather than a domination of the natural world. The Earth is not adequately understood either by spiritual or scientific traditions, the human has become an addendum or an intrusion. This attitude prevents humanity from considering Earth as a single society with ethical relations determined primarily by well-being of the total Earth community. The reinventing the human must take place in a time development context. Human sense of who humans are and what human role is must begin where the universe begins.²⁶ Thus human participation in the universe process can bring forth the real ecological conversion of humanity.

3.8 DEFINING ECOLOGICAL ANTHROPOLOGY

The environmental crises are the result of faulty anthropology. The environmental problems and ecological crises are due to wrong understanding of the human persons, of relations among persons and peoples, and of

²⁶ Cf. Berry, *The Christian Future and the Fate of the Earth*, 117-120. Cf. Berry, *Selected Writings on the Earth Community*, 165-168.

relationship to all of creation and God.²⁷ The *CSDC* points out that the relationship of human with the world is a constitutive part of his human identity (*CDSC* 452). The ecological crisis demands a redefinition of human relationships. Pope Francis in *LS* elucidates that misguided anthropocentrism underestimate the importance of interpersonal relations. If the present ecological crisis is one small sign of the ethical, cultural and spiritual crisis of modernity, humanity cannot presume to heal our relationship with nature and the environment without healing all fundamental human relationships. Christian thought sees human beings as possessing a particular dignity above other creatures; it thus inculcates esteem for each person and respect for others. Human relationship with the environment can never be isolated from relationship with others and with God. Otherwise, it would be nothing more than romantic individualism dressed up in ecological garb, locking into a stifling immanence (*LS* 119). The shift from anthropocentric age necessitates a shift in human consciousness. The shift from the anthropocentric age to the ecological age is first and foremost a shift in consciousness. It is in human's own interest to foster and facilitate this shift at all levels in society, and in all areas of human endeavour. Evolution or extinction is the choice before humanity.²⁸ The development of a Christian anthropology based on ecology is an important task for Catholic ecological thought. Berry explains that the task of renewing the Earth belongs to Earth, as the renewal of any organism takes place from within. Yet humans have a special role, a leading role in the renewal, just as humanity had the dominant role in the devastation. Humans can fulfil this role, however, only if human beings move the basic life orientation from a dominant anthropocentrism to a dominant eco-centrism. In effecting this change humanity needs to listen to the voices of Earth and its multitude of living and non-living modes of expression. Humans especially need to hear the creatures of Earth before it is too late, before their voices are stilled forever through extinctions occurring at such a rapid rate. Once gone

²⁷ Cf. Nandhikkara, "Human beings-in-solidarity," 127.

²⁸ Cf. Ervin Laszlo, "Berry and the Shift from the Anthropocentric to the Ecological Age" in *Thomas Berry Dreamer of the Earth* eds. Ervin Laszlo and Allan Combs (Rochester: Inner Traditions, 2011), 125.

they will never be heard again. Extinction is forever.²⁹ Thus the important task of the Church is to become Earth centric. The Earth has its own inner capacity to revive itself. Thus Ecological anthropology demands a realization of the human role in the revival of the Earth. Consequently the most important task of ecological anthropology is the human shift of consciousness of Earth-centric from selfish human-centric to universe-centric.

3.9 INTEGRAL ECO-SPIRITUALITY

The eco-spirituality can cure the cancer of eco crises. The messages conveyed by all religions, if grounded in developing the concept of eco-spirituality, it can be asserted, can cure the cancer of eco-crisis of the present age effectively and positively and for all these we have to build a new relationship with the Earth.³⁰ The creation has the aspect of spirituality. The *CCC* expounds that the worship is inscribed the order of creation (*CCC* 347). Therefore there is a necessity of spirituality in ecological commitments. Pope Francis in *LS* enumerates that more than in ideas and or concepts, the spirituality can motivate to a more passionate concern for the protection of the world. A commitment this lofty cannot be sustained by doctrine alone, without an interior impulse which encourages, motivates, nourishes and gives meaning to individual and communal activity. Admittedly, Christians have not always appropriated and developed the spiritual treasures bestowed by God upon the Church, where the life of the spirit is not disassociated from the body or from nature or from worldly realities, but lived in and with them, in communion with all that surrounds (*LS* 216). Therefore Church's eco-spirituality must recognize the intrinsic value of all creation. If all things have the immortal spirit of God, things have then divine purposes, which are beyond human comprehension. They may still endure in existence in another form, even though humans may erroneously think that they are no longer in existence. Many people are not aware of this imperishable divine spirit in all things, and so have abused nature and exploited it.³¹ Therefore it is ecologically important to develop a spirituality based on the natural world. Berry explains that the

²⁹ Cf. Berry, *The Christian Future and the Fate of the Earth*, 73. Cf. Berry, *Selected Writings on the Earth Community*, 77.

