

KÁROLI GÁSPÁR UNIVERSITY OF THE REFORMED CHURCH IN HUNGARY
FACULTY OF THEOLOGY

SUSTAINABILITY
ENVIRONMENTAL THEOLOGY FROM THE PERSPECTIVE OF
CREATION, ECOLOGY AND ESCHATOLOGY

DISSERTATION
SUBMITTED IN FULFILLMENT OF THE REQUIREMENTS FOR
THE DOCTOR OF PHILOSOPHY DEGREE IN
SYSTEMATIC THEOLOGY

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BUDAPEST, HUNGARY, EUROPEAN UNION

MARCH 24, 2010

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*"IS IT NOT ENOUGH FOR YOU TO FEED ON THE GOOD PASTURE?
MUST YOU ALSO TRAMPLE THE REST OF YOUR PASTURE WITH YOUR FEET?
IS IT NOT ENOUGH FOR YOU TO DRINK CLEAR WATER?
MUST YOU ALSO MUDDY THE REST WITH YOUR FEET?"*
(EZEKIEL 34:18).

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ABSTRACT

SUSTAINABILITY
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This dissertation argues that sustainability is a vital component of the Christian faith and adds a significant element to the complexity of environmental theology. The approximation of the context is from the Western world and the perspective is from creation, ecology and eschatology. Drawing on John Calvin, Karl Barth, and Jürgen Moltmann, this study constructs a creational, providential and eschatological model of sustainability that endorses a new position towards honoring creation.

After identifying the global crisis in the form of climate change due to industrialized civilization, the intricacy of humanity is analyzed within the framework of historical worldviews. The line of reasoning is that ecology is a subject handled within the framework of theology, and therefore, it needs a new Biblically founded horizon to see creation and its future fullness side by side in order to recognize the endangered unity of nature and history.

The ecosystem and humanity are interrelated and interdependent. Consequently, humanity's actions are prerequisites for the health of the natural environment and the wellbeing of creation. Conversely, responsibility goes along with

reflecting the image of God. This is the point where sustainability, as a Christian response, enters into theology. The theology of sustainability is therefore, an ethical and an eschatological answer to what has been given to humanity, and how that given authority has been handled.

Christian safeguarding, conservation, or efforts to save the environment therefore, are not just actions fulfilling ecological goals, but rather, they are actions pointing towards God that will be fulfilled in God at the end of time. Those engaging in these actions will be participating in God's ongoing creation as inheritors of His Kingdom. In this context, managing sustainability is a Christian process of obedience, by submitting humanity's will to the will of the Creator.

For that reason, from the perspective of the future, any ecological approach or environmental effort cannot be only scientifically viewed and anthropocentrically based. On the contrary, these actions of humanity must testify the acts of God in His creation and redemption. Thus, sustainability is an action of assistance to God's final plan, which is not theoretical. Instead, sustainability is a practical action-based, enduring way of conduct for the purpose of all creation, which is a new life, based on the promise of a new heaven and a new earth.

What kind of new heaven and new earth is coming? This is up to God's sovereign authority. Humanity's accountability is the ethical handover to God, of what was credited to it by Him. In this order, environmental theology must point in the direction of the eschatological dimensions of hope towards eternal life, and the Kingdom of God.

This dissertation's perspective consequently is neither established in linear timing, nor endorsed by limited actions. It is about God's desire, what sustainability represents, and what purpose it would like to serve, which is to prepare the way for Christ's second coming and place ecology and environmentalism into the perspective of eschatology.

Although this dissertation's concrete area of exploration and perspective is academic, the principal objective is to present the Christian Church with a new and practical solution by helping to fulfill Her mission on this ever-changing world. This new mission is not just to better protect this Earth; at the same time, the new mission is to truly proclaim the Gospel through a new and distinguished understanding and application of sustainability in the context of theology.

ACKNOWLEDGEMENTS

This dissertation "*Sustainability – Environmental Theology from the Perspective of Creation, Ecology and Eschatology*" was presented to the Károli Gáspár University of the Reformed Church in Hungary. The work was conducted under the careful supervision of Professor Ferenc Szűcs, Ph.D., former Rector of the Károli Gáspár University, and Chair of the Department of Systematic Theology and Ecumenical Studies in the Faculty of Theology.

The initial concentration of looking at "*Sustainability – Environmental Theology from the Perspective of Creation, Ecology and Eschatology*" was driven by a desire to better understand the challenge of managing sustainability in organizations, particularly in the Christian Church. The research was primarily carried out in the city of Redding, California, United States, and at the Károli Gáspár University of the Reformed Church in Hungary, Budapest, Hungary, where resources and tools for exploration of the project were attainable.

First and foremost, I thank God for giving me the opportunity for this study, for providing me with the strength to compose this dissertation, and for constantly guiding me through this process. Before beginning this research, I served in Christian ministries in both Europe and in the United States for nearly thirty years. I feel that it is a true blessing and a gracious gift from the Almighty to have the opportunity to put my observations based on all that I have experienced into words. My purpose with this work is to reveal sustainability in the context of Environmental Theology.

Special appreciation is extended to my family. First and foremost, I would like to thank my wife Magdolna, for her constant encouragement as well as patient support, without which I could not have completed my study. Furthermore, I would like

to thank our daughters, Réka and Nóra, for their enthusiasm in proofreading this paper. I would also like to express my gratitude to my parents, Gábor and Anna, posthumous to my stepfather Dr. Zsigmond Mézes, a medical doctor and theologian at the Bethesda Hospital in Budapest, and my step-grandfather Dr. Károly Dobos, a pastor and leader of the Leprosy Mission of the Reformed Church in Hungary, for my life journey and their examples of faith in my younger years. Also, I would like to thank my former schoolteachers, Dr. Attila Kálmán, Dr. István Jelenits, Dr. János Gonda, and my former youth pastor Rev. Tivadar Pánczél for showing me courage and commitment. Finally, sincere appreciation is given to my dear friends David and Joan Trotter, Daniel and Angie Saylor, Bob and Helen Morris, and George and Jan Bolash for their support, prayers, and love.

CHAPTER 1.

INTRODUCTION

1.1. THE CONTEXT OF THE DISSERTATION

1.1.1. THE CENTRAL POINT

The central point of this dissertation is to embrace the understanding of sustainability¹ within the context of theology.

The initial meaning of sustainability is the capacity to endure. For humanity, it is associated with the maintenance and preservation of life, within the framework of the environment, natural world, and resources. Sustainability, by the 21st century has been applied to almost every aspect of earthly life. The term became popularized in 1987 by the Brundtland Commission of the United Nations. However, this definition is not universally accepted, since sustainability's goals and how these goals are to be achieved have not yet been clearly developed.

Although accomplishing a sustainable way of being will enable the Earth to continue supporting human life as it is known today, from a theological perspective, the term has far more meanings than what it carries nowadays. This dissertation would like to unfold the significance of sustainability from a Biblical perspective, by demonstrating the power of transforming knowledge and faith about humanity's relationship with the Creator and the rest of Creation; this will also provide a basis for envisioning a new future. This new future will be given to humankind by Jesus Christ, because "*in keeping with his promise we are looking forward to a new heaven and a new earth, the home of*

¹ United Nations General Assembly, 96th plenary meeting, December 11, 1987, 42/187. *Report of the World Commission on Environment and Development, Sustainability: "Meeting the needs of the present without compromising the ability of future generations to meet their own needs"*. United Nations Documents, <http://www.un.org/documents/ga/res/42/ares42-187.htm>
Accessed on: 1-6-2010

righteousness."² Therefore, sustainability is not just some kind of preservation of this present life. Moreover, it is a preparation of what a new heaven and a new earth will bring as God's future arrangement.

The path, which leads to this future, is nothing short of reconciliation, for the reason that humans must first find peace with each other, with humanity itself, and with God. As Pope Benedict XVI said, *"if you want to cultivate peace, protect creation. The quest for peace by people of good will surely would become easier if all acknowledge the indivisible relationship between God, human beings and the whole of creation."*³

From an academic point of view, the interaction between sustainability and the environment will be demonstrated.⁴ In order to do so, Environmental Theology⁵, as a general term is applied to describe the physical and spiritual worldviews and the ethics associated with them. However, it is critical to notice, that a description or operational definition for Environmental Theology is not yet available⁶. In this context, Environmental Theology focuses on the interrelationships of religion and nature, especially concentrating on environmental concerns. The basic objective of Environmental Theology is to understand God's will for His creation and the association between religious worldviews and the development of nature through humankind. In

² 2 Peter 3:13

³ Benedict XVI, For the celebration of the World Day of Peace, Vatican January 1st, 2010 § 14. Holy See, Vatican Archive http://www.vatican.va/holy_father/benedict_xvi/messages/peace/documents/hf_ben-xvi_mes_20091208_xliii-world-day-peace_en.html

⁴ Merriam-Webster Dictionary, Merriam-Webster, Inc. Springfield, MA, 2008, Environment: *"The complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival"*.

⁵ An Introductory Dictionary of Theology and Religious Studies, Liturgical Press, Collegeville, MN, 2007, pg.389, Environmental Theology: *"look at the relationship of the world's religious traditions and the environment throughout their sacred texts, the histories of the different traditions, and their intersection with contemporary reflections on the environment."*

⁶ Jacobus, Robert J., *Defining Environmental Theology*, West Virginia University, Morgantown, West Virginia, 2001, pg.14

this process, the Christian Church may be renewed through the principles of sustainability, which focus on a responsible future.

This dissertation lays down this subject in three areas: ecology, sustainability, and theology as an approach to environmentalism in general, and as the basic foundation for "*Sustainability – Environmental Theology from the Perspective of Creation, Ecology and Eschatology.*"

This paper is composed of some distinct parts. In the first chapter, a discussion is made about how the world and the Church are in contrast in order to demonstrate their development. In the next few chapters, several topics are explained with regard to environmental theology: The second chapter examines the context of ecology. The third chapter outlines the framework for the theology of creation, providence, eschatology, and ethics. The fourth chapter focuses on sustainability. Finally, in the fifth chapter, a conclusion is drawn.

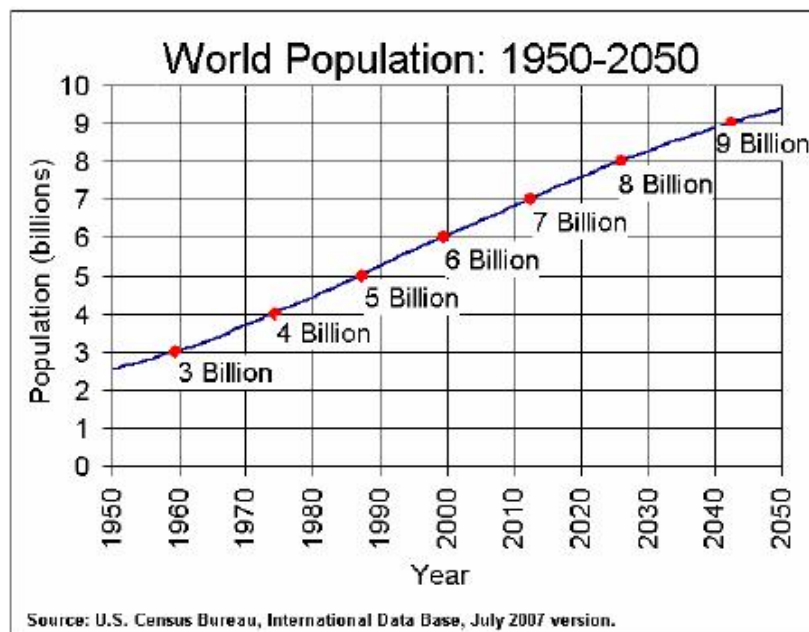
It is also apparent that God also speaks to humankind through global, historical, and environmental conditions and circumstances. These concerns in current times, take place in the form of global warming, climate change, soil degradation, water shortages, peak oil, pollution, political and social destabilization, overpopulation, overconsumption of raw materials, and an unsustainable lifestyle, just to name the main directions. Therefore, as a consequence of human actions and behavior, "*the Church has a responsibility towards creation, and She considers it her duty to exercise that responsibility in public life, in order to protect earth, water and air as gifts of God the Creator meant for everyone, and above all to save mankind from the danger of self-destruction.*"⁷

⁷ Benedict XVI, For the celebration of the World Day of Peace, Vatican January 1st, 2010 § 12. Holy See, Vatican Archive http://www.vatican.va/holy_father/benedict_xvi/messages/peace/documents/hf_ben-xvi_mes_20091208_xliiii-world-day-peace_en.html

In this context, evidence will be provided to demonstrate that Christianity has a global responsibility in helping to move the Church and human society toward wisely managing sustainability.

1.1.2. THE WORLD

The world population increased from 3 billion in 1959 to 6 billion by 1999, which demonstrates that the population doubled in just 40 years. In July, 2007, the world's population had reached over 6.6 billion. The United States Census Bureau's projection implies that population growth will continue throughout the 21st century, although more slowly. The world population is projected to grow from 6 billion in 1999 to 9 billion by 2042, which will be an increase of 50 percent in 43 years. (Image⁸)



The growth of the world's population is rapid. While population growth rates have slowed since their peak in the 1960s, the numbers being added to the population each year continue to be substantial. That magnitude of increase, added to

⁸ U.S. Census Bureau, Washington DC, *International Data Base*, 2009, <http://www.census.gov/ipc/www/idb/worldpopinfo.php> Accessed: 1-12-2010

the unprecedented growth that has occurred in the last half-century, will be felt by all aspects of life. It will further stress already strained ecological systems and worsen poverty in much of the developing world, thus aggravating threats to international security. These impacts are also clearly reaching the Church. Societies are changing by the birth of new generations as well as immigration. Transformation is taking place in every level of human life and can be seen in environmental change, poverty variations, and varying international security concerns. These are all fundamental forces shaping the life of all people, including the Church Herself.

The United Nations Population Fund estimated massive rural to urban migration in much of the developing world. These numbers are stunning⁹. In 1999, there were 125 million people living outside the countries of their origin. This number included undocumented migrants, refugees, and all other types of people who permanently left their birthplace. This 125 million however, represented just over 2 percent of the world's population. However, by 2005, migration from rural to urban areas increased to more than half of the world's population. At the end of the 20th century, already 74 percent of Latin American and Caribbean populations lived in urban areas. In addition, the same is true for 73 percent of people in Europe, and more than 75 percent of people in Australia, Canada, New Zealand, and the United States. By the turn of the 21st century, 261 cities in developing countries had populations over 1 million, compared with 213 in the mid-1990s. In 1994, only 15 years ago, there were 14 'mega-cities' on the planet, with more than 10 million inhabitants. This number is predicted to double by 2015.

⁹ United Nations Population Fund. *The Day of Six Billion*, (Database) New York, NY, , <http://www.unfpa.org/6billion/> Accessed on 1-13-2010

Also, overwhelmed water treatment systems, resulting in water pollution¹⁰ are leading to intolerable health conditions for many people. On a global basis, emissions of greenhouse gases are rising. Given this trend, many scientists believe that global warming¹¹ will accelerate during this century, with consequences including rising sea levels, growing weather severity, and disruption of agriculture. Given the trends in population, energy and resource consumption, combined with technological innovations, the adverse human impact on the global ecosystem could triple or quadruple by the year 2050.¹² Its impact on churches is incalculable because the church is simply not ready to deal theologically or practically with such a massive population change and all of its consequences.

Population growth¹³ intensifies poverty in developing countries by for example, generating a high ratio of dependent children for each working adult. This new situation brings about a relatively high percentage of income being spent on immediate survival needs. These basic needs are food, housing, and clothing. As a consequence, people are left with little money for the purchase of optional merchandise, investment into the economy, or spending on education and infrastructure. This will lead to the lack of available capital, which will continue to disable many developing countries to expand their economies and moderate poverty. Only about 20 percent of the current world's population has a sufficient standard of living. The other 80 percent live in conditions ranging from mild deficit to severe shortage. Since it is projected that more

¹⁰ U.S. Environmental Protection Agency, Washington DC, 2008, <http://www.epa.gov/OW-OWM.html/wpollu.htm> Accessed on 11-1-2009

¹¹ Intergovernmental Panel on Climate Change, Geneva 2, Switzerland, 2009, <http://www.ipcc.ch/> Accessed on 11-1-2009

¹² Population Media Center, Shelburne, VT, 2008, <http://www.populationmedia.org>

¹³ Ibid.

than 90 percent of future population growth will occur in less developed countries, it is quite evident, that a great imbalance is likely to be inescapable.

While the population is increasing, it also contributes to economic stagnation through its disappointing effect on capital formation. With growing numbers of young people attempting to enter the labor force¹⁴, many developing countries have extraordinarily high levels of unemployment. Political instability is generated by high rates of unemployment, which leads to the rise of severe political tensions that ultimately threaten national as well as international security.

As globalization spreads across the world, wealthier countries and territories find it more and more difficult to protect themselves from threats to their own security. As a global trend, motivated by poverty, violence or terrorism, people leave their homes seeking places of safety in prosperous areas and countries. *"Growth of refugee and migrant populations are contributing to political instability and economic dislocation in many countries. Intelligence agencies in the U.S. and elsewhere have long recognized the implications of population growth for international security."*¹⁵

One of the strongest forces holding Western countries together is the self-centered way of life. These societies have shown no tendency and willingness to undergo a dramatic decline in their own standard of living. At the same time, in many countries, shortages of water and food are at a crisis point. At least 400 million people

¹⁴ US Census Bureau, *Labor Force Statistics*, Washington DC, 2008, <http://www.census.gov/hhes/www/laborfor/laborforce.html>

¹⁵ Population Media Center, Shelburne, VT, 2008, <http://www.populationmedia.org>

live in regions with severe water and food shortages.¹⁶ By the year 2050, this number is projected to be approximately two billion.

In conclusion, the world's population is growing rapidly and as a result, it is already witnessing severe starvation, economic dislocation, and even wars for water, food, and the energy supply. This situation will worsen as the world tries to continue meeting the demands in the next decades.

1.1.3. THE CHURCH

In this postmodern world, the course of the Church in the Western world is in decline. While the world population doubled between 1960 and 2000,¹⁷ Christianity worldwide remained the same proportionally. About one third of the total world population is Christian,¹⁸ and Christianity has the same growth rate (2.3%) as the world. However, Islam has a growth rate of 2.9% per year, and by 2025, it will exceed Christianity worldwide by 5%.¹⁹ However, there is no agreement or clear understanding about future trends in Christianity and Islam among major sources, like the U.S. Center for World Mission, the UK Christian Handbook, the World Christian Encyclopedia, the International Bulletin of Missionary Research, or individual scholars like David B. Barrett, Samuel Huntington, or John Gary. On the other hand, it is astonishing to consider that already in 2008, the Vatican announced, that "*For the first*

¹⁶ Food and Agriculture Organization of the United Nations, New York, NY, 2008, <http://www.fao.org> Accessed on: 12-10-2009

¹⁷ U.S. Census Bureau, International Database, Washington DC, July 2007, <http://www.census.gov/ipc/www/> Accessed on 11-1-2009

¹⁸ Hunter, Preston, Adherents, Dallas, TX, *Worldwide Percentage of Adherents by Religion*; 2005 Chart, http://www.adherents.com/Religions_By_Adherents.html

¹⁹ Canadian Society of Muslims, Toronto, ON, Canada, *Muslim Population Statistics from the Canadian Society of Muslims*, 2007 <http://muslim-canada.org/muslimstats.html>, 2007

time in history, we are no longer at the top: Muslims have overtaken us."²⁰ Thus, Islam is now the world's largest single religious denomination. Furthermore, a surprising trend will become evident among Christians. The total number of Christians are already dispersed quite differently than they were in the past. Although Christianity is declining among Western nations, it is growing in Africa, Asia, and Latin America so much, that "by 2050, only about one-fifth of the world's 3 billion Christians will be non-Hispanic Whites. Soon, the phrase 'a White Christian' may sound like a curious oxymoron, as mildly surprising as 'a Swedish Buddhist'."²¹ Unfortunately, Western consciousness has neither realized this rapid growth of Christianity in Africa, Asia, and Latin America, nor the globalization of Christianity in general. Jenkins emphasizes, that within a few decades, Kinshasa, Buenos Aires, Addis Ababa, and Manila will replace Rome, Athens, Paris, London, and New York as the focal points of the Church.

By focusing on the Western societies, the Church has become so deeply attached to Her past structure in the midst of a changing society that She is ignorant toward substantial renewal, - Douglass phrases this behavior as a "*disobedience against God*"²² - which triggers loss in membership and attendance, weakens results in outreach toward those who are considered outsiders by the organized Church, and helps facilitate the growing number of those who turn to unorganized Christian groups, or non-Christian religion. Some U.S. statistics are available on this matter: "*The percentage of Catholics who say they attend Mass every week is steadily declining, from 44% of all U.S. Catholics in 1987, to 33% in 2005.*"²³ The Barna Group's survey also

²⁰ Owen, Richard, *Islam overtakes Catholicism as world's largest religion*, Times, March 31, 2008, (Article), <http://www.timesonline.co.uk/tol/news/world/article3653800.ec>

²¹ Jenkins, Philip, *The Next Christendom: The Coming of Global Christianity*, Oxford University Press, New York, NY, 2002, pg.3.

²² Douglass, Klaus, *Az Új Reformáció*, (New Reformation) Kálvin Press, Budapest, 2002, pg.17.

²³ Lewis, Adrienne, *American Catholics: Gender, Generation and Commitment*, USA TODAY, McLean, VA, November 7th 2004, Issue.

shows that "half of Americans believe the Christian faith no longer has a lock on people's hearts. Overall, 50% of the adults interviewed agreed that Christianity is no longer the faith that Americans automatically accept as their personal faith."²⁴ Also, confidence in religious institutions has hit an all-time low. From 1973 to the mid-1980s, religious institutions obtained many ratings above 60%. Ratings suffered in 1989 due to the televangelist scandals²⁵ involving embezzlement and sexual improprieties by Jimmy Swaggart, Jim Baaker, Ted Haggard, and other Christian leaders. Confidence dropped to 52%, which is a 30-year low. In 2001, it had risen to 60%, but by 2002, it had once again decreased to 45%, which shows a drop of 15 percentage points in one year. This represents a 20-year low.²⁶ "Since 1991, the adult population in the United States has grown by 15%. During that same period, the number of adults who do not attend church has nearly doubled, rising from 39 million to 75 million - a 92% increase!"²⁷ There are more Americans who say they are not affiliated with any organized religion than there are Episcopalians, Methodists, and Lutherans taken together.²⁸

Looking at this path, the word 'ecclesia', "with its two meanings of local and universal"²⁹ helps to explain the distance and difference between what is called the visible and the invisible Church. The attributes of the Church (*attributae ecclesiae*) in

²⁴ Barna Group Inc. Ventura, CA, "Christianity is No Longer American's Default Faith" Research Data, January 12, 2009, <http://www.barna.org/barna-update/article/12-faithspirituality/15-christianity-is-no-longer-americans-default-faith>

²⁵ Global Oneness, Jelsoft Enterprises Ltd. (Web archive) Accessed on 1-14-2010 http://www.experiencefestival.com/christian_teleevangelist_scandals

²⁶ Gallup Poll, Winseman, Albert L., *Faith Renewed? Confidence in Religion Rises*, June 22, 2004, <http://www.gallup.com/poll/12088/Faith-Renewed-Confidence-Religion-Rises.aspx> Accessed on 1-14-2010

²⁷ Barna Group Inc. Ventura, CA, "Number of Unchurched Adults Has Nearly Doubled Since 1991" Research Data, May 4, 2004, <http://www.barna.org/barna-update/article/5-barna-update/140-number-of-unchurched-adults-has-nearly-doubled-since-1991>

²⁸ Grossman, Cathy, *Charting the Unchurched in America*, USA Today, (Newspaper) March 7, 2002 Issue

²⁹ Cressey, Martin H., *Local Church and Universal Church*, J. Knox Series, Geneva 2002, p. 135

the universal form, declare that God is the only one whom the Church is visible to from all aspects. He knows who has membership in His Church. Moreover, the recognition of the visible Church is in the Sacraments and the clear proclamation of the Gospel. (*notae ecclesiae*)³⁰

Since the visible Church exists only through its congregations, their way of representing the invisible, almighty God is fundamental. This sheds light on the dilemma that the Church in the 21st century struggles with how it is possible to faithfully and successfully represents God, live an authentic Christian life, and fulfill God's requirement for His Church. In this case, it is imperative to ask, whom does the Church consist of? Calvin answers this question by describing the Church as "*the congregation of elect people*"³¹ which is based on "*the secret choice of God.*"³² Calvin continues to explain that "*hence, as it is necessary to believe the invisible Church, which is manifest to the eye of God only, so we are also enjoined to regard this Church which is so called with reference to man, and to cultivate its communion.*"³³ Niesel interprets this representation based on Calvin's notion of the invisible Church, by seeing the invisible Church as the permanent critic of the visible one.³⁴

This representation must be more than just a display of all that Christianity can offer! There is no longer a natural and historical need among '*the buyers*' in the '*market of values*'. It is not enough to '*sell the same product*' by defending the religion, keeping the traditions alive, and moving on with an unchanged form of Church life. The Church no longer holds a monopoly. There are other vendors as well, who all offer the same looking values with an even more attractive package to those who are in need of

³⁰ Calvin, John, Institution IV. 1.10.