³⁰ Cf. Kalapura, "Environment Crisis," 444.

³¹ Cf. Obijiaku, "The Immortal Divine Spirit," 676.

spirituality of the Earth refers to a quality of the Earth itself, not a human spirituality with special reference to the planet Earth. Earth is the material principle out of which humans are born and from which humanity derive all. Humans come into being in and through Earth. The Earth is the origin, nourishment, educator, healer, and fulfilment. At its core, even human spirituality is Earth derived. The human and the Earth are totally implicated, each in the other. If there is no spirituality in the Earth, then there is no spirituality in humans. Christianity's failure to recognize the Earth's spiritual qualities constitutes a significant challenge.³² Thus it becomes essential to the Catholic ecological ethics to recognize the spirituality of the Earth in the context of universe-centric-ethic.

3.10 THE FUTURE OF CHURCH'S ECOLOGICAL JUSTICE

The Church's social justice in general and ecological justice in particular is based on the fundamental social principles of Catholic social ethics. *Docat* enumerates that with the help of the fundamental social principles Personhood, Solidarity, and Subsidiarity one can understand the structures of society and align them with ethical criteria. Given the particular challenges of the present time, it seems appropriate to add another principle of sustainability. This principle of sustainability relates to and put into action the traditional principles of social ethics with regard to the human living conditions and the survival of the earth itself (*Docat* 263). However it is important to discern the grammar of the creation for a genuine ecology. Pope Francis in *LF* elucidates that faith, on the other hand, by revealing the love of God the Creator, enables us to respect nature all the more, and to discern in it a grammar written by the hand of God and a dwelling place entrusted to our protection and care (*LF* 55). The humans can detect and understand the patterns in the universe. The lawfulness and order as there are organizing patterns in the Universe and in the Earth community that human beings can detect and understand.³³ The principles of the universe are registered in human consciousness. The physical, the chemical, the biological structures of the universe have culminated, through a succession of transformations. These are registered in human

³² Cf. Berry, *The Sacred Universe*, 69.

³³ Cf. Im and Seo, "Gia Earth Justice," 224.

consciousness. In human minds and hearts, the universe has become aware of itself as a vast wonderful mystery.³⁴ The activation of these principles of the universe is vital for the continuation of the human venture. Berry explains certain basic aspects of the universe which were evident to the human mind from its earliest period, but which have been further refined, observed, and scientifically stated in more recent centuries. These governing principles of the universe have controlled the entire evolutionary process from the moment of its explosive origin to the shaping of the Earth, the emergence of life and consciousness, and so through the various ages of human history. The ecological age must now activate these principles in a universal context if the human venture is to continue. These principles on which the universe functions are three differentiation, subjectivity, and communion.³⁵ These principles of the universe can be real productive for catholic ecological action of the Church.

The universe remains dynamic mysterious and unpredictable. The wildness is the order and lawfulness in the Universe remains dynamic, mysterious and unpredictable.³⁶ The ethical principle of differentiation gives importance to diversity. Berry explains that the basic direction of the evolutionary process is toward constant differentiation within a functional order of things. In an acceptable cultural context, humans ought to recognize that the unique properties of each reality determine its absolute value both for the individual and for the community. These are fulfilled in each other. Violation of individual is an assault on the community.³⁷ Differentiation highlights the distinctiveness of every creature and importance of diversity in the universe. Berry's depiction of differentiation emphasizes the radical otherness of creatures from one another and the importance of such diversity. Differentiation highlights the distinctiveness of every species and indeed of every individual creature. Differentiation grants uniqueness to every being, asserting that its individual contribution to the wondrous cosmic story must be

³⁴ Cf. Kelly, "An Integral Eucharistic ecology," 688.

³⁵ Cf. Berry, *The Dream of the Earth*, 44-45.

³⁶ Cf. Im and Seo, "Gia Earth Justice," 224.