³¹ Ibid. IV. 1.2.

³² Ibid.

³³ Ibid. IV. 1.7.

³⁴ Niesel, Wilhelm, *The Theology of Calvin*, Library of Ecclesiastical History, Lutterworth Press, Cambridge, England, September 2002, pg.191-194

direction, understanding, a boost in self-esteem, comfort, consolation, attention, and love. These new vendors are not just atheist with money and pleasure-centered teachings. The challengers of the Christian faith are not only those religions who reject Jesus Christ, but also those that claim to be Christian, but either weaken the Biblical teachings or choose only those teachings that they consider attractive. The individuals searching for the previously stated values are all potential '*customers*' of the Church but also of the other vendors. The Church in Western societies has become only one option among many others. In addition, as many of these '*vendors*', the Church is also being tempted to '*convert resources into cash*' by watering down values or holding fast to traditions. At the same time, in recent history, an unprecedented wave of demographic alteration, political and economical transformation, sociological restructuring, cultural, social, mental, and technological changes are taking place, and all of these have unexpectedly struck the leaders and the members of the local Church. In this real and dangerous situation, it is crucial to ask the same question over and over again: what is the Church?

Both the local and the universal Church, since they are a human organization, also develop strategic plans, human resources, leadership concepts, conflict management tactics, and coordination as well as all aspects of leadership and management. However, they require a whole new and different approach to understanding, reacting to, leading, and organizing the local Church as a denomination, but also as a body. All of these issues require not just a mechanical answer, but also more importantly, one that reflects a combination of management, leadership, visionary, and theological concerns.

In this context, Christianity is not as competitive worldwide as it used to be, and even sects, cults, and other non-Christian groups are gaining interest and membership rapidly. In Western societies, reasonable data is available from the U.S.

explaining that Americans are deeply interested in faith and spirituality, but not necessarily in Christianity. "*The Christian faith is not as attractive to Americans as it used to be. That is largely due to two realities. First, the mass media have unfavorably caricatured the Christian faith, devout Christians and Christian churches. Second, it is relatively rare to find someone who is an exemplar of the Christian faith.*"³⁵ The statistics are devastating. The Barna research data indicates, that only 33% of self-identified Christians can actually identify a Biblical spiritual gift they claim to possess, less than 19% of born-again adults have a Biblical worldview, which has been unchanged in the past 15 years, and just half of all self-identified Christians firmly believe that the Bible is totally accurate. The Church is a result of nearly two thousand years of development, change, and a reciprocal influence with the world. During this time, there were many turning points³⁶ that could have possibly caused the Church to historically change course;³⁷ however, there has never been a time as now, when the rapid and visible separation between the Church and Her domain of mission - the world - is so apparent. This is because - as Moltmann calls it - "*the identity - involvement dilemma*" surrounds every attempt of the Church to understand the world and at the same time to stay relevant for it.³⁸

³⁵ Barna Group Inc. Ventura, CA, "*Barna Studies the Research, Offers a Year-in-Review Perspective*" Research data of 2009, <http://www.barna.org/barna-update/article/12-faithspirituality/325-barna-studies-the-research-offers-a-year-in-review-perspective>

³⁶ Rose Book of Bible and Christian History, *Time Lines*, Rose Publishing, Torrance, CA, USA, 2008, Chart

³⁷ Schaff, Philip, *History of the Christian Church*, Volume VII. Modern Christianity. The German Reformation., Christian Classics Ethereal Library, 1.0 digital edition, Grand Rapids, MI, June 11, 2009, §1. The Turning Point of Modern History. <http://www.ccel.org/ccel/schaff/hcc7.ii.i.i.html>

³⁸ Moltmann, Jürgen, *The Crucified God: The Cross of Christ as the Foundation and Criticism of Christian Theology*, Harper and Row, New York, NY, 1977, pg.7

Humanity is experiencing a total revolution. Worldwide tendencies³⁹ in overpopulation, global warming, environmental concerns, issues of drinking water, food production, poverty, and economic challenges in converting into a post-fossil fuel society, all combined with current lifestyle patterns, are transforming humankind. Life on this Earth is running out of control⁴⁰ and is in a desperate need of renewal and a completely new understanding about its own existence. The Church as an institution established by God, is the foundation of the mission for reaching out and bringing the Good News to all of humanity. However, in Western society, the decreasing recognition of the Christian Church, the decline of congregational and denominational membership as well as Sunday worship attendance, and the rejection of faith among prospect followers are credible signs that the Church is missing the point of Her Godly mission. The Church is not functioning properly and She is not responding powerfully to all the challenges that the world faces today.

This is because as acknowledged by Moltmann, "*the major territorial churches have arrived at a crisis.*"⁴¹ He speaks about people's diminishing identification with and strong indifference about the Church, which leads to empty pews, because the Church has a weaker and weaker hold on the people. The "*official Church was split up in accordance with the differentiation of modern life*"⁴² and this resulted in an increasing number of passive members, whose Christian responsibility was taken over by full-time church workers. Also, this "*very differentiation from above of what the Church has to*

³⁹ United Nations, New York, NY, *World Population Prospects, Executive Summary*, 2004
<http://www.un.org/esa/population/publications/WPP2004/2004EnglishES.pdf> Accessed on 12-1-2009

⁴⁰ Verhaag, Bertram, *Life is running out of control* (movie), 2004
<http://video.google.com/videoplay?docid=1876901729566469042#>

⁴¹ Moltmann, Jürgen, *The Church In The Power Of The Spirit: A Contribution To Messianic Ecclesiology*, Harper and Row, New York, NY, 1977, pg.326

⁴² Ibid pg.328

*offer has released a new process of growing independence*⁴³ which has steered the Church towards limited awareness of and association with politics. From the beginning of the nineteenth century, and since then, the rise of democratic politics has changed the Church as She lost Her previously privileged position in society, and no longer has a monopoly on the production of faith. In order to restore power and influence in society, the Church – primarily the Roman Catholic Church, followed by the Protestant denominations, - *“began to use lobbying techniques adapted to the democratic context.”*⁴⁴ As a result, the Church has become a collection of interest groups. This crisis is the predicament of the Church and theology, and more specifically, it is the *“crisis of relevance and the crisis of identity.”*⁴⁵ The identity involvement dilemma is described by Moltmann as heartbreak, where *“the more the church attempts to become relevant to the problems of the present day, the more deeply they (the church-goers) are drawn into the crisis of their own Christian identity. The more they attempt to assert their identity in traditional dogmas, rights and moral notions, the more irrelevant and unbelievable they become.”*⁴⁶ Douglass⁴⁷ rediscovers Moltmann’s view, not just by agreeing with this thesis, but by continuing the recognition of this dilemma saying that at the time of Moltmann’s writing (1977), it appeared that just one relation might work, however today, (2002) it is clear, that the Church has lost both connections, one to the people and the other to Her own identity. One of the main reasons why the Church is losing both of these connections is because of Her attachment to the world, which is made prominent by looking for self-satisfaction next to what God wants to offer. For

⁴³ Ibid.

⁴⁴ Warner, Carolyn M., *Confession of an Interest Group: the Catholic Church and political parties in Europe*, Princeton University Press, NJ, 2000, pg.3.

⁴⁵ Moltmann, Jürgen, *The Crucified God: The Cross of Christ as the Foundation and Criticism of Christian Theology*, Harper and Row, New York, NY, 1977, pg.7

⁴⁶ Ibid

⁴⁷ Douglass, Klaus, *Az Új Reformáció, (New Reformation)* Kálvin Press, Budapest, 2002, pg. 24-25

humanity, these days of the 21st century can be compared to the “*worship of the Golden Calf*”⁴⁸, which was and is a complete disorientation from the truth. In this situation, what the Church does today is a diverse maneuver, motivated by Her own panicked reaction, which is based on the fear of an increased vulnerability in response to both the rise of urban civilization and the collapse of traditional religion as well.

The Church needs to reach and incorporate people into the love of Christ in order to extend the Kingdom of God for humankind. Jesus left two commandments in regards to this: one is the *Great Commandment*. “*Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind*” and “*Love your neighbor as yourself.*”⁴⁹ The other is the Great Commission. “*Therefore go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit, and teaching them to obey everything I have commanded you. And surely I am with you always, to the very end of the age.*”⁵⁰ It might be obvious, that the second commandment is an auxiliary of the first one. However, Douglass sees it not as an auxiliary but as an explanation like “*love in action.*”⁵¹ Being a Christian means not only being capable of explaining the love of God, but also of being able to extend it to others. In other words, Douglass says that the love for a neighbor is the obligation of a Christian, and it shows what needs to be done by individuals in order to be the type of human God wants them to be. Furthermore, the great Commission tells Christianity what needs to be done by humankind so that God can be seen as a real God by all people. Humankind is also called by God to participate in the ongoing task of creation. Therefore, a new paradigm needs to be developed which

⁴⁸ Exodus 32

⁴⁹ Luke 10:27

⁵⁰ Matthew 28:19-20

⁵¹ Douglass, Klaus, *Az Új Reformáció*, (New Reformation) Kálvin Press, Budapest,, 2002, pg. 105-106

affirms the theological value of 'oikonomia', the ongoing management of God's created household by sustaining the love of God for future generations as the priority of all Christians. This unfolds the mystery and complexity of sustainability and connects the very question of the Bible with the very existence of the human race.

However, it is unfortunate to recognize that in one aspect the Church is resistant to confronting the postmodern world by changing Her inner formation, structure, and conduct in order to fulfill the teachings of Jesus. The world and society is experiencing enormous change and this change is also vital for the Church if She wants to stay alive. It seems difficult to approach and welcome people from all over the world into the inner circle of the Church, because establishing preconditions and discriminating against individuals or groups is still the easier approach when resisting change. Since the Church wants to reach the unchurched, it is not possible to exclude the Church from the sociological interpretation that "*the ways men live their common life affects mightily the ways they understand the meaning of that life and vice versa.*"⁵² The people of the 21st century want deliverance from religion and metaphysical control. It is unlikely that the Church can reach them through a relatively religious worldview and unformatted complexity. To them, "*religion has been privatized.*"⁵³

However, there are tendencies favoring that the public Church will boldly witness God's love and creation to all and establish a new way of communication between Her and the people of this world. The vision of the public Church is primarily concentrated within the Evangelical Church in America, whose constitution declares that the Church should confess that it is created and sustained by God for "*God's mission in*

⁵² Cox, Harvey, *The Secular City*, The Macmillan Company, N.Y. 1966, p.1.

⁵³ Ibid. p. 2

the world."⁵⁴ These tendencies are based on the answer to the question: 'How has the Church understood its identity and purpose?' The content of the Church's reply, "profoundly impacts its public life both internally and in relationship to the world."⁵⁵ According to Moe-Lobeda, it is essential to see beyond the historical context and traditional faith claims, especially regarding the being and doing of the Church. Moe-Lobeda emphasizes, that Christians are also "*part of the broader Church, the cloud of witnesses throughout the ages claimed, gathered, and sent by God's grace to give thanks for that work of God, witness to it, and give it social form.*"⁵⁶ In the hope that people can distinguish between the Church as a "*public sphere of the Holy Spirit*"⁵⁷ and between the walls built by the Church, Hütter underlines that proclamation and missionary activity are the main characteristics of the public Church in being able to expand and undergo unlimited multiplication. These activities must be in line with the needs of the current time, they must be communicated in the language of the present generation, and they must be authentically represented by those, who proclaim the Church as the body of Christ. As recently explained by Cardinal Cormac Murphy-O'Connor, the real assignment given to all believers is not to back away from every public issue which impacts society, but instead, to be encouraged as Christians to work closely with others. Even though "*the progressive secularization of the cultural environment and the accompanying decline in religious practice means that religious belief of any kind tends now to be treated more as a private eccentricity than as the*

⁵⁴ Evangelical Lutheran Church in America, Chicago, IL, Confession, Chapter 2.07 <http://www.elca.org/Who-We-Are/Our-Three-Expressions/Churchwide-Organization/Office-of-the-Secretary/ELCA-Governance/Constitutions-of-the-Evangelical-Lutheran-Church-in-America.aspx>

⁵⁵ Moe-Lobeda, Cynthia D., *Public Church: For the Life of the World*, Augsburg Books, Minneapolis, MN, 2004 pg.2

⁵⁶ Ibid. pg14.

⁵⁷ Hütter, Reinhard, *Suffering Divine Things: Theology As Church Practice*, Eerdmans Publishing, Grand Rapids, MI, 1999, pg.164-165

*central and formative element*⁵⁸ of society, nonetheless, Church, religion, and faith are not private issues. Additionally, Christians must lead by the example of their own lives, and Christianity must stand up for all things that are believed to be good and to correct those believed to be wrong. Therefore, in order to be able to see and understand these tendencies, the Church must learn the needs, the views, the life and the language of those, whom She is reaching out to and welcoming.

Looking at this from another aspect, it is not possible to say, that the Church has failed to respond properly and that She has become the obstacle to the freedom needed to connect people and God within the organization.⁵⁹ By distinguishing the definitions of the Church as the body of Christ or as a denominational institution, a clear distinction is made between the problems and understanding of this complex question. The body of Christ, according to Bonhoeffer *"is in the strictest sense of the word 'for us' as it hangs on the cross and 'for us' as it is given to us in the Word, in baptism and in the Lord's Supper. This is the ground of all bodily fellowship with Jesus Christ."*⁶⁰ Furthermore, since the Church is the real presence of Christ, humankind should think of the Church as a person, who is Jesus Himself, and not as an institution. It is also evident, that the visible Church in this world lives by the law, She is organized within society, and She performs Her activities continuously in all times. This demonstrates the difference and conjunction between a living organism, which is alive, and an administrative organization, which is a mechanism of bureaucracy. Both are in coexistence with each other, yet the organism warns the organization that it must support the goals of the organism. In a similar manner, the organization warns the

⁵⁸ Murphy-O'Connor, Cormac, *Why Is Religious Belief Seen As A Private Eccentricity?* (Article) The Independent, London, UK, Monday, 8 December 2008 Issue.

⁵⁹ Harnack, Adolf von, *A kereszténység lényege*, (The essence of Christianity) Osiris, Budapest, 2000. Pg.130.

⁶⁰ Bonhoeffer, Dietrich, *The Cost of Discipleship*, SCM Press, London, U.K., 2001, pg.240-241

organism to not interfere with the prioritization in the organization's agenda, or with acting according to its traditions. This concern is more than just a theoretical question, since its understanding deeply impacts all those who are already in or want to be part of a local church. Since the early Church, the *'question of the Church's existence'* has remained a main concern. Contextualization therefore, is a great challenge predominantly for the Reformed churches, because they emphasize first and foremost preaching and contribution to social life. Szűcs highlights the dilemma asking, *"is the Church an event or an institution and how do the latent Church and the manifest Church relate to each other?"*⁶¹ The Church has a double nature, but this cannot be so according to Her comparison to Christology or the dual Divine and the human nature of Christ. The experience, like the living organism must be represented to the public in the form of an institution. Therefore, *"the good institution is, which guarantees the best frame for the experience, in this respect, the institution is a tool."*⁶² The Heidelberg Catechism asks: *"What believest thou concerning the 'holy catholic church' of Christ?"* It says, *"That the Son of God from the beginning to the end of the world, gathers, defends, and preserves to himself by his Spirit and word, out of the whole human race, a church chosen to everlasting life, agreeing in true faith; and that I am and forever shall remain, a living member thereof."*⁶³ Based on this answer, the dynamic of the Spirit has to overcome the formalism of the traditions. This is the field where the Church is vulnerable and either outwardly reacts to challenges or retreats behind its walls in defense of its values and integrity, and slowly turns to a museum-like state, where the only priority is to keep the Church running *'as She is'*.

⁶¹ Szűcs, Ferenc, *National Church? The Reformed Churches in an Ethnic Community in the Carpathian Basin, - Contextuality in Reformed Europe*, Mondrian/Holtzman Trust, Amsterdam, NL, 2004, pg.154.

⁶² Szűcs, Ferenc, *Az egyház mint esemény és intézmény*, Confessio, Budapest, 2007/4 Issue

⁶³ Heidelberg Catechism, Question 54

By returning to the original theme of sustainability, Douglass presents the views of God about a new future saying that "*God dreams about a healthy Church, God dreams about a growing Church, and God dreams about a self multiplying Church.*"⁶⁴ The goal of God's dream is the extension of His Kingdom by positioning the Church into actuality since it is unmistakable that as the world's velocity speeds up, the Church is not moving fast enough to lead. Instead, the Church is merely following trends and reacting to history, especially in the field of environmental awareness, sustainable lifestyle, or Global warming. U.S. data indicates that when people were asked to name the top challenges facing the nation, only a minority of Americans identify issues such as energy (6%), the environment (3%), or global warming (3%) as crucial problems, and only a minority of churchgoing Catholics (36%), non-mainline Protestants (36%), and mainline Protestants (45%) are very certain climate change is occurring.⁶⁵ The world has changed, and the Church has not. It is time for the Church to change Her course again, especially because She is primarily a living organism, and as such, She is capable of adjusting Herself through a new image, new direction, or new goals in Her journey, without giving up the core values and theological beliefs which the Church is founded upon.

1.1.4. THE ARGUMENT

The Church is the body of Christ. As a body, it is not primarily an organization, but rather, an organism, which is fundamentally connected to the Head of the body, which is Christ Himself. She receives Her provisions, guidance, and direction from the Head. It is in Ephesians 4, that "*instead, speaking the truth in love, we will in all things grow up into him who is the Head, that is, Christ. From him the whole body,*

⁶⁴ Douglass, Klaus, *Az Új Reformáció*, Kálvin Kiadó, 2002, pg.356-357

⁶⁵ Barna Group Inc. Ventura, CA, "*Evangelicals Go 'Green' with Caution*" Research data September 22, 2008, <http://www.barna.org/barna-update/article/13-culture/23-evangelicals-go-qgreenq-with-caution>

joined and held together by every supporting ligament, grows and builds itself up in love, as each part does its work."⁶⁶ This connection is created for a purpose, which is to fulfill God's objective by building a structure where all people can gather together under the name of the Lord. This structure, which is the visible organization, has to be able to reach out to, understand, communicate with, support, and integrate all people into the organism at all times. Therefore, its functions must be able to operate in a timely manner to fulfill this purpose.

The Church is above all civilizations, cultures, other religions, and pluralist societies. This means that the Church must be able to be one step ahead of the world, as well as cultural and social change in order to accurately study and understand people's lives, circumstances, concerns, and real issues. This is all necessary so that She may properly help and unleash the power of the Holy Spirit in the form of evangelism and mission for all people. The Church is alive and must act accordingly instead of acting like a fossil from the Middle Ages. In reality, real transformation on key measures in this context of the Christian Church have been mostly outward reactions and actions taken for self-defense. In this matter, Her adaptation of Her appearance and effectiveness in most cases is obsolete for the pluralistic Western society, where the Christian Church offers a traditional form of worship, faith formation, engagement, and spiritual community through an outdated worship format which cannot keep up with the demands of modern society, and is incapable of truly reaching and touching the unchurched population. U.S. data shows, that among Protestant Churches, *"less than one out of every five churches rated worship to be a top ministry priority, and*

⁶⁶ Ephesians 4:15-16.

*that most of those in attendance say they did not experience the presence of God during the service.*⁶⁷

*"The fulfillment of the mission of the Church thus requires that the Church itself be changed and learn new things.... as new people are brought to Christ."*⁶⁸

Newbigin describes the capability of adaptation of the Church as being able to learn innovative methods and add effective assets to the mission operation. It is unmistakable, that the lack of comprehensive and flexible procedures is holding the Church back from fully delivering the message of the Good News. Richard Niebuhr also argues that historical and cultural relativity of human reasoning influences decisions. He says that *"Christians in an industrial culture cannot think and act as if they lived in feudal society."*⁶⁹ It is clear that when Christians are busy keeping the traditions, following the set social structure, and *'giving the impression of being what they would like to be'*, they voluntarily shrink themselves into a closed community of believers, where time and development fly over the Church's head and She loses her capability to connect to the people in the present society.

Thus, a thorough evaluation of the Church brings about the diagnosis that She is in a crisis! This may seem like nothing but a dilemma, but it is not mutually exclusive of a great opportunity! In fact, this decline is the greatest good news for the Church.⁷⁰ In fact, Douglass is convinced that the current crisis of the Church is God's provocation. This provocation is very powerful and very necessary in order for humankind to see the problems and also reopen a new opportunity for them to recognize and overcome the crisis. There is hope, because the statistical numbers are

⁶⁷ Barna Group Inc. Ventura, CA, *"Barna Reviews Top Religious Trends of 2005"* Research data December 20, 2005, <http://www.barna.org/barna-update/article/5-barna-update/166-barna-reviews-top-religious-trends-of-2005>

⁶⁸ Newbigin, Lesslie *The Gospel in a Pluralist Society*, Eerdmans Publishing, 1989, p.124

⁶⁹ Niebuhr, Richard, *Christ and Culture*, Harper & Row, 1951, p.236

⁷⁰ Douglass, Klauss, *Az Új Reformáció*, (New Reformation) Kálvin Press, Budapest, 2002, pg. 22

symptoms of reality, so consequently, they can be used as tools of guidance, to see all circumstances in this regard and to develop a powerful solution to face the crisis.

In this situation, it is imperative that the Church must confront this dilemma not by merely treating the symptom, but on the contrary, by finding the root of the problem, because the *"Church, which cannot change in order to exist for the humanity of man in changed circumstances becomes ossified and dies."*⁷¹ By turning towards the core of this issue, the Church will be able to find those whom She is called to reach instead of retreating into a defensive state or giving up Her future. As a result, a change of direction and a more radical approach to spiritual growth is needed in order to triumph over obstacles and limitations that have been previously set by a Church population who has clearly settled into a comfortable spiritual routine and perspectives, due to the consequences of their actions. The Biblical guidelines however, command the following: *"do not conform any longer to the pattern of this world, but be transformed by the renewing of your mind. Then you will be able to test and approve what God's will is -his good, pleasing and perfect will."*⁷² Also, Paul addresses the importance of perpetual action: *"my dear children, for whom I am again in the pains of childbirth until Christ is formed in you."*⁷³ Founded in these teachings, Valyi-Nagy explains *"soma tou Christou"*⁷⁴ as a Christ event, encapsulating that in this case, the continuous reformation (*ecclesia reformata sed semper reformanda*⁷⁵) is basically a guideline for how the Church should not form to the face of the ages, but instead, to the

⁷¹ Moltmann, Jürgen, *The Crucified God: The Cross of Christ as the Foundation and Criticism of Christian Theology*, Harper and Row, New York, NY, 1977, pg. 12

⁷² Romans 12:2

⁷³ Galatians 4:19

⁷⁴ Vályi-Nagy, Ervin, *Minden időnk peremén*, (At the Edge of All Times) Protestant Academy of Hungarians in Europe, Basel/Budapest, 1993, pg.264

⁷⁵ McKim, Donald K., *Westminster Dictionary of Theological Terms*, "ecclesia reformata sed semper reformand, Latin, the church reformed, but always being reformed", Presbyterian Publishing Corporation, Louisville, KY, 1996

face of Christ. This means that continuous reformation is not an action towards the direction and a conformation to the world, but on the contrary, it is an action, which leads towards the reintegration of Christ as the relevant image of change.