³⁷ Cf. Berry, *The Christian Future and the Fate of the Earth*, 120. Cf. Berry, *Selected Writings on the Earth Community*, 168.

respected.³⁸ The ethical principle of differentiation gives importance to the multiform of the reality in the universe that must be respected and protected.

The universe has rights. The Universe is a holism, with values and rights.³⁹ Each individual in the universe has its own inner articulation. Berry explains that each individual is not only different from every other being in the universe but also has its own inner articulation. Each being in its subjective depths carries the numinous mystery whence the universe emerges into being. This, humans might identify as the sacred depth of the individual, one's subjectivity.⁴⁰ Subjectivity stresses the importance of each individual that must be recognized and respected. The subjectivity urges humans to respect each creature, and each habitat as it is composed by various creatures, as its own individually existing entity. Each has its own relation to and resonates with the mystery of the divine. Berry even elevates this to an ethical norm, commenting that the interior articulation of its own reality is the immediate responsibility of every being.⁴¹ Thus the ethical principle of subjectivity is the imperative to respect every individual form in the Earth community and the universe; it is not merely ethical but divinely willed.

The community is the ground reality of morality. As far as the future of Christian ethics is concerned, it may be anchored on the way to community. The context of theologisation is the community, the ground reality for morality.⁴² The universe is a community. The community as everything is related and coexists with everything else.⁴³ The principles of communion emphasises the importance of bonding of the components of the universe. Berry explains that the ethical imperative of communion reminds that the entire universe is bonded together in such a way that the presence of each individual is felt throughout the entire spatial and temporal range of the universe. This capacity for bonding of the components of the universe with each other enables the vast variety of beings to come into existence in that

³⁸ Cf. Scheid, *The Cosmic Common Good*, 74.

³⁹ Cf. Im and Seo, "Gia Earth Justice," 224.

⁴⁰ Cf. Berry, *The Christian Future and the Fate of the Earth*, 120-121. Cf. Berry, *Selected Writings on the Earth Community*, 168.

⁴¹ Cf. Scheid, *The Cosmic Common Good*, 74.

⁴² Cf. Paulachan Kochappilly, "Community, Celebration," 68.

⁴³ Im and Seo, "Gia Earth Justice," 224.

gorgeous profusion.⁴⁴ More than a mutual order of parts, each creatures in the emergent universe is intrinsically designed for relationship, for communion in the community of life to which it belongs. In Berry's ethical vision the integral relationship of each part to the whole and of the whole to each part is the natural description of the capacity of relatedness that belongs to every creature.⁴⁵ The principle of communion describes inter-relatedness and interdependence of the whole reality that all that is in the Earth and universe must be respected and protected.

The three ethical principles of the universe provide genuine ground of ecological ethics. These three basic cosmic principles exist in dynamic relationship to each other. The differentiation allows the other to be truly other, and it challenges and resists all forms of or attempts at absorption in to the self. Subjectivity allows the other to be for itself, just as I am for myself. Subjectivity speaks to the spontaneities of other creatures, the power of the emergent cosmos alive and active in this particular creature and in this particular habit. Communion, being a community of beings in relationship to each other, is the *telos*, but not without the indispensable principles of differentiation, and subjectivity. This tripartite schemata also offers an alternative critique of the planetary forces that imperil Earth. The cosmic process of differentiation, and the irreplaceable articulation of energy that is each creature, therefore represents a kind of divine rebuke of the modern industrial paradigm that prefers monocultures and homogeneity. Subjectivity deepens the sense of rest that each creature may find, knowing that the rest in God is truly the creature's own, in the context of its cosmic home. And communion constitutes a stronger defence of the order of creation because communion is not simply designed by God but is an impulse that lies at the heart of every creature.⁴⁶ Thus these three principles of differentiation, subjectivity and communion can provide a real impetus to Catholic ecological thought.

⁴⁴ Cf. Berry, *The Christian Future and the Fate of the Earth*, 121. Cf. Berry, *Selected Writings on the Earth Community*, 168.

⁴⁵ Cf. Scheid, *The Cosmic Common Good*, 75-76.

⁴⁶ Cf. Scheid, *The Cosmic Common Good*, 76.