1.2. THE QUESTION OF METHOD

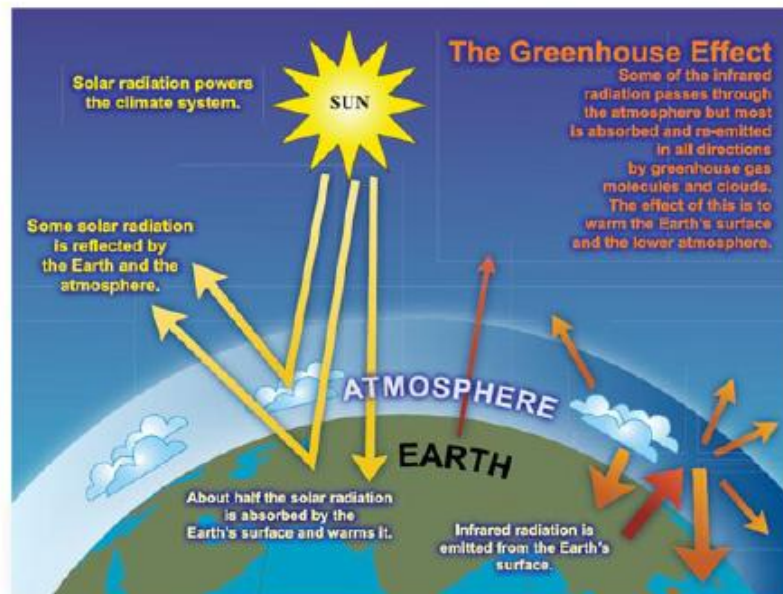
1.2.1. THE SCIENCE

Thousands of years of human history have not changed this planet and the environment as rapidly as the last 200 years have. The use of fossil fuels and the act of deforestation have dramatically changed human life on this Earth. Fossil fuels are non-renewable sources of energy, like coal, oil and natural gas that people use today in a processed form. They originate from plants and animals that lived up to 300 million years ago and were buried since then, but are now found in deposits beneath the earth. Fossil fuels work by releasing the chemical energy that is stored within them. People's demand for energy from non-fossil fuels, such as atomic power plants is 15%, and around 85% come from fossil fuels."⁷⁶ Human activities have significantly increased the release of heat trapping gases, which are called 'greenhouse gases'. These gases are trapped in the atmosphere, and causing the so called Greenhouse Effect. Greenhouse gases in the atmosphere, in a normal quantity are good sources since they naturally blanket the Earth keeping it about 33 degrees Celsius warmer than it would be without these gases. However, the increased release of these gases, - primarily because of human activities, - increased the temperature by about .5 degrees Celsius. Over the past century these effects begin to warm up the earth, what scientists now call Global Warming. As a consequence, the climate and life itself begin to alternate into an

⁷⁶ Chughtai, Osman and Shannon, David, *Fossil Fuels*, (Presentation) University of Michigan, Flint, 2008, <http://www.umich.edu/~gs265/society/fossilfuels.htm>

unknown direction, threatening life on this planet."⁷⁷ These concentrations prevent heat from escaping into space. The conclusion of this phenomenon is an effect somewhat like that which happens in the glass panels of a greenhouse- overheating.

The consequence of greenhouse effect is well beyond imagination. Climate change can no longer be described as coming, since it is already here! (Image ⁷⁸)

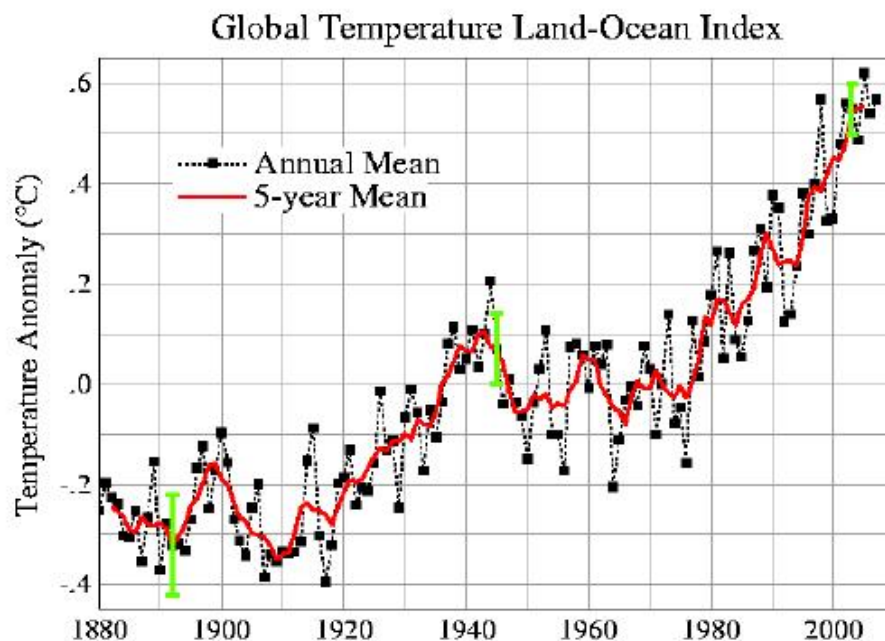


Greenhouse gases are essential for life on this planet. They keep the surface warmer than it would otherwise be. However, life as it is today will be endangered significantly, if the concentrations of these gases continue to increase. According to NASA data, global warming is an increase in the average temperature of the Earth's surface. Over one hundred years ago, the global average temperature has increased about 0.4 to 0.8 degrees Celsius. It is estimated, that by 2100, the average temperature will rise an additional 1.4 to 5.8 degrees Celsius. "That rate of increase

⁷⁷ Hopwood, Nick, and Cohen, Jordan, *Greenhouse Gases and Society*, University of Michigan, Flint, MI, 2008, (Article) <http://www.umich.edu/~gs265/society/greenhouse.htm>

⁷⁸ University of Illinois, Urbana, IL, *Adriana Files, Lecture 14*. 2008, <http://eeyore.astro.uiuc.edu/~lwl/classes/astro150/fall09/Lectures/lecture14.pdf>
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would be much larger than most past rates of increase."⁷⁹ Therefore, it is a legitimate concern, that human society and natural ecosystems might not be able to adapt to rapid climate changes, and will experience an end. Dr James Hansen, director of NASA's Goddard Institute for Space Studies, said in an interview to CNN, that carbon dioxide (CO₂) levels are already in the danger zone. "In the paleoclimate data, the Cenozoic data is the most alarming, burning all the fossil fuels clearly would send the planet back to the ice-free state with sea level about 250 feet higher."⁸⁰ Global temperature is rising rapidly. (Image⁸¹)



Most of the warming in recent decades is very likely to be the result of human activities. "Coal-burning power plants are the largest U.S. source of carbon dioxide pollution; they produce 2.5 billion tons every year. Automobiles, the second

⁷⁹ NASA, *World Book at NASA, Global Warming*, Washington, DC, 2008
http://www.nasa.gov/worldbook/global_warming_worldbook.html, Accessed on 11-10-2009

⁸⁰ Knight, Matthew, *Carbon dioxide levels already a danger*, (Article) CNN.com, London England, November 22, 2008, www.cnn.com/2008/TECH/science/11/21/climate.danger.zone/index.html

⁸¹ The NASA Goddard Institute for Space Studies, New York, NY, 2008, <http://data.giss.nasa.gov>

*largest source, create nearly 1.5 billion tons of CO2 annually.*⁸² This data refers only to America, so the calculations have not even taken global pollution into consideration, which according to Cornell University ecologist, David Pimentel, is a very dangerous factor: *“Water, air and soil pollution, along with other environmental factors, contribute to 40 percent of deaths worldwide each year.”*⁸³ Other characteristics of climate are also changing, such as patterns of rainfall, the amount of snow and the ice cover, and especially sea levels. It is quite impressive to observe a New Zealand research project, which demonstrated the changes in climate in areas not affected by human activity. *“Global temperature measurements remote from human habitation and activity show no evidence of a warming during the last century.”*⁸⁴ In general, life on this planet will never be the same as before.

1.2.2. SOCIAL SCIENCE

Sustainability in this context is not a cold theoretic idea or popular movement. It is closely associated with all areas of science, especially social science, since humans and societies maintain it. Natural science and social science are especially linked together in the context of sustainability, since *“sustainability considerations are widely recognized as having both positive and normative aspects. The positive aspect concerns the achievement of outcomes which are, in some sense, sustainable, through the efficient application of natural science and social science understandings.”*⁸⁵ Sustainability is also related to ethics, and a *“growing amount of*

⁸² Natural Resources Defense Council, Issues: *Global Warming*, question 1, pg. 1. – Global Warming Basics, New York, NY, <http://www.nrdc.org/globalWarming/f101.asp> Accessed on 10-10-2009

⁸³ Thompson, Andrea, *Pollution May Cause 40 Percent of Global Deaths*, Live Science, New York, N.Y. Issue: September 10, 2007

⁸⁴ Gray, Vincent, *The Cause Of Global Warming*, Lecture To The Wellington Branch Of The Royal Society Of New Zealand, November 22, 2000

⁸⁵ Redclift, M. R., *Sustainability: Life Chances and Livelihoods*, Routledge, New York, NY, 2000, pg. 24

attention is being given to the fundamental aspect of global environmental problems and sustainability, the social causes of environmental problems and the linkages between environmental science and ethics."⁸⁶

Since issues of how to manage sustainability are appearing all around the world, it is evident that the term is mainly applicable to human societies, because it considers everything in relation to nature and the environment. Living in a sustainable manner means that all resources available for humans must not be used faster than they can replace themselves. For example, when trees for lumber are harvested, new trees must be planted in their place; in addition, the rate at which the trees are cut down must not exceed the rate at which the new trees grow.

From a Christian standpoint, if the understanding of sustainability is united with a Christian platform, then sustainability helps churches to interact with society on climate change, the most pressing issue of the 21st century which is occurring at an alarming rate. This interface for the common goal is related to the perspective of environmental theology, since making decisions based on Christian hope will have a changing effect on human lifestyle and social structures. Acting responsibly not only facilitates a world that is better able to sustain itself and the population on it, but it also brings about an effective model, which directs theologians towards new directions. There are already quite a few religiously driven efforts that are readily available to the general public for inspiration.

One is Christian stewardship. According to the president of the Lutheran Church, Missouri Synod, *"then, we are talking about a 'big picture' view of how we*

⁸⁶ Groot, W. T. de, *Environmental Science Theory: Concepts and Methods in a One-world, Problem-oriented Paradigm*, London, UK, 1992, pg. 7.

*manage and use all that our good and gracious God has given to us.*⁸⁷ The other is creation spiritualists, who declare that what they believe is *"not a new religion, as some have accused, but is concerned with a more cosmic view of the Godhead and how it relates throughout the cosmos, not just on Earth."*⁸⁸ Eco-justice on the other hand, *"is that which respects, seeks to preserve, and advocates for just relationships among all living things. It concerns the future of all life upon this planet, the condition of the natural world and our human impact or footprint upon it."*⁸⁹

Therefore, in this context, these new initiations show the need for a correctly and Biblically based theological understanding about how to treat the environment, where practices of sustainable living, principles of social science, and teachings of theology, are combined to help humanity reach a common goal, which is actively participating in God's creation.

On this road, the Christian Church needs effective management and leadership practices, and to achieve them, the most skilled leaders and the best available methods to lead need to be employed. In the context of paradigm changes, the guideline in this matter is the historico-theological direction, described by David Bosch as the concept, that the Christian faith is a historical faith, meaning that *"God communicates His revelation to people through human beings and through events, not by means of abstract propositions."*⁹⁰ In conclusion, the way that God enters into

⁸⁷ Barry, Dr. A.L. President The Lutheran Church, Missouri Synod, *What About Stewardship?* (Article) 2009, <http://www.lcms.org>, 2009

⁸⁸ Hoerrner, Mark, *Creation Spiritualist Seeks to Unleash God*, Costa Mesa, CA, 2009, (Article) <http://www.buzzle.com/editorials/8-31-2006-107254.asp>

⁸⁹ Kairos, *What is Eco-justice?* (definition) Toronto, ON 2009 <http://www.kairoscanada.org/en/ecojustice/eco-justice-defn/>

⁹⁰ Bosch, David J., *Transforming Mission*, Orbis Books, NY. 1991, p.181

human affairs is “*incarnational*”⁹¹ rather than theoretical. This development of faith, and its visible forms including organizational efforts, is the territory where a termination of leadership and organizational changes can be followed and the lesson can be learned. Therefore, a conclusion is delivered to the context of today’s Church life by highlighting practical leadership problems and emphasizing the necessary redirection that must be taken in order to achieve an efficient, successful, and sustainable management practice of the Christian Church today. On this topic, Environmental Theology is the vehicle where all of these areas under discussion emerge together, under the structure of Systematic Theology, to shed light on the Christian Church’s responsibility in the field of sustainability from the perspective of creation, ecology, and eschatology.

1.2.3. POINT OF REFERENCE

In order to change the course of the Christian Church, it is fundamental to overcome the current trend. By doing so, the present time of the Church needs to be determined from the future and not the opposite way. Simply following the existing system as a road towards a universal solution is a recipe for failure. Therefore, an authentic and lasting religious transformation requires new considerations, a genuine approach, strategic management “*that implements and attains the objectives set in strategic planning*”⁹² and leadership which is able to advocate sustainability, and has a more comprehensive manner in the evaluation of the world it wants to reach. Consequently, the future Church must follow a thoroughly conceived plan, with a specific target, that glorifies Jesus and unfolds all the promises that God has given to His children.

⁹¹ Ibid.

⁹² Karger, Delmar W., *Strategic Planning and Management*, CRC Press, Boca Raton, FL, 1991 pg.2

1.3. THE PARAMETERS OF THE DISSERTATION

1.3.1. BACKGROUND

From a theological viewpoint, the academic background of this dissertation is very limited. The topic of 'sustainability' is not a leading subject among theologians, because it has not yet been defined in the context of the Christian Church, and it is especially not described as an action-based agenda. The larger domain of this theme includes environmentalism, justification, ecology, creation, ethics, social justice, or feminist theologies, and these have all been researched more than sustainability. Therefore, as a starting point, this dissertation fundamentally builds on these earlier outcomes, but in addition, it challenges and investigates sustainability from new angles.

In the last ten years, reflections such as dissertations and articles have established a circumscribable area pointing to this direction. Among these works is one by McFee, who first summarized the effort of the World Council of Churches to formulate an institutional environmental ethic in the last third of the 21st century. The dissertation affirms that the WCC's complex institutional history has great impact for Western Christianity in thinking through issues related to environmental concerns. On the other hand, current environmental questions "have affected the very ways in which the WCC attends to such ethical issues, resulting in profound institutional changes within the WCC."⁹³ Also, the WCC, as McFee states, unfortunately "did not systematically address environmental problems theologically nor did it consistently embrace a coherent theological methodology."⁹⁴ McFee concludes that during the course of history, regardless of many obstacles, the WCC finally made distinctive contributions to Christian ethics and its ethical content in its institutional environmental stances on humility,

⁹³ McFee, Daniel Evan, *The earth is the Lord's: The World Council of Churches' construction of an institutional environmental ethic, 1966–1998*, Marquette University, Milwaukee, WI, 2002, pg.20

⁹⁴ Ibid. pg.100

solidarity and risk.⁹⁵ McFee's dissertation and his historical description show how the environment and ethical issues have slowly but surely become the focal point of the Protestant churches worldwide.

Hazelwood, from an ecofeminist view, explains how justice as a vital part of environmental sustainability "*promotes an ethic capable of both meeting the eco-communal challenges of the present and of incorporating Christian ecological insights critical to re-imagining life together in earth community.*"⁹⁶ Within this eco-community, Hazelwood states, that sustainability as justice is essential to religious life, especially if this vision is rooted in a "*theo-ethical understanding of relationality that reflects the Trinitarian relation.*"⁹⁷

Randolph approaches the environment through Christian ethics with a new method. He denies beginning the process with an anthropocentric framework. He commences his proposal with the eco-system, understood as the community of life. By approaching this from a theological perspective, his central question is this: "*what will promote the flourishing of an eco-system, as well as the plant, animal, and human life that comprises the ecological community?*"⁹⁸ The dissertation examines the Amazon as a case study illustrating the types of environmental ethical challenges under consideration. After identifying and developing the Christian common good tradition, Randolph outlines the Christian common good approach to ecological issues, "*by tracing*

⁹⁵ Ibid. pg.197

⁹⁶ Hazelwood, Lisa Stolen, *Sustainability as justice: Toward a Christian, ecofeminist ethic of sustainability using the example of sustainable agriculture*, Ph.D. Dissertation, Union Theological Seminary, New York, NY, 2000, Abstract.

⁹⁷ Ibid.

⁹⁸ Randolph, Richard O., *Amazonian Rain Forest as an environmental test-case for renewal of the ethics and economics dialogue concerning the common good*, Graduate Theological Union, Berkeley, CA, 2003, Abstract

*out the implications of an ecological common good for the Amazon and the ecological crises that it is currently experiencing.*⁹⁹

Another author, Lee, proposes a process eco-ethics, as a theological model for Christians in South Korean, where “*socio-political and economic injustice along with current ecological crisis is worsening due to effects of global development and political hegemony that remain unchecked by evangelical and mainline churches.*”¹⁰⁰ In his writing, by analyzing Cobb and Moltmann, he critically responds to those conventional doctrines of eschatology that “*tend to surrender the world to God and the future one-sidedly, thus placing an irreconcilable discontinuity rather than a creative tension between ‘this worldly’ history and a kingdom of God to come.*”¹⁰¹

Yet another dissertation by Yordy, demonstrates a constructive theological proposal and guideline for the Christian community on how they should respond to the environmental crisis. Yordy draws her conclusions on a variety of historic and contemporary sources, and identifies the weak points of Christianity. She points to the process of evaluating the responses of the Christian community, which is overshadowed by a worldview that sees environmental damage and the Earth as an object that needs to be fixed. She suggests that “*Christians should understand the universe as the ongoing activity of God’s creation.*”¹⁰² By living life as a witness of the Kingdom of God, Christians should respond to God’s gifts and move the church to the center of action. In her argument, Yordy sees Christianity as overgrown by weeds, which “*obscure and*

⁹⁹ Ibid.

¹⁰⁰ Lee, Seung Gap, *The hope of the earth: A process eschatological eco-ethics*, Drew University, Madison NJ, 2005, Abstract

¹⁰¹ Ibid.

¹⁰² Yordy, Laura, *Ecology, eschatology, and Christian ethics*, Duke University, Durham, NC, 2005, Abstract

choke its ecological guidance."¹⁰³ However, she is clear that Christianity is on the right side of an ecological solution.

Arpels-Josiah adds an important element to the ecological theology for the North American context. She argues that the Reformed ecological doctrine of 'justification by grace through faith' "*constructs a Reformed ecological doctrine of justification that promotes more equitable attitudes toward environmental pollution.*"¹⁰⁴ She presents her argument based on John Calvin's doctrine of justification and Moltmann's doctrine of the cross. In summary, Arpels-Josiah presents the ecological doctrine of 'justification by faith' by combining environmental concerns with a concern for social justice which "*lifts humans up as unique within nature, but does so without elevating us to a position of exploitative superiority over nature.*"¹⁰⁵ According to her research, all of this is a gift of grace that is rooted in Christ alone.

Harvey "*examines the problems of theodicy and theism coming from traditional Protestant Christianity that continue to prevent it from producing an intelligible environmental ethic.*"¹⁰⁶ Schuster calls for witnessing by mission, and declares that "*the final verification of truth occurs at the end of time. In the meantime the credibility of the Biblical tradition can only be witnessed to and advocated provisionally.*"¹⁰⁷ Jenkins also "*describes major normative strategies in Christian environmental ethics by mapping them onto major traditions of grace.*"¹⁰⁸

¹⁰³ Ibid. pg.48

¹⁰⁴ Arpels-Josiah, Ariane Nicole, *Justification by grace through faith from an ecological perspective : Reformed theology, environmental ethics, and social justice*, Princeton Theological Seminary, Princeton, NJ, 2005, Abstract

¹⁰⁵ Ibid pg.260

¹⁰⁶ Harvey, Sharon, *Environmental ethics, evolutionary science, and openness theology*, University of Idaho, Moscow, ID 2006, Abstract

¹⁰⁷ Schuster, Jürgen, *The significance of the kingdom of God in its eschatological tension for the theology of mission of Lesslie Newbigin*, Trinity Evangelical Divinity School, Deerfield, IL, 2006, Abstract

¹⁰⁸ Jenkins, Willis Jackson, *Ecologies of salvation: New roots for environmental ethics in three Christian traditions*, University of Virginia, Charlottesville, VA, 2006, Abstract

By reflecting on these dissertations, the major dominant courses of directions are ethics, justification, and stewardship in a combination with elements such as grace, social justice, and witnessing. In general, their starting point is anthropocentric; describing what humanity can understand and do if Biblical ethics and teachings were applied through the combination of theology and related fields. It appears that this world has a central meaning for humanity and by rejoicing and understanding God's desire; humankind will find its path back to the Creator. Moreover, in the meantime, creation will also be saved. These ideas were rooted in the thoughts of the forerunners of these issues: Jose Pepz M. Cunanan, whose article first appeared in *Tugon*, Vol. XII, no.2, 1992, Margot Kässmann, whose studies were prepared for the 1993 Gurukul Summer Institute on Ecological Theology in India, Milton Efthimiou, whose article was first presented at the WCC ecumenical gathering on the earth Summit in Rio de Janeiro, in 1992, Dieter Hessel, Anne Primavesi, Larry Rasmussen, Tony Brun, and others. These writers' views were effectively collected and summarized "*in the hope that it will animate more reflection within Christian communities and stimulate more engagement on our part*"¹⁰⁹ for the common goal of helping individuals and communities to realize the objectives of ecological sustainability and economic justice.

The Roman Catholic Church, within its traditions also has an essential grounding in ecological concern. Modern Catholic theologians propose a variety of approaches to environmental issues, from an ethical and ecologically sensitive perspective. One of the common emphases is the connection between ecological damage and social justice. The last two decades in this context began with John Paul II.,

¹⁰⁹ Hallman, David G., *Ecotheology, Voices from the South and North*, WCC Publication Geneva, Switzerland, 1994, pg.9

when in 1990; he expressed a new advance¹¹⁰ within the Catholic Church. One year later, the U.S. bishops issued a more focused document, which was drawn largely from the church's social teaching tradition.¹¹¹ These two documents fundamentally started a new area of responsibility within the Catholic faith, life, and theology. Although there is a great effort to form a common view of the environment, "*at present, Catholic environmental ethics does not have its own distinct set of norms mediating between its deeper theological foundations and the specificity of concrete situations. However, the development of the Christian ecological conscience continues through multifaceted work on both the theoretical and practical levels.*"¹¹² By reviewing the Roman Catholic theological literature of the 1990s, on environmental theology and ethics, it appears that they tend to lean towards the view of deep ecology. For example, several individuals have written on this area. Just to name a few examples; Ecology and Liberation: A New Paradigm (Maryknoll: Orbis, 1995); Denis Edwards, Jesus the Wisdom of God: An Ecological Theology (Maryknoll: Orbis, 1995); Richard N. Fragomeni and John T. Pawlikowski, The Ecological Challenge: Ethical, Liturgical and Spiritual Responses (Collegeville: The Liturgical Press, 1994); Albert J. LaChance and John E. Carroll, eds., Embracing Earth: Catholic Approaches to Ecology (Maryknoll: Orbis, 1994); and Sean McDonagh, The Greening of the Church (London: G. Chapman; Maryknoll: Orbis, 1990). Irwin summarizes, that these authors have at least one thing in common, which is that they see that "*the ecological crisis is a matter of theology,*

¹¹⁰ John Paul II., *Peace with God the Creator, Peace with All of Creation*, January 1, 1990, § 1. http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html

¹¹¹ United States Conference of Catholic Bishops, Washington D.C., *An Invitation to Reflection and Action on the Environment in Light of Catholic Social Teaching*, Nov. 14, 1991, <http://www.usccb.org/sdwp/ejp/bishopsstatement.shtml>

¹¹² Cowdin, Daniel, *Environmental Ethics*, Theological Studies, Washington D.C., March 2008, Vol. 69, Issue 1, pg. 164-184

ethics, and values."¹¹³ That trend continues, because "the characteristic strength of the Roman Catholic theology throughout history has been its ability to reread and rethink its traditional beliefs in the light of contemporary issues, challenges, and pastoral needs."¹¹⁴ Irwin believes that today's environmental situation offers the church such a challenge that Her theology will be integrated into a vision of creation which will be able to strongly deal with the ecological concerns of this day.

To sum up the forerunners and the background of this dissertation, the limitations of a single volume determine the definition of parameters. A balance must be sought between Biblical, historical, and current information about ecology, theology and sustainability. Therefore, this dissertation primarily seeks to discover sustainability in the context of environmental theology in sufficient detail to provide cumulative evidence with which to reconstruct the understanding of sustainability in the Old and the New Testament. Although this is the background for this dissertation, the principal objective is to present a new and distinguished solution for the Christian Church to fulfill Her mission and enable Her to accomplish Her call in the new and changing environment of the 21st century, and proclaim the Gospel through a better understanding of sustainability.

1.3.2. CULTURAL CONTEXT

Horace Kallen was born in Berenstadt, Germany, as the son of an Orthodox rabbi. He came to the United States in 1887, earned his B.A at Harvard in 1903 and his Ph. D. in 1908. As a professor of aesthetics and philosophy, in 1915 he wrote in his book called 'The Nation'. In that book, Kallen suggested that the American 'melting pot'

¹¹³ Irwin, Kevin W., *Environmental Theology - A Book Review Discussion*, The Catholic University of America, - *Thomist Journal*, Washington, D.C., Volume 60(2), 1997

¹¹⁴ *Ibid.*

concept is both a theoretical misconception and a practical failure. He replaced it with a new term, called "*cultural pluralism*."¹¹⁵ Kallen was proud of his origin and as a Jew, he did not want to be assimilated fully into society and overtaken by the majority. He believed that different cultures and backgrounds offer a great value to society and a pluralist culture provides more progress than a single culture ever could.

Ever since cultural pluralism was born, people in the West live in a dynamic coexistence with others, where minority groups fully participate in an otherwise dominant society, and at the same time, maintain their cultural differences. In this pluralistic society, different groups interrelate to each other meanwhile showing tolerance for one another. In this context, different cultures, beliefs, ethics and worldviews coexist with each other without having conflicts. In this environment, minority cultures are encouraged to uphold their customs, while majority cultures continue to dominate their contribution to the society.

Pluralism, as it is defined by Harvard University,¹¹⁶ has at least four points. First, pluralism is an energetic engagement with diversity. Secondly, it is an active seeking of understanding across lines of difference. Thirdly, it is an encounter of commitments. Fourthly, it is based on dialogue.

The Bible also says to love and to coexist with other cultures, even with enemies. Jesus' teaching is clear: "*you have heard that it was said, 'Love your neighbor and hate your enemy.' But I tell you: Love your enemies and pray for those who persecute you, that you may be sons of your Father in heaven. He causes his sun to rise on the evil and the good, and sends rain on the righteous and the unrighteous. If you*

¹¹⁵ Philosopherpedia, Easton, MD, http://philosopherpedia.org/index.php/Horace_Kallen

¹¹⁶ Harvard University, *The Pluralism Project*, (Research) Cambridge, MA, http://pluralism.org/pages/pluralism/what_is_pluralism Accessed on 2-15-2010

*love those who love you, what reward will you get? Are not even the tax collectors doing that? And if you greet only your brothers, what are you doing more than others? Do not even pagans do that?"*¹¹⁷ Faith is Christianity's declaration; so therefore, it cannot teach that pluralism is something on which it can be grounded. On the other hand, love is the direction of something to endeavor.

According to Newbigin, "*pluralism is conceived to be a proper characteristic of the secular society, a society in which there is no officially approved pattern of belief or conduct.*"¹¹⁸ Therefore, Western society is free and according to Newbigin, it is not controlled by accepted dogma, but rather, distinguished by a so-called 'critical spirit'. As a consequence, everything is subject to examination, and criticism is always based on some other belief, putative truth, or individual interest.

Situating this dissertation in this context, especially in the global consequences of the environmental crisis, it is important to highlight the plurality of other cultures, from where people as subjects and causes of the current crisis, originate. Since culture is simply the way people as individuals and as communities behave, it is always an interaction between society and the people. Society influences people as people have an effect on society as well. For Christianity to take ground in this field, represent Christ, teach and stand for the truth, and advocate Biblical environmentalism, a vital question must be asked: is possible to continue to interact and bring the Gospel to people all around the world in the same manner as it has been done in the last 200 years? In a historic context, Newbigin sees this approach as a "*typical example of this aggressive imperialism*"¹¹⁹ and states that it is inappropriate for today's world. It is because people live in not just a culturally pluralistic, but religiously pluralistic world as

¹¹⁷ Matthew 5:43-4

¹¹⁸ Newbigin, Lesslie *The Gospel in a Pluralist Society*, Eerdmans Publishing, 1989, Kindle digital version, Location: 56-65

¹¹⁹ *Ibid.* Location: 2,378-87

well. To maintain this old missionary attitude, Newbigin disputes¹²⁰ is positively dangerous in a world, where other great religions show at least the same amount of liveliness as Christianity. Moreover, these other world religions are stimulated by the attack of the West, not just morally, religiously, but with the military as well, and therefore, this creates such a great tension between cultures, religions, and countries that the common goal of humanity to stay alive is in jeopardy. Therefore, Newbigin suggests that in a world, which is threatened by nuclear war and a global ecological crisis, *"the paramount need is for unity"*¹²¹ in order to be able to start with a search for the solution. To preach the Gospel in such a context, by revisiting Jesus' time, the first Christians also carried the Good News in a plural world, of many lords, gods, and beliefs. What is different today is the fact that humans live in a global world society, and it is dependent on each of its members more than before. Through this window, Paul is very reasonable in claiming that *"salvation is found in no one else, for there is no other name under heaven given to men by which we must be saved."*¹²² Newbigin also accepts these borders within the Church, but for him, they do not refer to a special kind of confirmation of Christian exclusivity. Instead, they clearly show the priority of salvation, which is given only in Christ, as a central and unique importance for the world. He also confesses that *"I therefore believe that a Christian must welcome some measure of plurality but reject pluralism."*¹²³

Some comments, like the ones Gelwick suggests, state that in Newbigin's *"major encounter with both the non-Western Christian communities and with non-Christian religions, there does not seem to be a revisioning or renewal of Christian*

¹²⁰ Ibid.

¹²¹ Ibid.

¹²² Acts 4:12

¹²³ Newbigin, Lesslie *The Gospel in a Pluralist Society*, Eerdmans Publishing, 1989, Kindle digital version, Location: 3,686-98

*theology.*¹²⁴ Environmental theology, which reflects upon a global crisis, aims to open some of the doors leading towards Christian renewal. By proclaiming the Gospel in a pluralist context, but also focusing on the need for discussing how Christians relate to the renewal of the Church, the power of the Holy Spirit cannot be bypassed. As Paul writes, “*therefore I glory in Christ Jesus in my service to God. I will not venture to speak of anything except what Christ has accomplished through me in leading the Gentiles to obey God by what I have said and done— by the power of signs and miracles, through the power of the Spirit.*”¹²⁵ Since the leading of the gentiles happens as the result “*of the Holy Spirit, the one who chooses and calls witnesses together to be the church*”¹²⁶ the Spirit is who empowers these witnesses to carry out the will of God. Hunsberger also underlines Newbigin’s understanding that those who are called out by the Spirit are not there because a special privilege is given to them. On the contrary, they are given a special responsibility¹²⁷. In this way, Christianity by the Holy Spirit must lead humanity in a global search for peace and justice and it must be the community’s answer to the global crisis within the context of a plural society.

1.3.3. PERSPECTIVE

By placing the dissertation into perspective, through looking at the current ecological crisis, it becomes apparent that the direction of the unfolding destruction of creation does not go hand in hand with the passage of time. Eschatology unfolds this

¹²⁴ Gelwick, Richard, *Christian Faith in a Pluralistic Society*, (Article) Missouri Western State University, St. Joseph, MO, pg. 44 <http://www.missouriwestern.edu/orgs/polanyi/TAD%20WEB%20ARCHIVE/TAD27-2/TAD27-2-pg39-47-pdf.pdf> Accessed on 2-15-2010

¹²⁵ Romans 15:17-19

¹²⁶ Hunsberger, George R., *Bearing the Witness of the Spirit: Lesslie Newbigin’s Theology of Cultural Plurality*, Eerdmans, Grand Rapids, MI, 1998, pg.95

¹²⁷ *Ibid.* pg.92

view by looking backwards, from the end times, to what is happening today since this is the right way in approaching the understanding the crisis as well as the solution.

*"In the beginning God created the heavens and the earth."*¹²⁸ This dual expression for reality means that the earth is the area, which is known by humanity, and heaven is the invisible, unknown area of creation. This is evident since *"dwells in heaven is the Creator who indwells his creation."*¹²⁹ Therefore, according to Moltmann, the world-immanence of God makes the world an eccentric world, and divides it into two distinguished parts: heaven and earth. This double world of heaven and earth, which was created by God is open to God *"which has its unity and its centre in its Creator and not in itself."*¹³⁰ Since heaven is invisible for humanity, it is the relatively infinite world, and since the earth is visible to humanity, it is a finite world. *"For the earth 'the heavens' mean the Kingdom of God's creative potentialities. The heavenly beings, the angels, are God's potencies in the realm of his potentialities."*¹³¹ That is why Moltmann explains that we can call *"heaven the relative transcendence of the earth, and the relative immanence of heaven."*¹³²

All this, from the perspective of the future, means that any ecological approach or environmental effort cannot be anthropocentric, but on the contrary, these actions of humanity must testify the acts of God in His creation and redemption. Therefore, any Christian safeguarding, conservation, or environmental saving efforts are not selfish actions by themselves for fulfilling ecological goals, but instead, they are actions pointing towards God, and are indications of hope for the world, which will be fulfilled in God at the end of time. That time will be a new time, a new order, a "new

¹²⁸ Genesis 1:1

¹²⁹ Moltmann, Jürgen, *God in Creation*, First Fortress Edition, Minneapolis, MN, 1993, pg.159

¹³⁰ *Ibid.* pg.182

¹³¹ *Ibid.* pg.163

¹³² *Ibid.*

*heaven and earth*¹³³, and that is the final goal of creation. Environmental theology therefore, must point in this direction, because *"what faith can do, by the power of God in Christ, to preserve the world of creation is to perform untiringly token acts as signs, manifestations of the future salvation in the sphere of the natural world, which testify that God has opened His new world for all created things."*¹³⁴

Schwarz also encourages humankind about the importance of the eschatological dimensions of ecology, since the mistreatment of the environment has taken on apocalyptic dimensions on the earth.¹³⁵ He points to Moltmann agreeing that eschatology is not about an apocalyptic final solution. *"On the contrary, what it is about is the new creation of all things."*¹³⁶ In this context, eschatology is not about cataclysm; rather, it is about hope for eternal life, for the Kingdom of God, for the new heaven and new earth. Therefore, in accordance with Moltmann's thoughts, this dissertation's perspective is neither confounded by linear timing, nor is it limited to actions and an anthropologically centered viewpoint. It is about the merging power of *"different horizons of eternal life, the eternal Kingdom and the eternal creation drawn together to a single focus: the cosmic Shekinah of God. God desires to come to His dwelling in His creation, the home of His identity in the world, and in it to His 'rest' His perfected, eternal joy."*¹³⁷ This is the goal that sustainability represents and aims to serve; it seeks to prepare the way for Christ's second coming and place ecology and environmentalism in the perspective of eschatology.

¹³³ Isaiah 65:17 & Revelation 21:1

¹³⁴ Steck, Odil Hannes, *World and Environment*, Abingdon Press, Nashville, TN, 1978, pg.293

¹³⁵ Schwarz, Hans, *The Eschatological Dimensions of Ecology*, Eerdmans, Grand Rapids, MI, 2000, pg.196

¹³⁶ Moltmann, Jürgen, *The Coming of God: Christian Eschatology*, First Fortress Press, Minneapolis, MN, 1996, pg.xi

¹³⁷ *Ibid.* pg.xiii

CHAPTER 2.

THE FRAMEWORK FOR ECOLOGY

2.1. THE CONTEXT OF ECOLOGY

2.1.1. INITIATION

The word ecology was first used by Ernst Haeckel in 1869. He described ecology as *"the scientific study of the interactions between organisms and their environment."*¹³⁸ The definition of ecology is presented by the Stanford University scholars, explaining¹³⁹ that ecology, as a science, studies interactions between individual organisms and their environments, co-specifics and members of other species. Nonetheless, ecology became apparent in the 19th century, but its structure and theory began to form only during the 20th century. Ecology has a broad selection of sub-categories, but population, community, and ecosystem ecology are limited to the field of philosophical analysis.

Going beyond ecology's simple scientific description, especially now, when environmental issues and global warming are pressuring this planet so forcefully, Al Gore's definition seems to be quite impressive. He says that, *"ecology is the study of balance, and some of the same principles that govern the healthy balance of elements in the global environment also apply to the healthy balance of forces making up our political system."*¹⁴⁰ This balance comes forth in the complexity of 'Deep Ecology', an environmental movement commenced by a Norwegian philosopher, Arnie Naess, in

¹³⁸ Begon, Michael, Townsend, Colin R., Harper, John L. *Ecology: from individuals to ecosystems*, Blackwell Publishing, West Sussex, UK, 1986, pg.xi

¹³⁹ Sarkar, Sahotra, *Ecology*, Stanford University Encyclopedia of Philosophy, Dec. 23, 2005, (Article,) <http://www.plato.stanford.edu/entries/ecology>

¹⁴⁰ Gore, Al, *Earth in the Balance*, H.F. Harcourt, Boston, MA, 2000 pg.11.
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1972¹⁴¹ where individual needs are overruled in favor of global consciousness. This understanding, called human self-realization, which "*maintains, that the fulfillment of our capacities is the ideal goal,*"¹⁴² became vitally important in the learning process of how to have a more consistent human behavior towards nature. According to Deep-Ecology, "*instead of regarding humans as something completely unique or chosen by God, they see us as integral threads in the fabric of life. They believe we need to develop a less dominating and aggressive posture towards the Earth if we and the planet are to survive.*"¹⁴³

2.1.2. ECOLOGY IN THE BIBLE

The above-mentioned statements appear quite secular when seen from just one angle. However, from a Christian standpoint, it is interesting to see that even in the Old Testament, the Book of Isaiah speaks of God and the Earth: He is the "*God of all the Earth.*"¹⁴⁴ In addition, "*the Holy One of Israel is your Redeemer; he is called the God of all the Earth.*"¹⁴⁵ As the creator of this universe, Isaiah recognizes God as the source and foundation of everything. Calvin comments on this verse, saying, that "*He employs the expression, the whole Earth, because the name of God had formerly been, in some respects, confined to Judea, but, by the preaching of the Gospel, the Gentiles*

¹⁴¹ AtKisson, Alan, *Introduction To Deep Ecology - An interview with M. E. Zimmerman*, Context Journal, Global Climate Change (IC#22) Summer 1989, Page 24, Langley, WA, <http://www.context.org/ICLIB/IC22/Zimmmrman.htm>

¹⁴² Porter, Burton F., *The Good Life - Alternatives in Ethics*, Rowman & Littlefield, Lanham, MD, 2001, pg.122.

¹⁴³ AtKisson, Alan, *Introduction To Deep Ecology - An interview with M. E. Zimmerman*, Context Journal, Global Climate Change (IC#22) Summer 1989, Page 24, Langley, WA, <http://www.context.org/ICLIB/IC22/Zimmmrman.htm>

¹⁴⁴ Isaiah 54:5b

¹⁴⁵ Ibid

have been called to the same hope of salvation."¹⁴⁶ Henry Matthew continues to articulate that, *"He is and shall be called the Lord of the whole Earth, as God, and as Mediator, for he is the heir of all things; but then he shall be called so, when the ends of the Earth shall be made to see his salvation, when all the Earth shall call him their God and have an interest in him."*¹⁴⁷ These explanations describe that God from the beginning was, is, and will be the God of all that has ever been created.

*"The missionary message of the Gospel"*¹⁴⁸ is John 3:16, because it shows God's immense love for all people in the redeeming death of Jesus, who is the exclusive Savior and Lord of humankind. This significance is the biggest news for all people of all cultural and religious backgrounds. It reads; *"For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life."*¹⁴⁹ In this well-known sentence, it is peculiar to notice the use of the word 'world'. The phrase says that God did not love His followers, or the believers, not even all people in general. He loved the world. The word is translated here is the Greek word 'kozmos'. It originates from around 1200 BC, and means an *"orderly arrangement."*¹⁵⁰

Although the topic remains controversial, early evidence suggests¹⁵¹, that Pythagoras was the first to apply this word to 'universe', which was later extended to the whole physical world, including the Earth. According to Huffman, he *"presented a cosmos that was structured according to moral principles and significant numerical*

¹⁴⁶ Calvin, John, *Commentary on the Book of the Prophet Isaiah - Volume 4* (calcom16.vii) Christian Classics Ethereal Library, Calvin College, Grand Rapids, MI, 2009

¹⁴⁷ Matthew, Henry, *Commentary on the Whole Bible Volume IV (Isaiah to Malachi)* (mhc4.Is.IV) Christian Classics Ethereal Library, Calvin College, Grand Rapids, MI, 2009

¹⁴⁸ Wiersbe, Warren W., *The Bible Exposition Commentary: New Testament: Volume 1*, Cook Communications Ministries, Colorado Springs, CO, 2001, pg.331.

¹⁴⁹ John 3:16

¹⁵⁰ Online Etymology Dictionary, Douglas Harper, 2001, <http://www.etymonline.com>

¹⁵¹ Huffman, Carl, *Pythagoras*, Stanford University Encyclopedia of Philosophy, February 23, 2005, (Article,) <http://plato.stanford.edu/entries/pythagoras/>

relationships."¹⁵² 'Kozmos', or 'cosmos' in English, was also used in Christian religious writing with a sense of "worldly life, this world, as opposed to the afterlife."¹⁵³ Kittel¹⁵⁴ calls it 'the theater of human life', as he explains that a greater stress will fall on the cosmos, when Christ is said to come into or to be in the world. He refers to this word as 'the setting of God's saving work'. This is a dramatic finding, very vital to understanding God's position towards the Earth. By detecting this word, it is deeply moving that Christ's death had eternal implications not only for humanity, but for all of creation, as well. Christian ecology thus, is based on the fact that God cares not only about people, but the entire created World. He cares so much about the World, that "he gave his one and only Son"¹⁵⁵ for it. God's love is astonishing, "and when we say, 'God so loved the world,' we have to break up the mass into its atoms, and to think of each atom as being an object of His love."¹⁵⁶ This incomprehensible aspect of God's love is His coming to humankind. He sent Jesus Christ for all of creation, in human form, to develop a relationship with all people, to bridge the distance and differences separating God from humanity. For humankind, it is a "life changing invitation to respond to God's love"¹⁵⁷ and reconcile its existence in Him.

From a New Testament approach, the word ecology originates from the Greek word 'oikos', meaning "house, dwelling place, habitation"¹⁵⁸ the management of the household, study of the house, or the doctrine of the house. Moltmann defines the

¹⁵² Ibid.

¹⁵³ Harper, Douglas, *Online Etymology Dictionary*, <http://www.etymonline.com>, 2008

¹⁵⁴ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.463.

¹⁵⁵ John 3:16

¹⁵⁶ MacLaren, Alexander, *Expositions of Holy Scripture: St John Ch. I to XIV (john1.ii.xxi)*, Christian Classics Ethereal Library, Calvin College, Gr. Rapids, MI

¹⁵⁷ Graham, Billy, *Living in God's Love: The New York Crusade*, G.P. Putman's Sons, New York, NY, 2005, pg.16.

¹⁵⁸ Harper, Douglas, *Online Etymology Dictionary*, <http://www.etymonline.com>, 2008

meaning of the doctrine of the house even deeper, by placing it in the context of the Christian doctrine of creation. There is a connection between these two explorations. *"If we see only a Creator and his work, there is no connection. But if we understand the Creator, his creation, and the goal of that creation in a Trinitarian sense, then the Creator, through his Spirit, dwells in his creation as a whole, and in every individual created being, by virtue of his Spirit holding them together and keeping them in life."*¹⁵⁹ Furthermore, by answering what the future and the goal of creation is, Moltmann says; *"the divine secret of creation is the Shekinah, God's indwelling; and the purpose of the Shekinah is to make the whole creation the house of God."*¹⁶⁰

In Biblical times, the primary context of ecology was in describing the creation and its circumstances. In Genesis, God said; *"Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the Earth, and over all the creatures that move along the ground."*¹⁶¹ God gave dominance to humans over the Earth and made a clear distinction between the two. This dominance, however, was not meant to be a dictatorship, but instead, a stewardship under God, responsible to God. The caretaker obeys the real owner of creation because *"the Earth is the LORD's, and everything in it, the world, and all who live in it."*¹⁶² Before sin and death came into the world, *"The LORD God took the man and put him in the Garden of Eden to work it and take care of it."*¹⁶³ God's intention with His creation was that by controlling the Earth, population will expand to fill the planet. Adam's descendants were to take care of creation and this would involve

¹⁵⁹ Moltmann, Jürgen, *God in Creation: A New Theology of Creation and the Spirit of God*, Fortress Press, Minneapolis, MN, 1993 pg.xiv

¹⁶⁰ Ibid. pg.xv

¹⁶¹ Genesis 1:26

¹⁶² Psalm 24:1

¹⁶³ Genesis 2:15

learning to understand and manage all of its processes for the benefit of humankind and the glory of God. Before God established a covenant with Noah, in Genesis, He invited all the creatures that move on the ground, to be fed with green plant. That means that all of the beasts and creatures were *"sitting together with humankind at the vegetarian table."*¹⁶⁴ *"Then God said, "I give you every seed-bearing plant on the face of the whole earth and every tree that has fruit with seed in it. They will be yours for food. And to all the beasts of the earth and all the birds of the air and all the creatures that move on the ground—everything that has the breath of life in it—I give every green plant for food."*¹⁶⁵ It is quite forgotten, as Matthew comments *"though Adam had dominion given him over fish and fowl, yet God confined him, in his food, to herbs and fruit; and he never complained of it. Though afterwards he coveted forbidden fruit, for the sake of the wisdom and knowledge he promised himself from it, yet we never read that he coveted forbidden flesh."*¹⁶⁶ After the Covenant was made with Noah, in order for humankind to employ dominance over the Earth, God allowed and encouraged, that people have the right to eat fruit, herbs, and for the first time, the animals, in order to be sure, that *"everything God created is good, and nothing is to be rejected if it is received with thanksgiving."*¹⁶⁷ Later, as an example, in the Old Testament, as God emerged¹⁶⁸ to Abraham, He ate of a calf, together with butter and milk.¹⁶⁹ In the New Testament, Jesus also ate of the Passover lamb with His disciples.¹⁷⁰ Furthermore, in

¹⁶⁴ Moltmann, Jürgen, *Noéval túlélni*, (Surviving with Noah), (Article), *Theológiai Szemle*, Budapest, 1978, pg.242

¹⁶⁵ Genesis 1:29-30

¹⁶⁶ Matthew, Henry, *Commentary on the Whole Bible*, Christian Classics Ethereal Library, Calvin College, Grand Rapids, MI, 2009, <http://www.ccel.org>

¹⁶⁷ 1 Timothy 4:4

¹⁶⁸ Genesis 18:1

¹⁶⁹ Genesis 18:7-8

¹⁷⁰ Luke 22:7-8

Jesus' time, animals were also used for other means besides for food. For instance, John the Baptist used human clothing made of "camel's hair, with a leather belt around his waist, and he ate locusts and wild honey."¹⁷¹ Animals were also used for holy sacrifices, transportation, and as raw material. Trees were used for building houses, and all sorts of earthly materials were used to fulfill the needs of people. All in all, the Earth and everything in it was properly utilized for the purpose that God intended. It is stated in the Book of Isaiah, that; "*Who (God) has measured the waters in the hollow of his hand, or with the breadth of his hand marked off the heavens? Who has held the dust of the Earth in a basket, or weighed the mountains on the scales and the hills in a balance?*"¹⁷²

This balance of God upon the Earth is based on wisdom and promise since "*as long as the earth endures seedtime and harvest, cold and heat, summer and winter, day and night will never cease.*"¹⁷³ God's fullness in Jesus in due course "*holds all things in unity*"¹⁷⁴ and continuously renews the "*face of the earth.*"¹⁷⁵ This balance, from a New Testament position, points to the phrase 'oikos theou' since 'God's economy' in Jesus' time originated from the 'house of God' concept. Kittel indicates, that this "*divine house is not spatial, but represents God's care.*"¹⁷⁶ Furthermore, as the phrase "*as the earth He has given to man*"¹⁷⁷ also indicates, the Earth is a gift, so this means that humanity does not have sovereign control over the Earth, because "*the LORD God*

¹⁷¹ Mark 1:5

¹⁷² Isaiah 40:12

¹⁷³ Genesis 8:22

¹⁷⁴ Colossians 1:16-20

¹⁷⁵ Psalm 104:24-30

¹⁷⁶ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.674.

¹⁷⁷ Psalm 115:16

took the man and put him in the Garden of Eden to work it and take care of it."¹⁷⁸

Moreover, this care has to be based on responsibility, meaning that the goal should be to help the Earth endure; it should be cultivated and sustained according to God's will. This human responsibility refers to the "*The Parable of the Talents*"¹⁷⁹ with the focus on the word '*oikonómos*', which means steward. Kittel places this word into context, as an "*estate manager, accountant, treasurer and as a minister of Christ he is entrusted.*"¹⁸⁰ This means that whoever has to take care of somebody else's treasure has consequences since that individual was entrusted with the treasure. Therefore, humankind has a responsibility to balance all life for future generations to come. From a Biblical perspective, God's 'commandment of balance' of the Earth is the basic groundwork and principle of ecology.