3.11 CONCLUSION

On the basis of the New Story of the Universe, Berry proposed his ecological synthesis, the universe-centric approach. The ecological vision in this approach is based on the integral Earth community and ethics as that give expression to the principles of Earth community. The basic ethical norm is the well-being of the comprehensive community and the attainment of human well-being within that community. Berry preserves a critical role for the divine and sacred source of the universe. The uniqueness of Berry's ecology comparing with many of the modern ecologists, is the place that he has given for numinous, the divine. Ecology of Berry ushers the importance of cosmological impetus for the Catholic ecological thought, which can act as a strong foundation for transforming human relationship with the Earth. Berry proposes evolutionary principles for the ecological ethics. These three evolutionary principles of cosmogenesis, creativity and celebration gives Catholic ecological thought moral evolutionary principles to re-establish human-Earth relationship in the context of the universe. The humans have rejected the divinely established order of the universe and are attempting to establish a contrived human order in its place. Therefore, the human-Earth relationship can be brought forth only by adequate understanding of the universe. On the bases of New Story, Berry formulated different phases for ecological conversion; these stages include to reinvent the human, at the species level, with a critical reflection, within the community of life systems, in a time-development context, By means of a story, shared dream experience. The most important part of ecological anthropology of Berry is the call for humans to shift of consciousness to Earth-centric from selfish human-centrism. He also realized the importance of a genuine ecological spirituality in his environmental ethics. The ecological spirituality proposed by Berry is based on spiritual intimacy with Earth. The spirituality of the Earth refers to a quality of the Earth itself, not a human spirituality with special reference to the planet Earth. The three ethical principles of the universe differentiation, subjectivity and communion provide genuine ground of ecological ethics. Thus the ecology of Berry based on the new story of the universe gives a new

realistic and holistic impetus the universe-centric approach to Catholic ecological thought for ecological action.

GENERAL CONCLUSION

The Earth, common home, is imperilled. With increasing clarity, it is observed the extent and the variety of ways in which the systems of Earth that generate and maintain an unparalleled diversity of life are threatened. Human is the cause for the great devastation of the Earth. The sixth report of IPCC A.3 states that the human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heat-waves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened.¹ The theological traditions can no longer shun away from the responsibility of the care for the Earth. The theological traditions have a pivotal role to play at this crisis for two reasons. First, as many religious leaders have argued, the ecological crisis is also a moral crisis. The recurrent inability to curb or even to address ecological threats like climate change is more than a policy failure. It also represents a moral failure. The second reason that religious traditions are paramount for addressing ecological crises, they have long been central in addressing ethical concerns and contributing to a vision of what humanity is and can be.² Thus the challenge before theological traditions is to respond to the ecological crises.

Unfortunately Christian attitudes towards natural world justified the exploitation of the nature. The Christianity concentrated on redemptive spirituality that focused being freed and saved from this deleterious Earth into a heavenly realm. Such concern for the grace of redemption meant that little attention was given to insights available from natural world. This attitude towards the natural world confirmed a discontinuity between the human and non-human that could justify exploitation.³ Berry being concerned about the environment believed that the present world view would not suffice to deal with the environmental crises. Thus he proposed a new world view, called the new story of the universe that would give a good impetus in the pursuit of caring for the environment. The story did not imply simply a passive reception

¹ Cf. IPCC, 2021 *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Report* (Cambridge: Cambridge University Press, 2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf

² Cf. Scheid, *The Cosmic Common Good*, 1-2.

³ Cf. Vanin, "Understanding the Universe as Sacred," 106.

by a listener. Rather, story required an engaged, participatory, mutual interaction in which the story was present, alive, and in movement through teller, telling, and audience. The movement of story was for Berry, therapeutic and transformative.⁴ This universe story based on multidiscipline background brings together the whole universe, by narrating its origin to present day reality of human consciousness. This story clearly describes the very core relationship of all that is in this universe, in which humanity is only a part. This story also shows the mysterious and mystical nature of the universe. The new story of the universe proposed by Berry breaks all the conventional mind set of humanity and make humanity realise the urgency for responsible and concrete action for the future the Earth.

The importance of the new story of the universe stems from the real environmental destructions caused by humanity. It has started to affect the existence of very life on Earth. The Christianity cannot be mute spectators to the reality of the ecological crises. In order to respond to ecological challenges it is inevitable to reassess the churches traditional understanding of the creation. The conventional theology and religion, traditional concepts of God and Trinity are to be properly understood in order to face the challenge of ecological problems. It is also important to redefine human understanding of the universe as mere objects to be used and manipulated. It is ecologically paramount to reinvent the role of human species in creation. Thus bringing about a great shift from human-centered democracy to creation based biocracy. Church who is forerunner in justice issues must recognize the ecological justice issues as important as human justice issues. Hence the new story of the universe becomes relevant in giving an impetus to Christianity to reinvent humanity for the care of the creation and protection of the nature. Berry draws inspiration from the classical theologians such as Augustine and Aquinas especially their concepts of God and the reality in the development of his ecological thinking. The importance of Teilhard Chardin especially his evolutionary understanding of the universe is paramount for in ecological ideas of Berry. The understanding of cosmology, Asian religions, such as Confucianism, Buddhism, and Hinduism played an important role in the

⁴ Cf. John Grim, "Exploring Thomas Berry's Historical Vision," in *The Intellectual Journey of Thomas Berry*, ed. Heather Eaton (New York: Lexington Books, 2014), 19.

formation of holistic ecological vision of Berry. Berry's personal experience of working with indigenous populations and the meadow experience played an important role in the formation of the new story of the universe.

The new story of the universe of Berry has thirteen stages; primordial flaring forth, galaxies, supernovas, sun, living earth, eukaryotes, plants and animals, human emergence, neolithic village, classical civilizations, rise of nations, the modern revelations, and the ecozoic era. This story from the origin of the universe shows that humans as integral with the universe, hence humans are part of this great process of the universe. Thus human cannot ignore the ecological degradation, it affects human existence itself. The eco-principles based on the new story of the universe of Berry provide the impetus for the ecological ethics. They lay the foundation for universe-centric-ethic. These principles are based on the Earth principles itself. The understanding of the psychic-spiritual nature of the universe necessitates human respect for the universe in general and the Earth in particular. It also highlights the reality that human as integral with the universe, not an addendum. The new story of the universe also reveals the universe as the bearer of religious experience. The ecological importance of understanding of the Earth as a living planet demands a great respect and care for the Earth. The universe based jurisprudence and reinventing human in the context of the universe brings forth the importance of the universe-centric ecology. The evolutionary principles of cosmogenesis, creativity and celebration pave new foundation for universe-centric ecological ethic. The principles of differentiation, subjectivity and communion on the basis of the nature of the universe reveal the guiding principles that could form basis for genuine ecological action.

Berry is a pioneer in the field of modern Catholic ecological field. Berry tried to develop pedagogy by which ecological issues can be addressed and solution can sought even before environmental justice issues were seriously taken up by the Church. Though the Catholic Ecological thought has a steady advancement in the Pontificate of Popes John Paul II, Benedict XVI and Francis, the contribution of Berry to Catholic ecological ethics is very noteworthy. Berry basing himself on Christian background suggested ways in which the Christianity could respond in ecological endeavour. He acknowledged the core issue was the misunderstanding of humanity about the

nature. Modern technology based on anthropocentric attitude is the real cause for environmental destruction. It is only by recovering the original role of the Earth and universe as in divine plan would be the real solution to the ecological crises. The real cause for the environmental degradation is the lack of proper human understanding of the universe. The traditional understanding of the universe is that of collection of objects to be exploited. The Christianity has an important role to play in bringing forth the real, holistic, spiritual understanding of the universe. It is only a factual understanding of the universe can bring forth concrete action in the area of environmental protection. The problems of anthropocentrism, consumerism, industrialization, and other evils that cause the degradation of the Earth is the result of falsehood and misinterpretation. The Christianity has a unique role in the areas of ecological action, especially the dream of the Earth. The great work of Christianity is to accomplish the authentic ecological action by identifying the ecological challenges. The role of the Church is fostering human-Earth relations in the context of the universe by being open to the modern and scientific understanding of the universe.

This universe-centric approach provides a new impetus to Catholic ecological ethics to fulfil Church's ecological dream. On the basis of the new story of the universe Berry proposed ecological synthesis that is Theo-centric and cosmic vision. The genuine ecological conversion in the context of the universe is achieved by the stages of reinventing the human, at the species level, with a critical reflection, within the community of life systems, in a time-development context, by means of a story, and shared dream experience. Humanity has an important role based on the Earth-sensitivity for ecological action. The most important aspect of ecological anthropology is the shift of consciousness to Earth-centric from selfish human-centrism. The ecological spirituality is important in universe-centric environmental ethics. The ecological spirituality is based on the principles of spiritual intimacy with nature, divine revelation visible also in the nature, spirituality concerned for the devastated Earth and recognizing the spirituality of the Earth. The evolutionary principles of cosmogenesis, creativity and celebration recognize the principles that guide the nature of the universe. The universe based principles of differentiation, subjectivity and communion provides the basis

for the Christian environmental ethics. The universe-centric approach based on the new story of the universe is genuinely a new realistic impetus to Catholic ecological thought for Church's ecological action.