2.1.3. ECOLOGY IN PRESENT SCIENTIFIC USAGE

In the scientific world, ecology by "*the classical Haeckelian definition, emphasizes both the living and the non-living components of the natural world.*"¹⁸¹ Furthermore, "*the principles of ecology apply to all facts of the world around us and all aspects of human endeavor.*"¹⁸² From a scientific standpoint, that includes the climate, geology, and the biotic ecosystem. In this sense, ecology is the study of the relationships between organisms and their environment. Therefore, many problems in human relationships like pollution, global warming, an increasing population, food and

¹⁷⁸ Genesis 2:15

¹⁷⁹ Matthew 25:14-30

¹⁸⁰ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.678.

¹⁸¹ Cary Institute of Ecosystem Studies, *Defining Ecology*, Millbrook N.Y. 2008, <http://www.ecostudies.org>

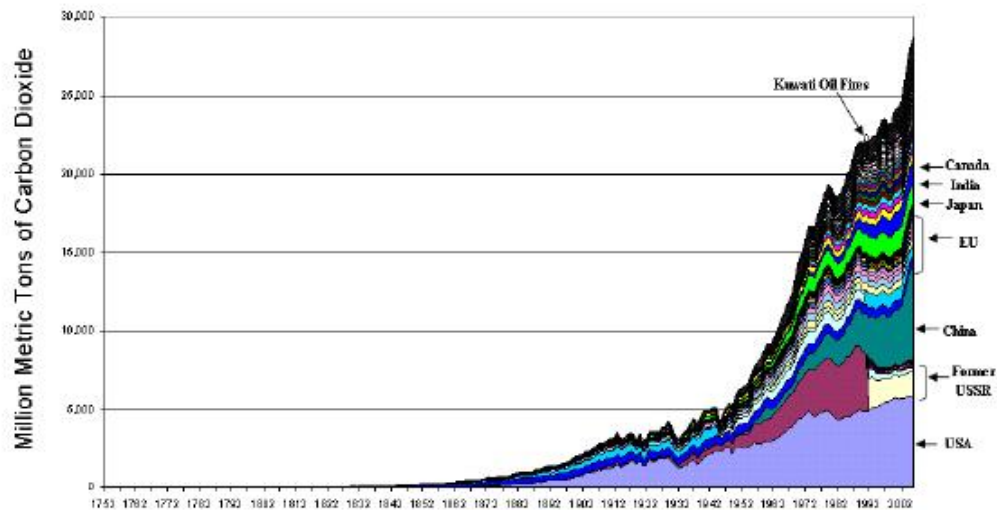
¹⁸² Begon, Michael, Townsend, Colin R., Harper, John L. *Ecology: from individuals to ecosystems*, Blackwell Publishing, West Sussex, UK, 1986, pg.viii

water shortages, extinction of plant and animal species, and many sociological and political complexities are to a great extent ecological.

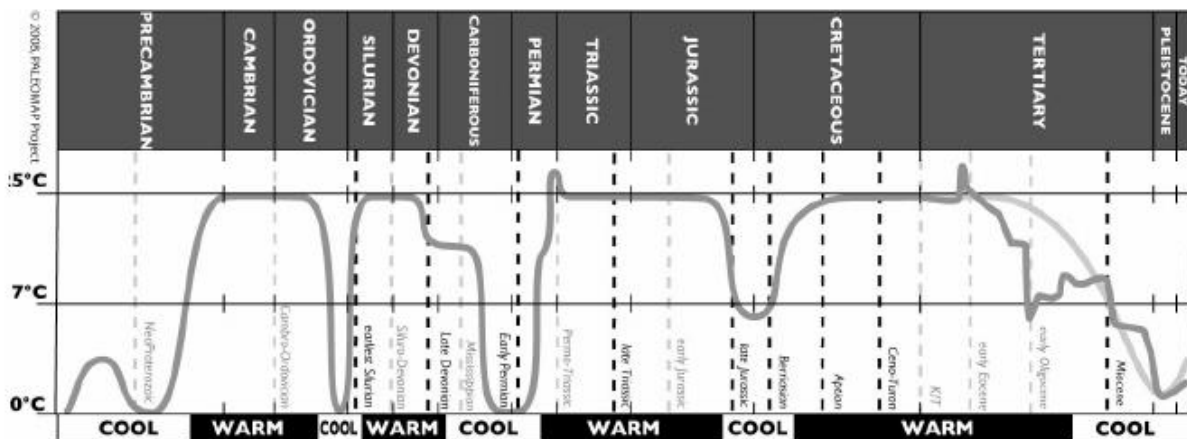
The world has reached the 21st century, and by experience, it is already safe to say, that humankind stands before the most unprecedented challenges ever seen; these challenges are brought about by climate change, and its related issues, such as soil degradation, water shortages, peak oil, pollution and other parameters influencing this phenomenon. The climate on Earth has changed many times during the course of history. From *"the ice ages to long periods of warmth, natural factors such as volcanic eruptions, changes in the Earth's orbit, and the amount of energy released from the Sun have affected the Earth's climate."*¹⁸³ In the early 18th century, the Industrial Revolution, along with a massive change in human activities, altered the composition of the atmosphere. The result can be seen today. According to the EPA, measurements have confirmed that greenhouse gas emissions are increasing and that human activities, predominantly, the burning of fossil fuels and changes in land use are the primary cause. As a result, the atmospheric concentrations of carbon dioxide and methane are higher today than at any point during the last 250 years. (Image¹⁸⁴)

¹⁸³ U.S. Environmental Protection Agency, *Basic Information*, Washington DC, 2009, <http://www.epa.gov/climatechange/basicinfo.html>

¹⁸⁴ Carbon Dioxide Information Analysis Center, U.S. Department of Energy, Washington D.C. Accessed on 1-14-2010 <http://cdiac.ornl.gov/trends/emis/glo.html>

Global CO₂ Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1752-2006

Nevertheless, the following question is quite obvious: why is this phenomenon happening exactly today? The earth's climate changed dramatically during the last 2 billion years, between a frigid and warm period after one another. Then, why is humanity experiencing this drastic and uncontrolled shift of global temperature now? (Image¹⁸⁵)



According to the 'butterfly effect' that encapsulates the concept of sensitive dependence on initial conditions in chaos theory, during the natural fluctuation of temperature variation on this earth, especially "within transitional periods of time, even

¹⁸⁵ Scotese, Christopher R., *Paleomar Project - Climate History*, Carleton College, Northfield, MN, April 20, 2002, <http://serc.carleton.edu/resources/23283.html>

small alterations lead to big transformations."¹⁸⁶ The unlimited burning of fossil fuels today generates that shift, and it is the result of overpopulation, pollution, and a selfish lifestyle; these are all factors that are currently influencing humanity's approach to the environment. In other words, the world's natural system is being shaped by humanity's irresponsible actions.

New research data suggests that another factor is a key player in global surface temperature change. Science Magazine, the world's leading journal of original scientific research, published an article, which suggests that stratospheric water vapor concentrations significantly change temperature on Earth. Carbon dioxide and other greenhouse gases may contribute only 75-80% to decadal changes in the rate of global warming, and stratospheric water vapor concentrations are responsible for about 25-30% of the change. The researchers state that "*stratospheric water vapor concentrations decreased by about 10% after the year 2000. Here, we show that this acted to slow the rate of increase in global surface temperature over 2000 to 2009 by about 25% compared to that which would have occurred due only to carbon dioxide and other greenhouse gases. More limited data suggest that stratospheric water vapor probably increased between 1980 and 2000, which would have enhanced the decadal rate of surface warming during the 1990s by about 30% compared to estimates neglecting this change. These findings show that stratospheric water vapor represents an important driver of decadal global surface climate change.*"¹⁸⁷ This groundbreaking new research suggests that humanity is still not aware of all the factors of global

¹⁸⁶ Végh, László, A rövidlátó ember megrontja a világot, (The Nearsighted Men Deteriorates The World) Article, Debrecen, Hungary, 2009, <http://www.angelfire.com/moon/vl/html/vldolg05.html>

¹⁸⁷ Solomon, Susan, Rosenlof Karen, Portmann Robert, Daniel John, Davis Sean, Sanford Todd, Plattner, Gian-Kasper, *Contributions of Stratospheric Water Vapor to Decadal Changes in the Rate of Global Warming*, NOAA Earth System Research Laboratory, Chemical Sciences Division, Boulder, CO, USA., Cooperative Institute for Research in Environmental Sciences, University of Colorado, Boulder, Colorado, USA., Climate and Environmental Physics, Physics Institute, University of Bern, Sidlerstrasse 5, 3012 Bern, Switzerland, January 12, 2010, <http://www.sciencemag.org/cgi/content/abstract/science.1182488v1>

warming. Yet, it is for certain that human activity is a significant element contributing to this change.

Therefore, the question is quite simple and frightening; is humankind, as it is known today, going to exist in the 22nd century? Natural resources - air, water, and soil - that sustain life on Earth are polluted. There are many problems, which will cause future generations to suffer, such as a significant increase of greenhouse gases, the destruction of the ozone layer, global warming, worldwide accumulation of toxic materials, the accumulation of nuclear waste, peak oil remains, pollution, overconsumption of raw materials, and an unsustainable lifestyle, just to name the main directions. Therefore, because of human behavior, life on Earth is threatened.

Humankind is challenged with a potentially catastrophic future, and has to confront this with crucial decisions. Popular culture usually tries to provide hope for a situation like this, from science, technology, and politics. However, this is not enough since environmental problems raise fundamental questions of ethics and philosophy. Simply relying on these two categories for a solution, without considering theology is unattainable, since theology, as Strong defines it, is "*the science of God and of the relations between God and the Universe.*"¹⁸⁸ Therefore, trying to understand environmental problems without considering the science of the God, Who created everything, can contribute as many problems as it solves. Looking for objective decisions in science and technology only means that the values and philosophical assumptions that decide the issue will come from the opinions that experts of these areas hold. Therefore, environmental decisions need to be considered from a wider scope, especially a scope that includes viewpoints of theology.

¹⁸⁸ Strong, Augustus Hopkins, *Systematic Theology*, Griffith & Rowland, Philadelphia, PA, 1909, pg.1.
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2. 2. ENVIRONMENTAL AWARENESS

God created the Universe and all of the creatures in it. There isn't scientifically proven evidence for the existence of all the creatures that inhabit this Earth, but the Bible explains that humans are a part of creation. Humans have existed for 100,000 years¹⁸⁹ but this time period is extremely short, especially when compared to the age of the Earth, which is 4.55 billion years¹⁹⁰ and the age of the Universe, which is about 14 billion years.¹⁹¹ However, when observing the minuscule amount of time that humans have spent on Earth in comparison to the age of the Earth, it is alarming to note that a mere 0.002% of human lifetime was able to seriously change the entire biosphere, generate global warming, pollution, overpopulation and an extremely dangerous condition for future life of Earth. Beginning with the Industrial Revolution, the clear cutting of forests, land development, mining, and industrial production started to take over the Earth. People began moving in masses to cities for work, factories grew rapidly, and quite suddenly, pollution became a real problem around cities. Unfortunately, the enormous negative effect of human activity on the environment was not recognized by society as a whole, and only a few individuals such as Henry David Thoreau and John Muir, founders of the Sierra Club in 1892, were publicly concerned with this issue. Economic competition between industrialized nations turned the environment upside down, and this social and environmentally neglecting mentality continued through the 20th century. Environmental awareness was not an issue until the

¹⁸⁹ Leakey, Richard, *The Origin of Humankind*, Basic Books, New York, NY, 1996, pg. xii

¹⁹⁰ Stassen, Chris, *The Age of the Earth, The Talks Origins Archive*, (Article) 2005, <http://www.talkorigins.org/faqs/faq-age-of-earth.html>

¹⁹¹ Primack, Joel R. "Gravitation." NASA World Book Online Reference Center, 2004, <http://www.worldbookonline.com>

end of the World War II, when Aldo Leopold¹⁹² published his book called, 'The Sand County Almanac' in 1949, in which he voiced that ethical sensibility should be extended beyond humankind towards nature and the environment as well. In 1962, Rachel Carson's book 'Silent Spring' documented poisonous consequences of DDT to the world, and this discovery created international attention, and as a result, the banning of DDT in the United States. According to Harrison,¹⁹³ DDT, is an insecticide and was originally prepared in 1873. In 1939, Paul Muller of Geigy Pharmaceutical in Switzerland discovered the effectiveness of DDT, and for this discovery, he was awarded the Nobel Prize in medicine and physiology in 1948. As the severe environmental concern developed around this product, in 1973, the use of DDT was banned in the United States. Fortunately, the buildup of DDT in natural waters is a reversible process. As a result of a strict ban on DDT use, the U.S. Environmental Protection Agency announced a 90% reduction of DDT in Lake Michigan fish by 1978. All of these revolutionary individuals and their ideas gave birth to what is known today as the Environmental Movement.

Since then, the Environmental Movement has been the most successful social movement in human history. It was primarily inspired by the work of George Perkins Marsh, an American diplomat, who in 1864 wrote a cornerstone book, called *Man and Nature*. The National Park Service of the U.S. Department of Interior promoted this book¹⁹⁴ and considered it as the foremost inspiration for the modern conservation movement. In it, Marsh compared two distinguished situations, the destruction wrought on Vermont's landscape and the deforestation he had seen in Europe. Marsh showed

¹⁹² Encyclopedia Britannica, Chicago, IL, 2009, "Aldo Leopold (1887–1948) U.S. naturalist, conservationist, and forester, influential forerunner of environmental movement. He is regarded the most influential conservation thinker of the twentieth century". <http://www.britannica.com>

¹⁹³ Harrison, Karl, *DDT @ 3Dchem.com, Banned Insecticide*, (Article), 1997 <http://www.3dchem.com/molecules.asp?ID=90>

¹⁹⁴ National Park Service of the U.S. Department of Interior, *History and Culture: George Perkins, March*, Washington DC, 2008, <http://www.nps.gov/mabi/historyculture/gpmarsh.htm>
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how long-lasting the effects of environmental harm could be, by conjuring up images of Ancient Rome. He argued that humans unavoidably caused change to the natural world however; it is up to them to decide whether it will be for the better or the worse. He highlighted, that humans had to make choices that would benefit the health of the entire natural world like stewards of nature.

The Environmental Movement continues to raise awareness for world peace by acknowledging that immediate action is required if the Earth is to be saved from eternal destruction.

2.3. THE CRISIS

2.3.1. CHALLENGING THE JUDEO-CHRISTIAN WORLD VIEW

Lynn Townsend White, Jr. was an internationally known medieval scholar, former professor of medieval history at Princeton University, Stanford University, and the University of California, Los Angeles. Since his influential work, 'The Historical Roots of Our Ecological Crisis' was introduced to popular knowledge; ecology has not been the same. His famous statement regarding ecology still holds true today. He stated that: "*what people do about their ecology depends on what they think about themselves in relation to things around them.*"¹⁹⁵ In this article, White set forth his proposal that the ecological crisis is based on the beliefs and teachings of Judeo-Christianity. He came to this idea by arguing that Christianity is the driving force behind humanity seeking to dominate nature. If humanity has dominance over nature and the environment, than it sees it as a foreign idea, not related to human responsibility. The result of a thought pattern such as the previously mentioned one is what can be seen today, which is an avoidance of responsibility towards the environment.

¹⁹⁵ White, Lynn, *The Historical Roots of Our Ecological Crisis*, Science Magazine, Vol. 155, March 10, 1967, Washington DC, pg 1203-1207

White suggests that a new religion or a revised Christian one could be the solution to solving this situation. White's ideology of humanity is based on the view of the post-Christian age, because people's thinking, language, and even actions "*largely ceased to be Christian, - the substance often remains amazingly akin to that of the past. Our daily habits of action, for example, are dominated by an implicit faith in perpetual progress.*"¹⁹⁶ It is vital to see the thought process of this article, since according to White, "*the victory of Christianity over paganism was the greatest psychic revolution in the history of our culture.*"¹⁹⁷ By this, Christianity established a kind of dualism, where one side is humankind and the other is nature. Since the two are separate, and it is God's will that human use nature for the fulfillment of needs, humans have dominance over nature. On the contrary, in many pagan religions, every part of nature, like trees, mountains, rivers, etc. has its own god, or spirit, and it is required to 'ask' or 'pray' to them for peace, understanding, or for the permission to take control. For example, one must ask permission to cut down a tree. However, it is Christianity, through its destruction of paganism, which made it possible to allow people to develop nature as they wanted, disregarding the feelings, or needs of natural resources. To dissolve this paradox, White suggests, that a new type of Christianity be employed. He says that "*both our present science and our present technology are so tintured with orthodox Christian arrogance toward nature that no solution for our ecologic crisis can be expected from them alone. Since the roots of our trouble are so largely religious, the remedy must also be essentially religious.*"¹⁹⁸ Even though the suggested patron saint for ecologists, St. Francis of Assisi, failed when basing his ideas on this principle, White argues, that an alternative Christian view must be born regarding the relationship between nature and human kind.

¹⁹⁶ Ibid

¹⁹⁷ Ibid

¹⁹⁸ Ibid

On the contrary to White's article, Lewis W. Moncrief argues that White's analysis oversimplifies this subject, by missing the fundamental point that human beings from the beginning, have been changing the environment. He asks: *"if our environmental crisis is a 'religious problem', why are other parts of the world experiencing the same environmental problems that we are so well acquainted with in the Western world?"*¹⁹⁹ However, Moncrief agrees with White that *"human ecology is deeply conditioned by beliefs about our nature and destiny – that is, by religion. However, to argue that it is the primary conditioner of human behavior toward the environment is much more than the data that he cites to support this proposition will bear."*²⁰⁰ Understanding the environmental crisis requires a more complex view, including an understanding of capitalism, technology, democratization, urbanization, individualism, and other religions in order to come to a well-rounded and potentially useful conclusion. Also, critics to White state that *"the role played by religions is generally in establishing a broad set of allowable beliefs and behaviors in an automatic and highly particular way as White's article seems to imply. This does not even begin to ask the question whether what White describes is a good accounting of what Christian theology actually teaches on the subject. While White's analysis is somewhat simplistic and open to criticism from a variety of directions, it still poses questions to which responsible theology needs to give attention."*²⁰¹

Lynn White called Christianity arrogant in regards to nature and accused it of being the historical origin of the ecological crisis that humanity began to experience in

¹⁹⁹ Moncrief, Lewis W., *The Cultural basis of Our Environmental Crisis*, Science Magazine, Vol. 170, October 30, 1970, Washington DC, pg.508-512

²⁰⁰ Ibid

²⁰¹ Case-Winters, Anna, *Reconstructing a Christian Theology of Nature*, Ashgate Publishing, Farnham, U.K. 2007, pg.19-20,

the late 20th century. White demonstrates a simple chain reaction case explaining that Christianity is the starting cause carrying the responsibility for the current ecological crisis. His opinion is based on the Christian teaching that humans are superior to Earth and nature, and because the roots of the Western culture are built on Christianity, thus, modern science and technology are also the products of Western culture. These allegations demonstrate that Christianity was the root of what has become modern thinking and society today, and this root requires careful attention!

The other uncompromising view of understanding life and its consequences comes from the Gaia hypothesis. The scientist James Lovelock²⁰² first proposed this hypothesis in 1979, when he worked for NASA on methods to detect life on Mars. The original idea was that the sign of life on Earth is the stable concentration of chemicals, like oxygen and other elements in the atmosphere. Lovelock recommends that using this form of life detection is a reliable method for determining if there is life on other planets. He admits that *"although my tentative suggestion had been rejected, the idea of looking for a reduction or reversal of entropy as a sign of life had implanted itself in my mind."*²⁰³ From his brainstorming, the Gaia²⁰⁴ Hypothesis was born, which is a controversial theory stating that Earth acts as a super organism with an ability to regulate environmental conditions needed to sustain itself. The hypothesis is based on the idea that *"life at an early stage of its evolution acquired the capacity to control the global environment to suit its needs and that this capacity has persisted and is still in active use. In this view, the sum total of species is more than just a catalogue. The biosphere and like other associations in biology is an entity with properties greater than*

²⁰² Lovelock, James Ephraim, (1919-) Independent scientist, author, researcher, and environmentalist. Personal site: <http://www.ecolo.org/lovelock>

²⁰³ Lovelock, James, *Gaia, a New Look at Life on Earth*, Oxford University Press, UK, 1979, pg.2.

²⁰⁴ Princeton University Word Net Web, Princeton, NJ, 2009, *"Gaia: goddess of the earth and mother of Cronus and the Titans in ancient (Greek) mythology"* <http://wordnet.princeton.edu/>

the simple sum of its parts."²⁰⁵ Gaia, according to some scientists has two faces.²⁰⁶ One is that "*Gaia is an organism, with all the attributes that designation implies.*"²⁰⁷ The other is that "*Gaia is a research program concerned with the roles living organisms play in managing flows of matter and energy through the biosphere, and with identifying the feedbacks and potential control points that could give the earth a semblance of life, if not life itself.*"²⁰⁸ The scientific community responded to this hypothesis with great rejection based on mainly two topics; "*the theory was criticized as being teleological (i.e. requiring foresight and planning by the biota), as well as being unscientific.*"²⁰⁹ From an ecological standpoint however, this hypothesis, after a paradigm shift, is the birth place of Deep Ecology, a new world, suggesting that Mother Earth is a "*planet as a living organism, one that is self-regulating, of which life is an interconnected web of ecological processes.*"²¹⁰ In this case, sustainability is nothing more than a New Age religion, worshipping Gaia in order to survive life in the Universe.

²⁰⁵ Samson, Paul R., and Pitt, David, *The Biosphere And Noosphere Reader: Global Environment, Society, And Change*, Routledge Publisher, London, 1999, pg.116.

²⁰⁶ Schneider, Stephen H., Miller, James R., Christ, Eileen and Boston, Penelope J., *Scientist Debate Gaia*, Massachusetts Institute of Technology Press, Cambridge, MA, 2004, pg. 57

²⁰⁷ Ibid.

²⁰⁸ Ibid.

²⁰⁹ Molnar, Sebastian, *The Gaia Hypothesis*, (Article) April Issue, 1999, Geocities, http://www.geocities.com/we_evolve/Evolution/gaia.html

²¹⁰ Cassell, Kevin, *Deep Ecology and Gaia: A World View for Our Own Survival*, (Article) June 13, 2007, <http://www.kevincassell.com/blog/index.php?id=1>

2.3.2. THE BACKGROUND OF THE CRISIS

2.3.2.1. DEMOGRAPHIC REASONS FOR THE CRISIS

Looking at the current rate of world population growth, makes one really wonder what God means when He commands for humans to “*fill the Earth.*”²¹¹ How many people can this Earth sustainably support? The answer to this question is not supposed to come from a general numeric standpoint which simply gives a number of people. Rather, when approached from an ethical perspective, the question would be phrased more like - what degree of material prosperity and lifestyle of consumption should be enough? It is essential to take into consideration that determining the number of people that the Earth can sustain is not a simple calculation. In an accurate calculation, each person does not just receive a count of one. Instead, that person’s entire being as a member of the Earth must be taken into consideration since some people use up more resources, they pollute more, (Personal Impact Calculator²¹²) and their standard of living and way of lifestyle cause more harm to the Earth. All of this must be taken into account. If it is considered, that population growth and economic growth are not developed as parallel and equally growing factors, and then the answer is even more alarming. According to Max Singer, 44% of the world’s population live in countries where the fertility rate has fallen below the replacement rate,²¹³ and demographers are now predicting that world population will peak within 50 years and then sharply decline, with serious consequences.²¹⁴ That 44% however lives mainly in Western societies, where just in Europe, the fertility rate within 30 years (from 1970-75

²¹¹ Ibid

²¹² Environmental Defense Fund, Washington DC, 2009, <http://www.fightglobalwarming.com/carboncalculator.cfm>

²¹³ Singer, Max, *The population surprise*, The Atlantic Monthly, (Article) August 1999, pg. 22

²¹⁴ United Nations, *World Fertility Patterns 2007*, New York, NY, www.un.org/esa/population

to 2000-05) dropped from 2.2 to 1.4.²¹⁵ Even though the world's population is still growing, and Christianity is also increasing in Latin America and Africa, not to mention the uncertain situation in China, the population in the West is declining.²¹⁶ It is because the West's population is top heavy, meaning the ratio of youth to the elderly is low. On the other the Muslim population's ratio is the opposite. It is striking to read the 'Conclusion' of the Muslim Population Statistics article that *"an aging population tends to be introspective and sluggish, whereas a young population is more likely to be vibrant and energetic. This may or may not bode well for many countries and that will depend on whether their political structure is fragile or not."*²¹⁷ The trend is dramatic.

(Image²¹⁸)

Comparative chart - number of Muslims to Christians:

	Christian	Muslim
1900 world population	26.9%	12.4%
1980 world population	30%	16.5%
2000 world population	29.9%	19.2%
2025 world population (PROJECTED)	25%	30%

²¹⁵ Ibid

²¹⁶ U.S. State Department, International Religious Freedom Report, Washington D.C. 2009, <http://www.state.gov/g/drl/rls/irf/2009/index.htm>

²¹⁷ Canadian Society of Muslims, Toronto, ON, Canada, Muslim Population Statistics from the Canadian Society of Muslims, 2001 Accessed on 1-12-2010 <http://muslim-canada.org/muslimstats.html>

²¹⁸ Ibid.

Barrett, in the 'Annual Table of World Religions 1900-2025' also underlines this trend from another angle. (Image²¹⁹)

Annual Table of World Religions, 1900-2025

by David B. Barrett and Todd M. Johnson, Jan. 1, 2002

	1900	1970	2000	Trend	mid-2002	2025
WORLD POPULATION				%p.a.		
1. Total population	1,619,626,000	3,696,148,000	6,055,049,000	1.22	6,203,709,000	7,829,703,000
2. Urban dwellers (urbanites)	232,695,000	1,353,370,000	2,881,079,000	1.90	2,991,572,000	4,611,677,000
3. Rural dwellers	1,386,931,000	2,342,778,000	3,173,970,000	0.60	3,212,217,000	3,212,026,000
4. Adult population (over 15s)	1,074,058,000	2,310,543,000	4,254,647,000	1.76	4,405,603,000	5,987,079,000
5. Literates	296,258,000	1,475,194,000	3,261,345,000	1.76	3,377,265,000	5,046,637,000
6. Non-literates	777,800,000	835,349,000	993,302,000	1.75	1,028,338,000	940,442,000
WORLD CITIES						
7. Metropolises (over 100,000)	300	2,400	4,050	1.84	4,200	6,500
8. Megacities (over 1 million)	20	161	402	2.21	420	650
9. Urban poor	100 million	650 million	1,400 million	3.16	1,490 million	3,000 million
10. Urban slum-dwellers	20 million	260 million	700 million	2.82	740 million	1,500 million
WORLD RELIGIONS						
11. Total all religions	1,000	6,000	9,900	1.70	10,200	15,000
12. Christians (all kinds)	558,132,000	1,236,374,000	1,999,564,000	1.27	2,050,616,000	2,616,670,000
13. Muslims	199,941,000	553,528,000	1,188,243,000	2.11	1,239,029,000	1,784,676,000
14. Non-religious	3,024,000	532,096,000	768,159,000	0.60	790,557,000	875,121,000
15. Hindus	203,003,000	462,598,000	811,336,000	1.54	836,543,000	1,049,231,000
16. Buddhists	127,077,000	233,424,000	359,982,000	1.04	367,538,000	418,345,000
17. Atheists	226,000	165,400,000	150,090,000	0.24	150,804,000	159,544,000
18. New-Religionists	5,910,000	77,762,000	102,356,000	0.94	104,280,000	114,720,000
19. Ethno-religionists	117,558,000	100,278,000	228,367,000	1.30	234,341,000	277,247,000
20. Sikhs	2,962,000	10,618,000	23,258,000	1.84	24,124,000	31,378,000
21. Jews	12,292,000	14,763,000	14,434,000	0.61	14,670,000	16,053,000

Weigel claims that *"Islam is the fastest growing major religion in the world today. From a population base of 200 million in 1900, Islam grew more than fivefold during the twentieth century. The change in Muslim/Catholic demographics over the past thirty years is striking. In 1970 there were 554 million Muslims in the world, and 666 million Catholics; by the Great Jubilee of 2000, Islam could count 1.2 billion adherents, and Catholicism almost 1.1 billion. 1.3 billion Catholics in 2025 will find themselves in a world with 1.8 billion Muslims."*²²⁰ This trend will lead to a shrinking Western, Judeo-Christian based societies and growing Asian, non-Christian, mainly Muslim societies to the point, where the world's human carrying capacity will soon reach its limit, and this will dramatically change the face of the world at it is known today.

²¹⁹ Barrett, David B., & Johnson, Todd M., *Annual Statistical Table on Global Mission*, International Bulletin of Missionary Research, January, 2002
<http://www.wnr.org/cms/statuswr.shtml>

²²⁰ Weigel, George, *World Religions by the Numbers*, (Article), Catholic Education Resource Center, Powell River, B.C., Canada, January, 2002
<http://www.catholiceducation.org/articles/facts/fm0010.html>

But where is that limit? Is human population growth or climate change the larger danger to the world? According to Chris Rapley, who is the former director of the British Antarctic Survey, "*reducing our carbon emission is one of the greatest challenges facing humanity!*"²²¹ He also agrees that history's utmost scientific endeavor is how humanity responds to climate change. Since climate change is "*human made*"²²² there is an important relationship between people and climate change. Simply stated, the more people there are, the more emissions are generated, and the more emissions that are generated the bigger the carbon footprint becomes, and the bigger the carbon footprint becomes, the faster climate change takes place.

Subduing the Earth, however, according to the Bible²²³ is a different scenario. God entrusted humanity to subdue the Earth and rule it, but in a manner similar to gardening. God did not say that it is appropriate to destroy the Earth and that it is alright to do whatever humans want to. It is not written anywhere that humankind received Earth as a gift, which from that point forward has nothing to do with its giver. The exact opposite is accurate; God told Adam that gardening is the proper way of subduing. "*The LORD God took the man and put him in the Garden of Eden to work it and take care of it.*"²²⁴ Taking care of a garden is a simple, but constant task, which remains the same today as it was in the time of Adam. First, the soil must be broken up, than seeds need to be planted, watered, weeds pulled, and pests controlled. This is followed by a harvest. Gardening implies subduing and ruling, nothing other than a small area of wild nature to feed those who are in need. No more and no less, no waste, and no starvation. The Scriptures even say that it was God who planted the

²²¹ British Antarctic Survey, *Interview with Prof. Chris Rapley*, Cambridge, UK, 2008, www.antarctica.ac.uk

²²² Crowley, Thomas J, *Causes of Climate Change Over the Past 1000 Years*, Science Magazine, July 14, Washington DC, 2000, Vol.289, no. 5477, pg. 270-277,

²²³ Genesis 1:27-28

²²⁴ Genesis 2:15

Garden of Eden as a home for the first humans²²⁵ providing an example for them to follow. This guide from God can be applied to a worldwide scale. In the modern world, the terms of subduing and ruling can be understood like managing and administering. These, however, must be done with respect and responsibility.

2.3.2.2. OTHER REASONS FOR THE CRISIS

Nevertheless, a question still remains: Since developed Western nations are historically Judeo-Christian based, why is it that they responded to creation with an anti-labile approach?

First, it is because Western Christianity has embraced consumerism, and it has also disregarded the Bible's many cautions and warnings regarding work and the rewards of honest labor. Instead, it has followed the direction of the masses of greed and materialism producing controversy throughout history. These days of the 21st century can be compared to the "*worship of the Golden Calf*"²²⁶ which was and is a complex disorientation from the truth.

Secondly, the Church, in many forms and in many instances does not live Her life according to the Biblical principles and Godly references. Today, it is commonplace to hear about false teachers, arrested pastors, church leaders caught for pedophilia, bribery, and financial and political scandals. The result of all of this is lost authenticity of the Church²²⁷ among the unchurched²²⁸ population. This conduct outside

²²⁵ Genesis 2:8

²²⁶ Exodus 32

²²⁷ White, Nathan, *The Unchurched World Views Us as Judgmental and Homophobic*, Shepherd the Flock, Atlanta, GA, (Article) March 28, 2008

²²⁸ Barna Group Inc. Ventura, CA, "*Spirituality May be Hot in America, But 76 Million Adults Never Attend Church*" Research data March 20, 2006, <http://www.barna.org/barna-update/article/5-barna-update/158-spirituality-may-be-hot-in-america-but-76-million-adults-never-attend-church>

of Christianity can also be seen since the Church has neglected the order of God and does not follow what She teaches to others.

Thirdly, as a consequence, Christianity has downgraded to the margins of society. Materialism is escalating uncontrollably and people are becoming more and more influenced by the media, advertising, and politics. In this midst of this, Christianity does not dare to go against the flow and it hides behind the safe walls of the Church. Tozer describes this as an essential issue, saying that *"the church's mightiest influence is felt when she is different from the world in which she lives. Her power lies in her being different, rises with the degree in which she differs and sinks as the difference diminishes."*²²⁹ More than ever, humans are dissatisfied with themselves, they lack self-esteem, and they search for quick fixes for their problems. Individuals have a void in their life as well as spirit, and they desperately try to fill this void with everything this world can offer. In this market, Christianity is just one member of this desperate society. Individuals in many countries are under the impression that they will be happier if they buy more things that they do not really need and that only bring momentary pleasure. Yet, they still try to alleviate their life problems with this method and this ultimately leaves humanity in greater debt than before. This drives people to earn more and to borrow even more, but they do not notice that at the same time, they are neglecting the disastrous cost to the human moral and world ecology. *"The forces of democracy, technology, urbanization, increasing individual wealth, and an aggressive attitude toward nature seem to be directly related to the environmental crisis now being confronted in the Western world. The Judeo-Christian tradition has probably influenced*

²²⁹ Tozer, Aiden Wilson, *The Set of the Sail*, Christian Publication, 1986, pg.35-36
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the character of each of these forces."²³⁰ As a result, Western Christianity has blended into the life of the masses and it has been influenced by culture and lifestyle. In reality, it serves two Masters at the same time.²³¹

2.3.3. ANALYSIS OF THE CRISIS

Considering Christian awareness and the environment, Christians are very slow to respond to such revolutions as the Green Movement, and they are also slow to adopting sustainable lifestyles. The latest study from the Barna Group, a research organization with the following vision: *"to provide leadership and unique, strategic information and resources that help facilitate spiritual transformation in America"*²³² – is not quite enthusiastic about this matter. In a recent survey of American Christians²³³, when asked the question, *'name the top challenges facing the nation,'* individuals identified issues such as: environment (3%), global warming (3%), health care (11%), education (8%), the war in Iraq and Afghanistan (27%), fuel costs (30%), and the economy (50%) as central problems. This clearly shows that American Christians are concerned about the environment, yet their primary apprehension is about the quality of daily life. Their apprehensions are the same as those of the unchurched; they are concerned about the economy, fuel costs, and other issues. On the other hand, in the words of David Kinnaman, the president of The Barna Group, the survey shows that *"still, millions of Christians - no matter how you slice it, Catholic or Protestant,*

²³⁰ Moncrief, Lewis W., *The Cultural Basis for Our Environmental Crisis*, Science Magazine October 30, 1970, Vol. 170. No. 3957, Washington DC, pg.508-512

²³¹ Matthew 6:24

²³² Barna Group, Ventura, CA, 2009, <http://www.barna.org/about>

²³³ Barna Group, Ventura, CA, 2009, *Evangelicals Go "Green" with Caution*, September 22, 2008, <http://www.barna.org/barna-update/article/13-culture/23-evangelicals-go-qgreenq-with-caution>

evangelical or not - want to see their faith community become more active in environmental stewardship."²³⁴

From a professional standpoint, there is a growing need to launch more institutions, organizations, and centers that serve the purposes of Christian environmental stewardship. One of the first and most advanced groups like this is the Au Sable Institute, formerly led by Calvin B. DeWitt, a Christian Scientist, writer, and conservationist. His group aims for the "*integration of knowledge of the Creation with Biblical principles for the purpose of bringing the Christian community and the general public to a better understanding of the Creator and the stewardship of God's Creation.*"²³⁵ Also, many newly established groups, programs, and activities are structured to allow for the promotion of Christian environmental stewardship. These organizations are primarily non-profit, seeking to motivate, activate, and educate Christians in the effort to care for God's creation, be faithful stewards, honor God, and protect the environment. For environmental responses from the Christian Church and for a denominational perspective, see Chapter 2.5.

Although there are many new beginnings in this matter, it is not difficult to conclude, that the Christian Church is taking baby steps when moving forward; this is a new direction and understanding, and for many, it is out of their comfort and interest zones. At this time, the majority of Christians in the Western hemisphere are frankly unconvinced about the reality of the environmental crisis. The reason for this analysis is that the majority of Christians do not see the importance of the ecological concern. It is mainly because from a nearsighted standpoint, it can be mistaken as a liberal issue, or New Age propaganda. Also, it can be seen as some kind of negligence, rooted in the

²³⁴ Ibid

²³⁵ Au Sable Institute, Grand Rapids, MI, <http://www.ausable.org/au.main.cfm>

belief of the unimportance of this Earth, since it will be destroyed and renewed after Jesus' second return. Given that, there are so many other significant problems facing humanity and these all absorb much attention. Thus, many individuals seem to think that the environment and its concerns are someone else's problem and the answers are supposed to come from experts, governments, science, ethics, or anything that is not connected to an individual person's sphere of responsibility. As humanity starts to see the daily decline of species, consequences of environmental disasters, destruction of the rain forests, or even Chernobyl- like nuclear accidents, they begin to realize, that Christians have a divine responsibility to the Earth and to all of the creatures within it. The Earth is being exploited by humanity and this will have a severe and disastrous effect of unprecedented proportions, which will affect not just present life, but the life of future generations as well.

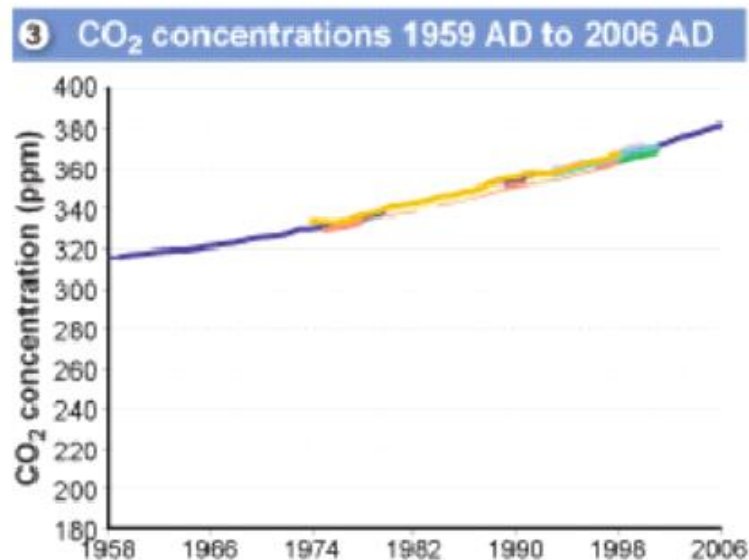
This is an unusual time since humankind is now capable of destroying itself without using nuclear power. Humans have the power to trash the land, disregard creatures, and pollute water around the globe. It is clearly an execution of the Earth. In Revelation, John states in his prophecy that *"the nations were angry; and your wrath has come. The time has come for judging the dead, and for rewarding your servants the prophets and your saints and those who reverence your name, both small and great - and for destroying those who destroy the earth."*²³⁶ This judgment, very directly outlines the future of those, who stand and act against God's will. It is a direct warning for people: It is now or never! Humanity must change the course of history and this is the last chance to do so! It is astonishing to take into account, what humanity has already 'achieved' in order to damage this globe. Regarding this matter, the United

²³⁶ Revelation 11:18

Nations' Millennium Ecosystem Assessment²³⁷ was established by 1,360 experts in 95 nations. Its findings are astonishing, because it concluded that two-thirds of the ecological systems are already polluted or over-exploited by the rising human population. All this has happened within the past 50 years. The result of the 'modern' humankind's negligence toward this Earth has generated a crisis, which is sensibly present in the environment. The effect will be explained in detail and broken down into several sections that are outlined below.

2.3.3.1. CLIMATE CHANGE

A/ Natural Systems - (atmosphere, air, water) The destruction of the Earth's protective atmosphere has generated several life-changing effects on this planet. The growing radiation exchange activity determines how much radiation comes into and leaves the atmosphere. It is the outcome of the release of greenhouse gases (Image²³⁸) and aerosols resulting from human activities.



²³⁷ United Nations, *Millennium Ecosystem Assessment*, Washington D.C. March 30, 2005, <http://www.millenniumassessment.org/en/About.aspx#1>

²³⁸ US Environmental Protection Agency, *Atmosphere Changes*, Washington DC, 2008, <http://www.epa.gov>, Copyright @ 2010 by Gábor Lassu. All rights reserved

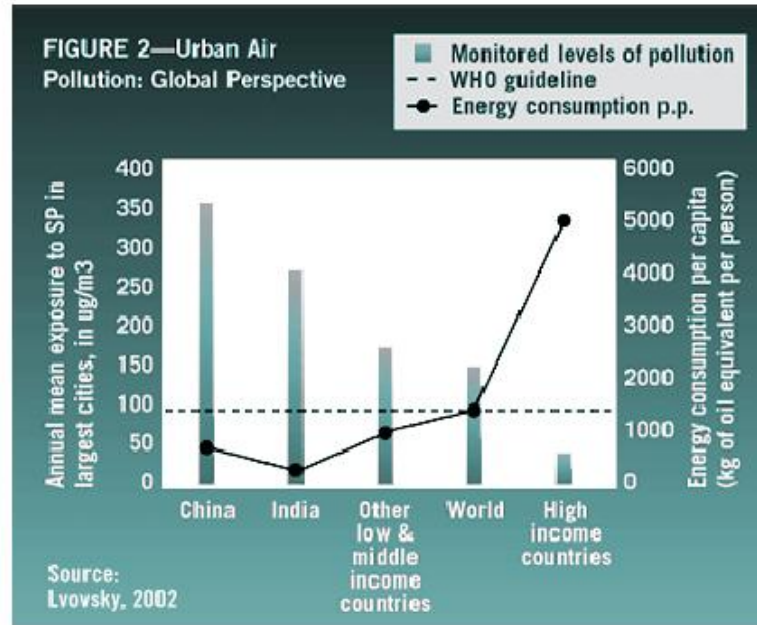
Greenhouse gases are generated by burning fossil fuels and also as an effect of the decrease of green vegetation, mainly from cutting down forests. Because greenhouse gases absorb and emit heat, increasing their concentrations in the atmosphere will lead to a warming effect. This warming effect is seen as a global temperature increase. *"The atmosphere absorbs more infrared energy than it reradiates to space, resulting in a net warming of the Earth atmosphere system and of surface temperature. This phenomenon is referred to as the greenhouse effect."*²³⁹ All of these factors contribute to changing the climate, which has several global consequences.

*"Smog is a type of large-scale outdoor pollution. It is caused by chemical reactions between pollutants derived from different sources, primarily automobile exhaust and industrial emissions."*²⁴⁰ It causes all kinds of health issues, such as lung disease, asthma, respiratory illnesses, pulmonary diseases, chronic bronchitis and even death in some cases. In general, scientists differentiate between indoor and outdoor pollution. Pollution varies in different regions, and it does not depend only on energy consumption. (Image ²⁴¹)

²³⁹ Wuebbles, Donald J. and Edmonds, Jae, *Primer on Greenhouse Gases*, , CRC Press, Boca Raton, FL, 1999, pg. 2-3

²⁴⁰ Berkeley National Laboratory, *ELSI Project, Outdoor Pollution*, Berkeley, CA, 2008, <http://www.lbl.gov/Education/ELSI/pollution-main.html>

²⁴¹ World Bank Institute, *Development Outreach, Urban Air Pollution Management*, November, 2003, Washington DC, <http://www1.worldbank.org>



Water is essential and indispensable for all forms of human and other life.

It is necessary in almost all human activities as well. According to the U.N.,²⁴² access to safe freshwater is now regarded as a universal human right. Climate systems and freshwater systems are closely interconnected in multifaceted and interactive ways. Because of this special relationship between the two systems, any change in one of these systems results in a change in the other one as well. (Image²⁴³)

²⁴² United Nations Commission on Human Rights, *Agenda item 10., Economic, Social and Cultural Rights*, March 30, 2004, Geneva, CH, http://data.unaids.org/Topics/Human-Rights/60thchr_economic_cultural_social_en.pdf

²⁴³ United Nations, Intergovernmental Panel on Climate Change, *The Working Group II contribution to the IPCC Fourth Assessment Report*, Cambridge Press, Cambridge, UK, 2007, pg. 175, Copyright © 2010 by Gábor Lassu. All rights reserved

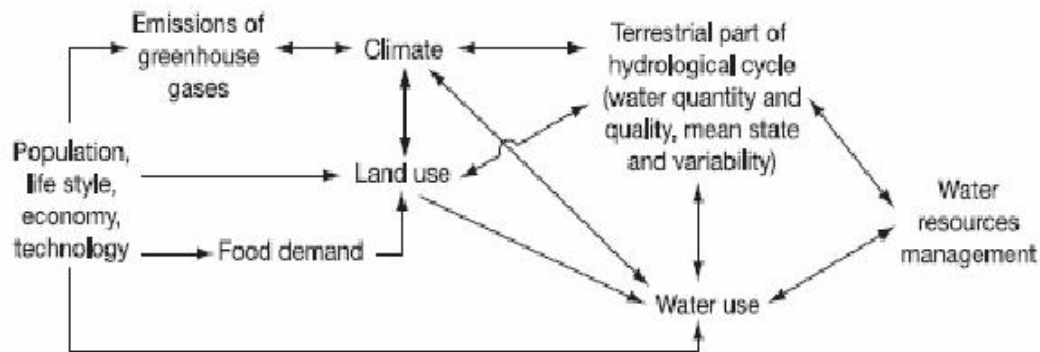


Figure 3.1. *Impact of human activities on freshwater resources and their management, with climate change being only one of multiple pressures (modified after Oki, 2005).*

Having clean drinking water is the most significant issue of the 21st century. In developed countries and regions, the concern is about the polluted water supply, which requires an enormous effort to keep clean and in circulation. In the undeveloped regions and developing countries, the main issue is the presence and availability of water. The change of the hydrological cycle around the globe affecting water supply, water availability, and floods, requires a quick and meaningful adjustment. Better management must be developed in regards to the water resources around the world. Water quality has become as important as water quantity. The demand for water and its availability is essential because *"of all ecosystems, freshwater ecosystems will have the highest proportion of species threatened with extinction due to climate change."*²⁴⁴

The rising sea level, which is a result of global warming, is yet another issue related to a concern of water. *"In the last century, the average temperature has climbed about 0.6 degrees Celsius (about 1 degree Fahrenheit) around the world. The biggest danger, many experts warn, is that global warming will cause sea levels to rise*

²⁴⁴ Ibid pg.192

*dramatically. Thermal expansion has already raised the oceans 4 to 8 inches (10 to 20 centimeters)."*²⁴⁵ *"According to a new climate change study, the melting of Greenland's ice sheet would raise the oceans by seven meters (23 feet), threatening to submerge cities located at sea level, from London to Los Angeles."*²⁴⁶ All these effects have already become a reality and they are changing life on this planet. Furthermore, global change dynamics cause serious outcomes to human life as well.

B/ Managed Systems - (agriculture, forestry, fishery, food supply) Since the main result of climate change is global warming, by itself, it generates an enormous impact on the globe. The forces that shape climate have a direct impact on weather patterns like rainfall, droughts, floods, cyclones, hurricanes, air and sea temperature changes, heat waves, etc. These weather phenomena have a direct influence on farming and all agricultural activities and production. The food supply is, and will be even more in danger because of weather impacts. Besides for climate change, the agricultural sector's ability to prosper also depends on the adaptation of future changes in technology, food, and environmental conditions, such as the development of new, more weather-resistant crops, better soil quality, and an improved accessibility to water. This unfortunately, also means that the developing nations may have a weaker ability in adapting to a new situation than the industrialized countries. To illustrate: *"Europe experienced a particularly extreme climate event during the summer of 2003, with temperatures up to 6°C above long-term means, and precipitation deficits up to 300 mm. A record drop in crop yield of 36% occurred in Italy for maize grown in the Po valley, where extremely high temperatures prevailed. In France, compared to 2002, the*

²⁴⁵ Lovgren, Stefan, *Warming to Cause Catastrophic Rise in Sea Level?*, National Geographic News, (Article) April 26, 2004, Washington DC.