NEW PERSPECTIVES

The most significant aspect of universe-centric approach is that it is capable of providing new perspectives for Catholic ecological thought. First of all, Berry states that the ecological community is not subordinate to the human community. Nor is the ecological imperative derivative from human ethics. Rather, human ethics are derivative from the ecological imperative. The basic ethical norm is the well-being of the comprehensive community and the attainment of human well-being within that community. Hence there is a need to redefine Catholic ecological ethics from human perspective to Earth perspective.

Second important aspect is that Berry was a renovator, reminding his students of the great insights of the past. He was also an innovator, making connections between economics, culture, and science that have given new life to the field of environmental ethics. Thus universe-centric approach can provide a multi-cultural, multi-discipline, and multi-religious perspective to ecological ethics. Another important aspect of universe-centric approach is that Berry is able to describe cosmos's intrinsic goodness in a way that can find affirmation and approval both in non-Christian religious traditions and among environmentalists. Berry weaves the scientific data into a mythic, and revelatory story with the power to transform humanity and human relationship to the Earth. Thus Berry's ecology provides a cosmological and scientific perspective to ecological justice. The universe-centric approach is also based on evolutionary principles. The three evolutionary principles of cosmogenesis, creativity and celebration can provide Catholic ecological thought an evolutionary perspective.

Universe-centric approach also provides an Earth-based perspective to the Church. The talk of the role of the Church in the twenty-first century must begin with the natural world on which humanity depends for physical and spiritual sustenance. The basic question is no longer human-divine

relations, nor is inter-human relations. The basic issue is human-Earth relations. Yet another new perspective of universe-centric approach is the stages of ecological conversion. Berry has suggested stage by stage phases by which this ecological conversion can be attained. These stages include reinventing the human, at the species level, with a critical reflection, within the community of life systems, in a time-development context, By means of a story, shared dream experience. Another important perspective of universe-centric approach is the Earth based anthropology that the task of renewing the Earth belongs to Earth, as the renewal of any organism takes place from within. The humans have a special role, a leading role in the renewal, just as humanity had the dominant role in the devastation. Humans can fulfil this role only by moving basic human life orientation from a dominant anthropocentrism to a dominant eco-centrism. Another central characteristic of the universe-centric approach is an integral eco-spiritual perspective for real ecological action. This perspective requires moving from a spirituality of alienation of natural world to spirituality of intimacy with the natural world. Another most important contribution to universe-centric approach is the three ecological ethical principles. The ethical formation is governed by these three basic principles. They are differentiation, subjectivity and communion. The present course is a violation of each of these three principles in their most primordial expression. Thus the universe-centric approach based on the new story of the universe provides a universe based impetus for ecological action.

FINDINGS AND INTERPRETATIONS

One of the most important aspects of the universe-centric approach is the appreciation of psychic and spiritual nature of the universe. The primary contribution of the new story of the universe lies in the recognition of the psychic and spiritual nature of the universe. The consequence of this understanding is that universe is not mere physical reality to be used and abused. It must be respected and preserved. So the principle of eco-preservation is properly explained and highlighted. The principle of eco-preservation is an important ecological concept. Though there are different laws of the land for the preservation of the ecology, most of the time these

laws are ignored. So only a proper understanding of the universe by humans can bring a radical change in attitude and action. Thus the universe-centric approach can be great impetuses to bring about this attitudinal change among humanity, hence eco-preservation become a reality.

The second important ecological finding of the universe-centric approach is the reinventing of human in the context of the universe. The human is neither an addendum nor an intrusion into the universe. Humans are quintessentially integral with the universe. The next ecological principle that can be derived from the universe-centric approach is the eco-centric anthropology in place of modern misguided anthropology. The modern tyrannical anthropological attitudes have caused great devastation to the universe as a whole. The creation around us are seen as objects to be exploited for the sake of the human being. It is high time that original understanding of human being is narrated in the context of the universe. The universe-centric-ethic provides a proper eco-centric anthropology.