²⁴⁶ Lovgren, Stefan, *Greenland Melt May Swamp LA, Other Cities, Study Says*, National Geographic News, (Article) April 8, 2004, Washington DC.

maize grain crop was reduced by 30% and fruit harvests declined by 25%.²⁴⁷ This data is from Europe, but it is applicable to other areas since it shows the result of one extreme event in an industrialized area. This same kind of force has an even more devastating product in a developing country. Like the high drought, lack of animal food, and diseases, the quantified impacts of selected African droughts on livestock between 1981 and 1999 show dramatic results. Between 18% and 62% of domestic animals perished, and in Ethiopia alone, nearly 90% of calves died. This has a tremendous impact on humans as well. (Image²⁴⁸)

Table 5.1. Quantified impacts of selected African droughts on livestock, 1981 to 1999.

Date	Location	Mortality and species	Source
1981-84	Botswana	20% of national herd	FAO, 1984, cited in Toulmin, 1986
1982-84	Niger	62% of national cattle herd	Toulmin, 1986
1983-84	Ethiopia (Borana Plateau)	45-90% of calves, 45% of cows, 22% of mature males	Coppock, 1994
1991	Northern Kenya	28% of cattle 18% of sheep and goats	Surtech, 1993, cited in Barton and Morton, 2001
1991-93	Ethiopia (Borana)	42% of cattle	Desta and Coppock, 2002
1993	Namibia	22% of cattle 41% of goats and sheep	Devereux and Tapscott, 1995
1995-97	Greater Horn of Africa (average of nine pastoral areas)	20% of cattle 20% of sheep and goats	Ndikumana et al., 2000
1995-97	Southern Ethiopia	46% of cattle 41% of sheep and goats	Ndikumana et al., 2000
1998-99	Ethiopia (Borana)	62% of cattle	Shibru, 2001, cited in Desta and Coppock, 2002

The same is true of ocean life. Overfishing and water temperature change have significantly decreased the fish population. *"Direct effects of increasing temperature on marine and freshwater ecosystems are already evident, with rapid poleward shifts in regions, such as the north-east Atlantic, where temperature change has been rapid... Climate-related reductions in production cause fish stocks to decline at previously sustainable levels of fishing; therefore the effects of climate must be correctly attributed and taken into account in fisheries management."*²⁴⁹

²⁴⁷ United Nations, Intergovernmental Panel on Climate Change, *The Working Group II contribution to the IPCC Fourth Assessment Report*, Cambridge Press, Cambridge, UK, 2007, pg.278,

²⁴⁸ Ibid pg.278

²⁴⁹ Ibid pg.291-292

Also, at present, "40% of the Earth's land surface is managed for cropland and pasture. Natural forests cover another 30% (3.9 billion ha) of the land surface with just 5% of the natural forest area providing 35% of global round wood."²⁵⁰ The degradation and the clear-cutting of forests significantly put human life on Earth at risk because the effects of those processes reduce the levels of available oxygen supply, which are absolutely necessary for life. In developing countries, the global timber supply has a growing market share, which also contributes to this situation. This distributional effect will also leave businesses, landowners, tourism agencies, and governments to deal with its consequences.

C/ Life - Human and cultural decline, species extinction, and waste (toxification) are the most significant alterations caused by climate change. The term 'human health' encompasses all three areas of physical, social, and psychological well-being. Therefore, it is very important to study, how climate change interferes with human health in all of these areas. Weather patterns directly change life conditions through extreme events, such as hurricanes or tsunamis, but they also indirectly influence human life by transforming ecosystems, infrastructure, water, air, soil, and agriculture. All of the transformations can cause suffering, disability, and even death. If humans become weak or vulnerable due to poor health, their capacity to make the right judgments regarding habitat selection, in response to climate change, also suffers. *"Weather/climate factors and health outcome(s) for the population(s) concerned, either directly or through multiple pathways are described, as pathways and direct acting influences of environment, social and health system factors."*²⁵¹ (Image²⁵²)

²⁵⁰ Ibid pg. 276

²⁵¹ Ibid pg. 396

²⁵² Ibid pg. 396

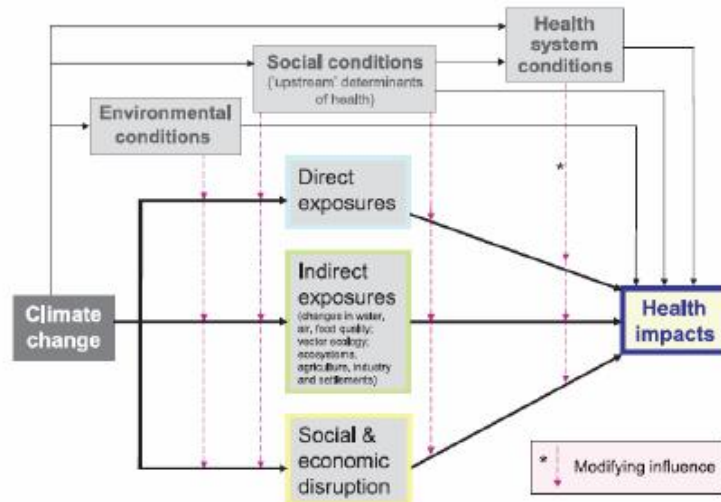


Figure 8.1. Schematic diagram of pathways by which climate change affects health, and concurrent direct-acting and modifying (conditioning) influences of environmental, social and health-system factors.

According to the WHO,²⁵³ populations with high rates of disease and incapacity are less able to survive the alterations related to climate change. Some of the negative health effects include heat waves, such as the European summer heat wave of 2003, which, according to a recent analysis, occurred because of human-caused climate change. Also, the freshwater supply, which is supported by more variable precipitation patterns, is likely to increase risks of water-borne diseases. In many of the poorest regions, rising temperatures and variable precipitation are likely to decrease the production of staple foods, and thus increase risks of malnutrition. Furthermore, coastal flooding caused by rising sea levels may even necessitate population displacement. It is stunning that more than half of the world's population now lives within 60km of the sea, in such areas as the Ganges-Brahmaputra delta in Bangladesh, the Nile delta in Egypt, or many small islands, such as the Maldives, the Marshall Islands, and Tuvalu. Changes in climate are likely to lengthen the transmission seasons of important vector-borne diseases. The effects of climate change also alter regions that lack population immunity and/or a strong public health infrastructure.

²⁵³ World Health Organization, *Climate and Health, Fact sheet No 266*, December 2001, Geneva, Switzerland, <https://apps.who.int/inf-fs/en/fact266.html>

Besides for detriments to human health, the results of climate change also have an already out-of-control effect on species. *"Species, for instance, are estimated to be heading towards extinction at a rate of about one every 20 minutes. That's a pace a thousand times faster than the norm during Earth's history. In the same 20 minutes, we will destroy 1,200 acres of forest and emit 180,000 tons of carbon dioxide into the atmosphere worldwide. Less forest cover means fewer acres of habitat for species and more climate-changing carbon in the atmosphere. As climate, landscapes, and oceans change, species must move or adapt. Those that can't simply die out."*²⁵⁴

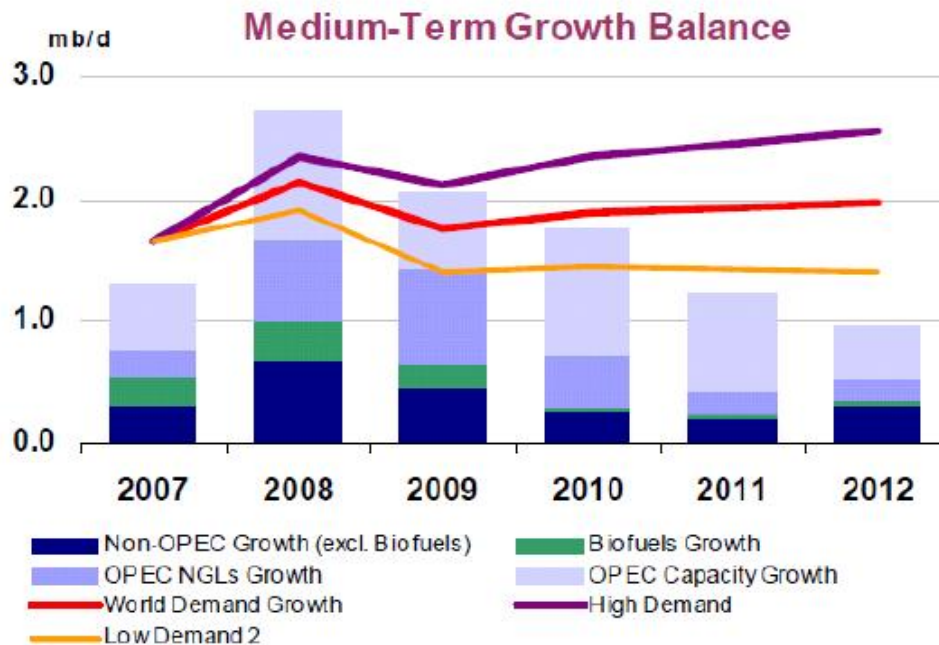
2.3.3.2. OTHER FACTORS OF THE CRISIS

A/ Peak Oil - The other major factor of the crisis is the problem of peak oil. There is already an international, political, and most importantly, an energy-related security concern regarding this issue. The 'International Energy Agency' reports that the world's oil resource base is sufficient to meet demand until 2030, although the cost of supply will increase. (Image²⁵⁵)

²⁵⁴ Conservation International, *Ensuring Species Survival*, (Database) Accessed on 1-30-2010 Arlington, VA <http://www.conservation.org/learn/biodiversity/species/Pages/overview.aspx>

²⁵⁵ International Energy Agency, Long-Term Oil Supply Outlook, October 30, 2007, Paris, France, pg.3. Accessed on 1-31-2010 http://www.iea.org/speech/2007/tanaka/oil_and_money.pdf

The Outlook for Spare Capacity



Balance tightening through Medium-Term under any demand scenario

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On the other hand, the 'The Oil Depletion Analysis Centre,' an independent research group states that *"in our opinion it will be very difficult to raise the oil production above 95 million barrels/day, which is something like 10% above today's level."*²⁵⁶ These two reports contradict each other. The IEA, which is supported by politicians and governments, releases data produced by international scientists. Conversely, an independent group is not under pressure by politicians and governments, and thus, it more likely to produce unbiased data. Either way, in 2010, at the World Economic Forum in Davos, Switzerland, the 'Global Energy Outlook's' major topic was to reconsider this issue because *"despite the major decline in energy prices*

²⁵⁶ ODAC, The Oil Depletion Analysis Centre, *Peak Oil Quotes*, London, UK, 2010, <http://odac-info.org/peak-oil-quotes>

from their peak in 2008, energy security concerns have increased as major producing and consuming economies differ significantly on how to develop a more secure and stable energy system."²⁵⁷

B/ Politics and Interests Groups – In June 1992, 425 scientists and other intellectual leaders from 106 countries, which included 72 Nobel Prize winners, presented an appeal to the head of states attending the 'Earth Summit' in Rio de Janeiro. These individuals recognized the growing need for protecting the environment. *"We are, however, worried at the dawn of the twenty-first century, at the emergence of an irrational ideology which is opposed to scientific and industrial progress and impedes economic and social development."*²⁵⁸ The summit's declaration states that *"the greatest evils which stalk our Earth are ignorance and oppression"*²⁵⁹. By recognizing the historic responsibility of the head of states, it is vital to understand, that the importance of global warming, overpopulation, starvation, diseases, environmental refugee migrations and the common effort of humanity to shape the life of this Earth must all overcome politics and local interest. Recognizing the need of the world will definitely assist in discovering and learning how to overcome these major problems.

On December 11th, 1997, according to the United Nations' Framework Convention on Climate Change,²⁶⁰ the Kyoto Protocol, an international agreement, was born. The agreement was accepted in Kyoto, and it entered into force on February 16th, 2005. The Protocol established obligatory targets for 37 industrialized countries and the European community. All the countries, except for the United States, have ratified the

²⁵⁷ World Economic Forum, Davos, Switzerland, January 28, 2010, <http://www.weforum.org/en/events/AnnualMeeting2010/IntProgramme/index.htm?id=29946>

²⁵⁸ University of Virginia, Science and Environmental Policy Project, *The Heidelberg Appeal*, Charlottesville, VA, VA, 1992, http://www.sepp.org/policy%20declarations/heidelberg_appeal.html

²⁵⁹ Ibid

²⁶⁰ United Nations Framework Convention on Climate Change, Bonn, Germany, http://unfccc.int/kyoto_protocol/items/2830.php Accessed on 1-31-2010

Protocol. The main goal of it is to reduce greenhouse gas emissions between 2008-2012 by 5% compared to the 1990 levels. The core value, upon which the Protocol is founded, is 'common but differentiated responsibilities.' It recognizes that the more developed countries are primarily responsible for the current high levels of greenhouse gases in the atmosphere, which are a result of manufacturing activities stemming from the beginning of the Industrial Revolution. Ironically, politics immediately stepped into this agreement by launching the 'cap and trade system', which is an emission trading system. On one hand, it forces national caps on emissions of countries, but also allows them to sell them for credits to other countries or entities. That literally means that in order for many lobbyists to continue high emission development and trade, they have to sell it to those, who do not pollute up to their own limits. In the background of such an agreement are humongous political and financial interest groups who are trying to influence world trade, investments, and interests meanwhile gaining from a system, which is supposed to reduce emission for the benefit of humanity.

The Copenhagen Accord followed the Kyoto Protocol between December 7th and 19th, 2009. Unfortunately, this Accord did not deliver the full agreement the world needed to address climate change. It *"just makes the task more urgent"*²⁶¹ said Yvo de Boer, Executive Secretary of the United Nations Framework Convention on Climate Change. In Copenhagen, three key things were produced. *"First, it raised climate change to the highest level of government. Secondly, the Accord reflected a political consensus on the long-term, global response to climate change. Thirdly, the negotiations brought an almost full set of decisions to implement rapid climate action near to completion."*²⁶² For the first time, the U.S. is also committed to reducing

²⁶¹ United Nations Framework Convention on Climate Change, Bonn, Germany, <http://unfccc.int/2860.php>, Accessed on 1-31-2010

²⁶² Ibid.

emissions and with this Accord; they aim to reduce emissions by 17% by 2020. Unfortunately, the accord itself is not legally binding for any country and it sets no targets for achieving emission reduction. Again, special interest groups and political interests have influenced this Accord, now even more than in Kyoto, by not forcing the countries to change their course and set the goal for future generations.

C/ Human Factor - Other issues, such as data tampering, called the use of the 'Hagbard's Law' on statistical measures are quite saddening. Greer highlights, "*when choices are guided by numbers, and the numbers are all going the right way, it takes a degree of insight unusual in contemporary life to remember that the numbers may not reflect what is actually going on in the real world.*"²⁶³ Data tampering, and 'friendly' changing of information are not new practices in neither the political nor the scientific community. Greer writes, that with characteristic Texan straightforwardness, Johnson and his administration "*didn't leave statistics to chance; he was famous for sending any unwelcome number back to the bureau that produced it, as many times as necessary, until he got a figure he liked.*"²⁶⁴

Two recent examples of false data use were the events of 'Climate Gate' and 'Glacier Gate,' playing on the name of the political scandal of Watergate. The former took place at East Anglia University, in November 2009. "*The U-turn by the university follows a week of controversy after the emergence of hundreds of leaked emails, 'stolen' by hackers and published online, triggered claims that the academics had massaged statistics.*"²⁶⁵ The latter is when "*five glaring errors were discovered in*

²⁶³ Greer, John Michael, *Hagbard's Law*, Energy Bulletin, Santa Rosa, CA, December 2, 2009, <http://www.energybulletin.net/50873>

²⁶⁴ Ibid.

²⁶⁵ Mendick, Robert, *Climategate: University of East Anglia U-turn in Climate Change Row*, Telegraph, U.K. November 28, 2009, <http://www.telegraph.co.uk/earth/copenhagen-climate-change-confe/6678469/Climategate-University-of-East-Anglia-U-turn-in-climate-change-row.html>

one paragraph of the world's most authoritative report on global warming, forcing the Nobel Prize-winning panel of climate scientists who wrote it to apologize and promise to be more careful."²⁶⁶ These errors were unfortunately in the well respected 2007 Report of the U.N. Intergovernmental Panel on Climate Change. This document suggested that glaciers in the Himalayas could melt away by the year 2035. Luckily, it was discovered, that the original year was 2350 and not 2035.

In conclusion, climate change is happening, regardless of politics, interest groups, or international agreements. It is not too extreme to say that life on earth is in real danger! Even if it wants to merely slow down this escalating avalanche, humanity needs to act quickly, collaboratively, and with common understanding for their own as well as the ecosystem's benefit.

2.4. WORLDVIEWS WHICH LED TO THE CRISIS

2.4.1. HISTORICAL OVERVIEW

A worldview is one's personal concept of reality. It is an assumption or belief about a consistent and integral sense of life and it provides a basis for sustaining and applying information and knowledge. Everyone has his or her own idea about reality. Most of the time, a worldview is philosophical, academic, or even abstract in nature and construction. Yet, it is always personal and searches for answers to life's most important questions regarding humankind. One's worldview affects the way he or she thinks, acts, and behaves in all aspects of life. According to Ronald Nash, "*A world view is a set of beliefs about the most important issues in life.*"²⁶⁷ Therefore, when aiming to understand where the world is today, how it got to be there, and which

²⁶⁶ Borenstein, Seth, *UN Climate Report Riddled with Errors on Glaciers*, Associated Press, New York, NY, January 20, 2010, http://www.apnews.com/ap/db_6775/contentdetail.htm?contentguid=k1TP9Wwj&src=cat&dbid=6775&dbn_ame=Top+Stories&detailindex=6

²⁶⁷ Nash, Ronald, *Worldviews in Conflict: Choosing Christianity in a World of Ideas*, Zondervan, Grand Rapids, MI, 1992, pg.16

direction it is going in, it is useful to observe how humans acted in the past and how they act today.

There are many different worldviews developed by humanity. Just a few examples are listed below:

- Theism believes that there is a personal God outside of time and space who is in contact with His creation and who created this universe, which is still a work in progress.
- Deism is linked to theism, but its followers believe that the Creator is no longer involved in creation.
- Pantheism believes that the whole cosmos is God, since everything is God.
- Naturalism doesn't believe in the existence of God; it outlines that all people are the product of the environment, and people decide their own morality.
- Pluralism is very similar to Naturalism, and it is a mix of various aspects of the other worldviews, so it is extremely inconsistent. It is worthwhile to note that the shift from Naturalism to Pluralism corresponds to the shift from Modernism to Postmodernism.
- Modernism began to grow more intensively from the 18th hundreds, and lasted until the 1980s, when Postmodernism began to take hold and brought about an end to Modernism. In Modernism, people started to believe that science would solve all the problems of humankind, end poverty, bring about world peace, discover the cure for all diseases, and control all aspects of life.
- Postmodernism came to be after World War II, when people were disillusioned. They realized that Modernism would not bring all the solutions to humankind. Science wasn't curing all diseases and hadn't

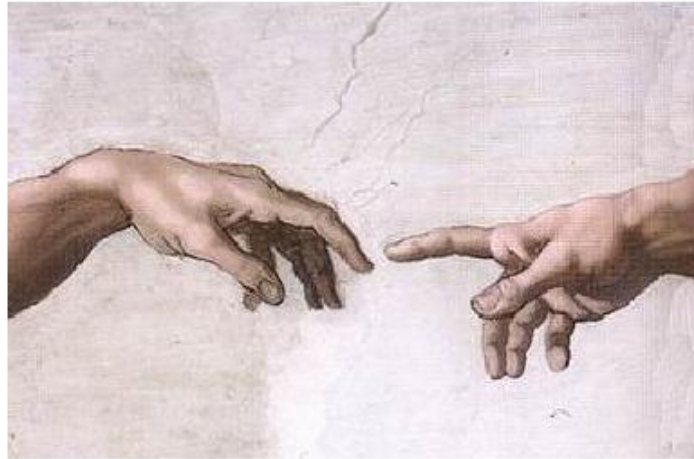
brought about a utopia of progress for the human race. A shift from Modernism to Postmodernism is still in progress today.

To understand and explain the history of humankind from an environmental standpoint, it is vital to see a few selected worldviews in detail, and examine how they influenced humankind and led the world to the state where it is today.

2.4.2.1. HUMANISM

It is astonishing to discover, that during human history, the relationship between God and humanity was one-sidedly dismissed by humanity, and shifted the center of the world of creation from God, to the selfish humans themselves. This shift can best be seen during the Renaissance, which began in the 14th century. It was the great era of the revival of classical-based art and learning in Europe. It was during this time that a new philosophical direction called Humanism was born, and became the ideology of that time. According to Humanism's mainstream understanding, it is up to the humans to find the truth of life, the answers, and the reason of existence. Humanism is opposed to seeking these answers through religion, tradition, or anything else that is contrary with the submission of common sense to visible evidence. On the contrary, it supports science, methods, and experience and also emphasizes that knowledge is capable of distinguishing between right and wrong. This understanding of life is based on one's individual interests, rather than faith, religion, or any transcendental truth. As a consequence, humanity is no more in need of God, as it is separated from the Creator. This 'brake away from God' was very impressively visualized through the beautiful ceiling painting of the Sistine Chapel in the Vatican by

Michelangelo Buonarroti. The "*Creation of Adam*"²⁶⁸ was painted between 1508-1512, and it focused on the distancing fingers of Adam and God, as they are not touching, but separating themselves from each other, representing the individual human, who is in no more in need of being in contact with the Creator. (Image²⁶⁹)



The original harmony between God and humanity was challenged at the end of the Middle Ages, when the ideology of the Renaissance, called Humanism²⁷⁰ was born. Humanism, as a movement, started in Italy with the rediscovery of Medieval Italian writers like Dante, Boccaccio, and Petrarch. It continued by an Italian scholar, Pico della Mirandola, who, in his work called 'Oration on the dignity of man,' expressed the basic philosophy of the Renaissance. Later, other influential scholars established the Platonic Academy in Florence, which was founded by Cosimo de' Medici, the famous Florentine statesman and patron of the arts. This academy primarily focused on Platonism and predominantly influenced the literature, painting, and architecture of the times of the Renaissance. After all, humanism traveled swiftly from Italy throughout all of Europe, where it focused not on art and literature as in Italy, but on the fields of

²⁶⁸ Genesis 1:26-27

²⁶⁹ Buonarroti, Michelangelo, *Ceiling painting of the Sistine Chapel*, Vatican, 1508-1512

²⁷⁰ Online Etymology Dictionary, *The word Humanism, Humanist is from French 'humaniste', from Italian, umanista, coined by the Italian poet Lodovico Ariosto (1474-1533)* 2009, <http://www.etymonline.com>

theology and education, which were a major fundamental cause of the Reformation and were advocated by the German scholars Johann Reuchlin and Melanchthon. One of the most influential scholars in the development of Humanism was the Dutch priest Desiderius Erasmus. His influence on the whole movement, especially in England, was indefinite. He helped to establish Humanism at the University of Cambridge, while his followers William Grocyn 1446-1519 and Thomas Linacre worked at the University of Oxford. Humanism spread throughout English society, inspiring it by literature and culture. Later, the English language also helped to extend it around the globe.

On the other hand, it is evident, that Humanism influenced the Reformation. It objected the forms and dogmas of Medieval Christianity and also the way that the Church controlled what people were able to study, publish, and even discuss amongst each other. In response, the Reformation first and foremost proclaimed the direct information from the Bible itself and worked to produce improved, newly translated Bibles, otherwise only available in Greek and Latin. Also, another important aspect was the principle idea of learning, which according to the Reformation, should be available to all people, and not simply restricted to a few elite individuals.

First and foremost, Humanism brought an influential societal shift that *"it marked not simply an epoch in the progress of culture, but had a noteworthy bearing upon religious history. So close did it lie to the opening stages of the Reformation"*²⁷¹ that it can be seen as a starting point of Protestantism, which represent one of the wings of Christianity today. Regardless of many important commonalities, the paths of Humanism and the Reformation slowly separated from each other, mainly because the Reformation emphasized the importance of salvation, looking at the Kingdom of God

²⁷¹ Sheldon, Henry C., *History of the Christian Church, The Modern Church; First Period (1517-1648) Vol. III, The Modern Church, Part One, Humanism and its Relation to the Reformation*, Thomas Y. Crowell and Company, New York; NY, 1895, Online Edition, <http://www.edwardtbabinski.us/sheldon/humanism.html>
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and Heaven as a final goal for human kind. For Humanism, this was an unacceptable teaching, since followers wanted to enjoy their current lifestyle. Possibly because of this, the Reformation took two different courses over time. One was fundamental Christianity, which focused more on the emotional and dogmatic aspects of the Christian tradition. The second was the rationalistic studies of Christian tradition, focusing on free inquiry, and helping to establish the more liberal Christian denominations during the course of history.