The third important finding of the universe-centric approach is the prominence given to the planet Earth. For our present Earth, is not Earth as it always was and always will be. This unique mode of Earth-being is expressed in the number of diversity of living forms that exist on Earth, living forms so integral to one another and with the structure and functioning of the planet that the Earth can be appropriately spoken as a Living Planet. Thus the next ecological principle of the universe-centric-ethics is the importance of the planet Earth. The principle of Earth-sensitivity become inevitable in all activities of human beings.

The fourth ecological finding of the universe-centric-approach is the spiritual dimension of the universe. Since the human religious capacities emerges out of this cosmological process, then the universe itself can be considered the primary bearer of the religious experience. The universe is the primary referent in all human understanding. Thus another ecological principle that can be derived from the new story of the universe is the eco-spirituality. It is not mere eco-sensitive spirituality, but recognizing the religious nature of the universe. The spirituality of the Earth refers to a quality of the Earth itself, not a human spirituality with special reference to the planet Earth. The

recognition of eco-spirituality enables a great respect towards the Earth and it becomes inevitable to respect and preserve it.

The fifth important finding of the universe-centric approach is the reinventing human with the universe. Berry explains that this historical mission can be achieved by reinvent the human, at the species level, with critical reflection, within the community of life systems, in a time-development context, by means of a story and shared dream experience. The important ecological principle based on reinventing human through the new story of the universe is the ecological conversion. The ecological conversion of humans can be actualized by these stages suggested by Berry. This becomes important in ecological action to be in one ecological community.

The sixth important finding is the three principles of evolution for ecological ethics. They are cosmogenesis, creativity, and celebration. The evolutionary principle of cosmogenesis, creativity and celebration by Berry highlighted the need for human acknowledgement and appreciation of universe's capacity of self-organization. These three evolutionary principles of cosmogenesis, creativity and celebration of Berry gives Catholic ecological thought moral evolutionary principles to re-establish human-Earth relationship in the context of the universe.

Finally, the ethical formation is governed three basic principles of the universe. They are differentiation, subjectivity, and communion. The differentiation is an alternative way of speaking about the diversity of creatures in creation. Berry formulated a new ecological principle of differentiation based on the new story of the universe. The differentiation allows the other to be truly other, and it challenges and resists all forms of or attempts at absorption in to the self. Subjectivity as a second imperative Berry derived from the cosmological process that each individual is not only different from every other being in the universe but also has its own inner articulation. Berry formulated a new ecological principle called subjectivity. Subjectivity allows the other to be for itself. Subjectivity speaks to the spontaneities of other creatures, the power of the emergent cosmos alive and active in this particular creature and in this particular habit. The third ethical imperative of communion reminds that the entire universe is bonded together in such way that the presence of each individual is felt throughout the entire

spatial and temporal range of the universe. Communion is being a community of beings in relationship to each other. Berry formulated the three ecological principles of differentiation, subjectivity, and communion based on the new story of the universe. These ecological principles are based on the real nature of the universe. Thus recognition of these principles is the recognition of the reality of the universe, which is accomplishes universe centred ecological ethics.

The universe-centric approach based on Berry's new story of the universe opens up new areas for further research in the area of environmental ethics. The perspectives of the universe-centric ethics such as Earth-centric anthropology and eco-spirituality open up new window for research and study. The Theo-centric, Cosmo-centric and evolutionary centric perspective of ecology is a new area to be analysed. Another important area for future research both in theology and ecology is the Christo-centric-ecological approach.

Primarily, the universe-centric approach demands that first priority should be given to the environment with regard to all human endeavours and activities. Secondly the Earth must be respected. The Earth is not mere collection of objects to be used and abused for human wants. Thirdly the humans must acknowledge and appreciate the universe's capacity of self-organization. Humanity must realize that human origin and existence is possible in the process of the universe and humanity has no existence outside the universe. Fourthly the principles of the universe must become the guiding principles of humanity rather than human principles dictating the fate of the Earth and the universe. Finally the universe-centric approach illuminates the Christian approach to the nature. The Christianity in general and Church in particular cannot shun away from the responsibility for the environment. The Church could become a strong instrument in healing the distraught caused to the Earth. Church could also become leading beacon for the world in the area of environmental care and protection.

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