Above all, from the point of view of anthropology, the most prominent issue of this time was the question and understanding of humankind's free will. The polemic about this topic started between Erasmus and Luther in 1516, with the writings of Erasmus' 'De Libero Arbitrio Diatribe Seu Collatio' (On the Freedom of the Will a Diatribe or Discourse) and Luther's 'De servio arbitrio' (The Bondage of the Will). It is quite astonishing to observe, that both scholars could unite against the error of the Roman Catholic Church. Their differences could be summarized by Garrett; as "*Luther loved the truth of God's Word as that was revealed to him through his own struggles with the assurance of salvation. Therefore, Luther wanted true reformation in the church, which would be a reformation in doctrine and practice. Erasmus cared little about a right knowledge of truth. He simply wanted moral reform in the Roman Catholic Church.*"²⁷² After centuries passed, and by looking back to history, "*according to present time judgment, the essence of the polemic was based on a misunderstanding,*

²⁷² Garrett, Eriks J., *Luther and Erasmus: The Controversy Concerning the Bondage of the Will*, (Article) Protestant Reformed Theological Journal, Volume 32, Number 2. Grandville, MI, 1999 <http://www.prc.org/prtj/apr99.html#LutherAndErasmus>

which blended the freedom of humanity's volitional will and responsibility with the role of the will filled in salvation."²⁷³

The question of free will appears in Calvin's writings as well. Szűcs discovered that within this dilemma, Calvin agreed with Luther; however, Szűcs also added two new aspects to this polemic. First, Szűcs states that the inquiry about free will is not the questioning regarding the decision of freedom, but instead, the limited capability of humanity without the grace of God and the work of the Holy Spirit. *"When writers treat of free will, their inquiry is chiefly directed not to what its power is in relation to civil or external actions, but to the obedience required by the divine law."*²⁷⁴ Secondly, the human will shall be recreated by the rebirth of the Holy Spirit. This can be seen, based on Ezekiel: *"I will give you a new heart and put a new spirit in you; I will remove from you your heart of stone and give you a heart of flesh. And I will put my Spirit in you and move you to follow my decrees and be careful to keep my laws."*²⁷⁵ Calvin comments on this adding that *"how can it be said that the weakness of the human will is aided so as to enable it to aspire effectually to the choice of good, when the fact is, that it must be wholly transformed and renovated?"*²⁷⁶ Calvin and the Reformation brought about a new teaching, stating that the central point of theology is not the knowledge of God and the world, but the knowledge of God and one's own self.²⁷⁷

²⁷³ Szűcs, Ferenc, *Kálvin és a humanista emberkép*, Collegium Doctorum V. 1. August 2009 Issue, Budapest, pg. 75-76

²⁷⁴ Calvin, John, *Institutio*, II. 2.5.

²⁷⁵ Ezekiel 36: 26-27

²⁷⁶ Calvin, John, *Institution*, II. 3.6.

²⁷⁷ Calvin, John, *Institution*, I. 1.1.

Yet from another view, Humanism, as a new intellectual movement, taught that knowledge and study of the literature, art, and civilization of ancient Greece and Rome is all that is needed to lead a moral and effective life. Therefore, Humanism teaches that dignity and worth of all people basically generates the ability for humanity to determine right from wrong. Truth and morality in this understanding, is a process, and not a constant fact of God, and so it requires permanent examination. As a result, views, understanding, truth, and knowledge can change when new information is exposed. By comparing this view with belief systems, faith, or God, it is apparent that by focusing on self-determination, Humanism discards God as the source of validation. This distancing force was also recognized by Calvin, who reflected on this movement by recognizing this new attitude of humanity, saying: *"But herein appears the shameful ingratitude of men. Though they have in their own persons a factory where innumerable operations of God are carried on, and a magazine stored with treasures of inestimable value—instead of bursting forth in his praise, as they are bound to do, they, on the contrary, are the more inflated and swelled with pride."*²⁷⁸

Humanism changed the center of the world. Previously, the center was God, who was positioned in the middle of the Universe, as the Creator, surrounded by all of His creatures who obeyed and followed the Lord of this world. Now, God is replaced by humanity, who challenges and questions all rules and wants to make decision alone in freedom, based on knowledge and experience.

It is a fundamental issue to understand the prehistory and the state of humankind, and how and why humankind as a global community is where it is now, and what consequences this state has regarding to global warming and the danger to the environment. As humanity slips out from God's grasp, becoming more independent, it

²⁷⁸ Calvin, John, Institution, I. 5.4.

is necessary to draw a parallel between the story of creation and the main ideology of Humanism. Adam and Eve wanted to know all knowledge and disregarded the will of God. Now, since Individualism was born from Humanism, it is not surprising to see that Individualism states that the individual is the primary unit of reality and the ultimate standard of value. It is quite devastating to see where this view, as well as a consumer mentality, leads the global community in the field of sustainability. As Adam and Eve, now all of humanity has distinguished themselves from God. The result is well known. This dissertation states that until humanity returns to the Creator, this Earth will slowly but surely continue on the road of destruction and rush to the end of its life. The only answer to this problem is re-centering. Re-centering the life of humanity from itself back to God. That will bring peace and self understanding about life and death, right and wrong, lies and the truth. Without God, humanity will no longer exist. With God, there is one last chance to reconcile with Him and re-establish life, based upon the original harmony of the Creator. All individuals should understand that one day this Earth will not be suitable for life, its climate and atmosphere will not support life, and serious situations will arise unless humans returns to the beginning, where they were in the arms of the Father.

2.4.3. DEISM

Deism is the other important worldview to consider when following and measuring the distance between God and humanity. "The word 'Deism' is derived from the Latin word for God, which is 'Deus.' *"Deism is a natural religion. Deists believe in the existence of God, on purely rational grounds, without any reliance on revealed religion or religious authority."*²⁷⁹ Deism is a philosophic and theological position

²⁷⁹ Robinson, B.A., *Deism: About the creator God who left* (Article), Religious Tolerance, Ontario Canada, 2009, <http://www.religioustolerance.org>

relating to God's affiliation with the created world. Originally, it was born to dispute Christian orthodoxy in 17th century England. As a systematic philosophy, Deism was first developed by Lord Herbert of Cherbury, (1583-1648) a British historian and religious philosopher. Deism believes in the existence of a single God at the center of reason who examines the natural world. Deism started in Europe, with the Scientific Revolution of the 17th century, and became powerful and very influential during the time of the Enlightenment, an intellectual movement, which places the natural world and humankind solely on the basis of reason, without turning to religious beliefs. This worldview became popular in the 18th century, especially in the United Kingdom, France, and the United States.

Deism believes that God does not intervene with the world in any way, allowing it to function according to the laws of nature. Among many, there are two popular literary works describing this state. The first one is the most famous teleological argument using the watchmaker analogy. It was proposed in 1802 by William Paley (1743 – 1805) a British Christian apologist. In it, Paley states that design implies a designer. This analogy has played a major role in the development of natural theology to underline the existence of God and the universe created by intelligent design. The other is from Imre Madách's²⁸⁰ work, 'The Tragedy of Man', where the Lord speaks saying, "*It's done, the great act of creation. The maker rests. The wheels in motion and will rotate upon its axle for a hundred million years before a single cog wears out.*"²⁸¹ However, looking at the life and faith of Madách, apart from this

²⁸⁰ Encyclopedia Britannica, Chicago, IL, 2009, Imre Madach, (1823–64) Hungarian poet. His main work is a poetic drama, called; *The Tragedy of Man*, (*Az ember tragediája*, 1861) He is often considered to be Hungary's greatest philosophical poet. <http://www.britannica.com/EBchecked/topic/355557/Imre-Madach>

²⁸¹ Madach, Imre, *The Tragedy of Man, Scene 1*, Translated by George Szirtes, Corvina, Budapest, 1998
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quotation, it is evident that he was a follower of theism. As Biro states, "*Madách's faith in reality is a specific variation of theism, and not deism.*"²⁸²

Deism's main focus is reason. In addition, reason and observation of nature are the only ways humans can know God. In this matter, revelation or any supernatural manifestations are denied. Therefore, Deism is a theological doctrine, and it was developed from religious groups such as Unitarianism and Universalism. It is also important to notice, that Deism has had a great influence on the development character of modern times. Because of this, Deism sustained the idea that first and foremost, humans should rely on themselves. As Thomas Paine (1737 – 1809) a British intellectual, one of the Founding Fathers of the United States, affirms in his work, 'The Age of Reason' that "*all the knowledge man has of science and of machinery, by the aid of which his existence is rendered comfortable upon earth, and without which he would be scarcely distinguishable in appearance and condition from a common animal, comes from the great machine and structure of the universe.*"²⁸³

2.4.4. MODERNISM

From the second half of the 19th century, Modernism steadily pulled people away from the presence of God. This curve was in full swing in the Renaissance, where humanity found itself rebelling against God. During the Enlightenment, God became a bystander of Creation. Modernism, on the other hand, arrived to the point where God is not even needed. Charles Darwin (1809–82) in biology, and Karl Marx (1818–1883) in political science, were the two major thinkers of this period. Darwin, in his work, 'Origin of Species' (1859) provided a scientific explanation of how the diverse species of

²⁸² Biró, Béla, *Madách és az egyezményes filozófia*, Madách Irodalmi Társaság, Budapest, XII. Szimpózium, Online Article, 2005, <http://www.madach.hu/MadachIThonlap/tanulmanyok/Szimpozium%20XII/biobela.htm>

²⁸³ Paine, Thomas, *The Age of Reason*, World Union of Deists, Clearwater, FL, 2009, Original text in PDF: <http://www.deism.com/images/theageofreason1794.pdf>

plants and animals have descended over time from common ancestors. Darwin stated in his theory of evolution that by natural selection, human beings are driven by the same impulses as animals. This theory deeply undermined the religious certainty of people at that time. Marx, who wrote books now considered by Communists all over the world to be the source of absolute truth on matters of economics, philosophy, and politics, argued that there was a fundamental disagreement within the capitalist system and that opposing the libertarian ideal, the workers were anything but free. There were several other thinkers and leading scholars, who were fundamental in establishing modernism: Arthur Schopenhauer (1788–1860), a great pessimist of 19th-century German philosophy, Friedrich Wilhelm Nietzsche, (1844–1900) who saw civilization so self-confident over its mastery of science, technology, politics, and economics that he declared the death of God, and later Sigmund Freud, (1856–1939), who was one of the first psychiatrists to suggest workable cures for mental disorders.

Bose states that *"trying to define modernism can be a frustrating exercise. As a style, it is less coherent, its boundaries looser, than, say, classicism. Many critics would argue that modernism is not even a singular style, that it incorporates a great variety of aesthetics and sensibilities."*²⁸⁴ In this sense, modernism can only be described as a wide variety of ideas, thoughts, and practices. Because it is a combination of cultural tendencies and movements that considered the traditional view and form of life outdated, it includes social organizations, representation of religious faith, art, architecture, and literature from every angle. All this took place in the dawn of the industrialized world, where new social, political, and economic conditions emerged and formed the life of the society.

²⁸⁴ Bose, Sudip, *What is Modernism?* Preservation, The National Trust for Historic Preservation, Washington, DC, May/June issue of 2008, (Article) <http://www.preservationnation.org/magazine/2008/may-june/what-is-modernism.html>

Modernism abandoned the worldview of the Enlightenment, and most importantly rejected the existence of God, as Creator.²⁸⁵ Even the official Catholic Church could not stay quiet about modernism. Pope Pius X, in his encyclical writes, "*It must, however, be confessed that these latter days have witnessed a notable increase in the number of the enemies of the Cross of Christ, who, by arts entirely new and full of deceit, are striving to destroy the vital energy of the Church, and, as far as in them lies, utterly to subvert the very Kingdom of Christ.*"²⁸⁶

According to Waltz,²⁸⁷ in Modernism, humans have characteristics, but they no longer contain an organic core. This concept is illustrated in the constructed and composite view of human identity. This view led modernists to believe that they had a mission, to achieve a modernist civilization of their creation, which could transform human nature itself. The wide goal of Modernism, to transform contemporary culture, was superbly achieved first in Europe and then in the world. The techniques of abstraction, the self-imagery of artists, and the imperative to continually innovate, have greatly influenced advertising, films, and multimedia, which have filled contemporary culture at large. The world and included in it, humanity, have completely become mindless and they only regained consciousness with the greatest wakeup call of history, World War II, which shifted people's attention from themselves to a deeper understanding about their existence.

²⁸⁵ Lewis, Pericles, *Modernism, Nationalism, And The Novel*, Cambridge University Press, Cambridge, UK, 2000, pg. 38-39

²⁸⁶ Pius X, *Pascendi Dominici Gregis*, Encyclical on the Doctrines of the Modernists, September 8, 1907., Part One: Articles 1, Holy See, Vatican Archive, http://www.vatican.va/holy_father/pius_x/encyclicals/documents/hf_p-x_enc_19070908_pascendi-dominici-gregis_en.html

²⁸⁷ Waltz, Robin, *Modernism*, Pearson Education, Upper Saddle River, NJ, 2008, pg. 13

2.4.4.1. CRITICAL REFLECTIONS ON WORLD VIEWS

By following the historical and philosophical route of the relationship between God and humanity, it is an unmistakable reality to determine that the growing distance between God and humanity is becoming more and more evident. First, the Renaissance replaced God with humankind. From the center of its worldview, Humanism discovered that by rationality, humankind is capable of determining right from wrong without relying on God as a supernatural and divine authority. Then, during the Enlightenment, Deism put God aside, merely allowing Him to watch Creation as a bystander. This philosophical belief accepts God, but rejects the idea of the supernatural as a basis of truth and religious dogma. Finally, Modernism states that God does not exist at all, because this modern worldview, according to Griffin²⁸⁸ denies the possibility of an experience of God. Since modernism is materialistic, its basic doctrine requires that all perceptual experience of the world must come through at least one material sensory organ. This approach identifies the soul and mind as functions of the brain instead of distinct entities. The modernist worldview therefore, indicates a clear 'non-existing' approach towards God. This theoretical and practical situation concluded that the world is better off without God and this led to a society where God turned into a historical figurehead.

This theological focus shift began not with Copernicus, (1473–1543) a Polish astronomer, who formulated the heliocentric cosmology, but with Humanism and its anthropocentric worldview. Ever since then, humanity understands itself as being at a distance from God, and associates itself with pride, self-centeredness, and vanity. This early shift was already diagnosed by Calvin. In his *Institution*, it was clear that regardless of great evidence supporting the glory of God, and despite the fact that "to

²⁸⁸ Griffin, Ray, *God And Religion In The Postmodern World: Essays In Postmodern Theology*, State University of New York Press, Albany, NY, 1989, pg. 55

*whatever side we turn, we behold his perfections visibly portrayed*²⁸⁹ - humankind is blind to take advantage of God's kingdom, because *"so great is our stupidity, so dull are we in regard to these bright manifestations, that we derive no benefit from them."*²⁹⁰

Focusing on ecological issues, this blindness during the centuries resulted in countless ethical and environmental implications. The main problem is that because of human activities, there is already a significant ecological crisis, where the environment, species, and human inhabitants change in a way that destabilizes the continued survival on this planet. The motivation of these irresponsible human activities is positioned on the foundation of the cause of distance between God and humankind. This is the abandoning move from the theocentric to any human-centered worldview. As Gustafson describes, the real difference between *"most Western ethics is the theocentric focus as such."*²⁹¹ His view clearly puts God back into the center of value, instead of individuals, communities, or even humankind. Therefore, it is vital to realize that *"moral difference follows from the redescription of the place of man in the universe, and of man in relation to the divine powers."*²⁹² Visibility and evidence of this moral difference is the great question of all times. During the 19th and 20th century, humankind looked at itself as being at the *"highest point of an ascending straight line of world history."*²⁹³ However, according to Spengler, it is only a stage of life, which is already *"ripened to its limit"*²⁹⁴ and will not last forever. Therefore, it is quite evident to describe this time of history as being in a transitional phase and to see the future of

²⁸⁹ Calvin, John, *Institutio*, I. 5.1.

²⁹⁰ Calvin, John, *Institutio*, I. 5.11.

²⁹¹ Gustafson, James M., *Ethics from a Theocentric Perspective: Ethics and Theology*, University of Chicago Press, Chicago, IL, 1992, pg. 4.

²⁹² *Ibid.*

²⁹³ Spengler, Oswald, *The Decline of the West*, Oxford University Press, New York, NY, 1991 pg. 29.

²⁹⁴ *Ibid*

humanity not as an infinite always upward growing world, but as a “*single phenomenon of history, strictly limited and defined as to form and duration.*”²⁹⁵ It is very unfortunate, as Reinhold Niebuhr argues that “*for all centuries of experience, men have not yet learned how to live together without compounding their vices and covering each other 'with mud and with blood'.*”²⁹⁶ The ‘want’ or ‘greed’ take away all that God wanted to provide for humankind. Thus, the real danger is that “*human society will never escape the problem of the equitable distribution of the physical and cultural goods which provide for the preservation and fulfillment of human life.*”²⁹⁷ Reflecting on this fulfillment, the Club of Rome²⁹⁸ in 1972 developed a model which was built specifically to investigate five major trends of global concern: accelerating industrialization, rapid population growth, widespread malnutrition, depletion of nonrenewable resources, and a deteriorating environment. In this report “*The Limits to Growth*”²⁹⁹ scientist concluded that humanity has two paths to choose from. The first path follows the current trend in world population, industrialization, pollution, food production, and resource depletion. If nothing changes soon, the limits to growth on this planet will be reached sometime within the next one hundred years. The real fear factor in this case would be a sudden and uncontrollable situation in both population and industrial capacity. The second option highlights, that it is possible to achieve a satisfactory equal opportunity for all people and to establish a condition of ecological and economic stability, if “*the world's*

²⁹⁵ Ibid.

²⁹⁶ Niebuhr, Reinhold, Gilkey, Langdon B., *Moral Man and Immoral Society: A Study in Ethics and Politics*, Westminster John Knox Press, Louisville, KY 2002, pg. 1.

²⁹⁷ Ibid.

²⁹⁸ Club of Rome - a non-profit, non governmental organization, a global think tank and centre of innovation, was established in April 1968. <http://www.clubofrome.org/eng/home/>

²⁹⁹ Ibid.

people decide to strive for this second outcome rather than the first, the sooner they begin working to attain it, and the greater will be their chances of success."³⁰⁰

2.5. THE CHURCH'S RESPONSE TO THE CRISIS

Considering the history of climate change and the first signs of environmental alarm, set in motion in the 19th century, denominations and churches did not adopt ecclesiastical conscientiousness and responsibility until the early 1970s. Beginning after the first signs of danger and seriousness of global warming however, many well-founded critical and comprehensive studies and theological reflections took place.

When highlighting some events regarding the environment that are considered milestones by world and church organizations, it is apparent that some alarms were set off. The first major alarm went off in 1962, when Rachel Carson wrote her famous book 'Silent Spring' alarming the world about the use of chemicals in agriculture, especially DDT³⁰¹. After 10 silent years, when the world's population skeptically and fearfully learned what might happen with the Earth, two organizations, the U.N. and the Club of Rome, simultaneously responded to the situation. In 1972, the United Nations Conference on the Human Environment in Stockholm, Sweden, acknowledged the need for a common outlook and for common principles to inspire and guide the people of the world in the preservation and enhancement of the human environment in their resolution called "*Declaration of the United Nations Conference on the Human Environment.*"³⁰² Also, the Club of Rome published their report, called "*The*

³⁰⁰ Ibid.

³⁰¹ Carson, Rachel, Wilson, Edward O., *Silent Spring*, 40th Anniversary Edition, Houghton Mifflin Harcourt, Boston, MA, 2002, (First published in 1962) pg.178-180

³⁰² United Nations Environment Programme, (Report) Stockholm, 1972, <http://www.unep.org/Documents.Multilingual/Default.asp?documentID=97>
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*Limits to Growth*³⁰³ frankly proposing two different paths to choose from in order for humanity to survive climate change. One is that if humanity does nothing, within the next one hundred years, this planet in every aspect will reach its limits for life. As a consequence, this will result in an uncontrollable decline in population and industrial capacity. The second option is, for every individual human being to realize his or her individual human potential, in order to establish a condition of ecological and economic stability that is sustainable for the future.

These indications, research, and conferences about a rapidly closing global danger on the ecology, environment, and eventually on humankind awakened the Church. Merely all denominations around the world stared to focus on reaching a better Biblical and theological answer to this worldwide phenomenon. Unfortunately, after a few years of this extensive concentration, political, economical and local Church issues changed the attention to a more apathetic and unconcerned direction. Conference after conference ended in tailoring great theoretical indications, with a very small number of applications, which are incorporated and integrated into the regular church life on the congregational level. Realizing the situation and the poor communication between conferences and denominations, and also within denominations toward the local level, the World Council of Churches sponsored a conference in Hungary, between June 23rd and 29th in 2001 at the Károli University in Budapest.³⁰⁴ At the conference, called 'Globalization in Central and Eastern Europe, Responses to the Ecological, Economic and Social Consequences', 47 representatives from Europe clearly highlighted that it is essential that *"the results of this consultation are received well by the churches of the*

³⁰³ <http://www.clubofrome.org>

³⁰⁴ World Council of Churches, Geneva, CH, *Globalization in Central and Eastern Europe, Responses to the Ecological, Economic and Social Consequences, 2001*
<http://www.oikoumene.org/en/resources/documents/wcc-programmes/public-witness-addressing-power-affirming-peace/poverty-wealth-and-ecology/neoliberal-paradigm/29-06-01-globalization-in-central-and-eastern-europe.html>

oikumene in other parts of the world."³⁰⁵ Undoubtedly, the conference stirred up a wind of attention for the high priority of climate change, its consequences to humankind, and the responsibility of the Church, but unfortunately, this did not provoke the Christian Church as much as the subject's importance would suggest.

During the last few years, widely known new research data surfaced, like that the "*global population numbers are on track to reach 7 billion in 2011, just 12 years after reaching 6 billion in 1999*"³⁰⁶ or "*the planet's ocean surface temperature was the warmest on record for July, breaking the previous high mark established in 1998*"³⁰⁷ or "*the world is on course to halve extreme poverty by 2015.*"³⁰⁸ All this proposes that this ecology is approaching danger even faster than scientists have projected just a few years ago. Therefore, these events and projections of these days must serve as a wakeup call to the Christian community and to the society as well.

2.5.1. PROTESTANT RESPONSES

A few milestones are highlighted in order to present this situation in the context of the Protestant Churches. Within a short time, the Protestant denominations responded at the World Council of Churches consultation in Bucharest in 1974. Here, the word 'sustainable development' first was used 13 years prior to the Brundtland Commission's report³⁰⁹ as the theory of sustainability was being formulated. "*What emerged out of the Bucharest discussion on the role of science and technology in the*

³⁰⁵ Ibid.

³⁰⁶ Population Reference Bureau, World Population Data Sheet, August 12, 2009, Washington DC, 2009, <http://www.prb.org/Publications/Datasheets/2009/2009wpds.aspx>

³⁰⁷ NOAA National Oceanic and Atmospheric Administration, Washington DC, August 14, 2009, http://www.noaanews.noaa.gov/stories2009/20090814_julyglobalstats.html

³⁰⁸ Earth News, *A Global poverty to halve by 2015*, (Article) August 7, 2009 <http://www.earthportal.org/news/?p=2629>

³⁰⁹ United Nations, General Assembly, *42/187. Report of the World Commission on Environment and Development*, New York, December 11, 1987.

development of human societies was the articulation of a concept called 'sustainability' - the idea that the world's future requires a vision of development that can be sustained in the long run, both environmentally and economically. The awareness of the need to link socio-economic justice and ecological sustainability has been a recurring theme within the ecumenical community and has been a gift to the broader global community."³¹⁰ The resolutions of Bucharest were incorporated into the speech of biologist Charles Birch in his keynote address at the World Council of Churches 5th Assembly in Nairobi, Kenya in 1975. Here, as a result of the speech, a new resolution, called 'Programme on the Just, Participatory and Sustainable Society' (JPSS) was adopted with the goal of achieving these sustainable goals.

Within the following twenty years after 1975, the world began to realize the understanding of sustainable life from a theological perspective as well. During this time, the growing awareness and focus regarding human responsibility slowly established accountability for the Christian world. This responsibility was not just for nature but for people as well, especially people in poor countries.

In 1980, the World Council of Churches, in Melbourne, Australia, reflected on the theme 'Your Kingdom Come'. *"The conference insisted on the particular role of the poor and churches of the poor in God's mission... and also highlighted how Christ's choice of vulnerability and way to the cross challenges the use of power, in political, church and mission life."*³¹¹ The document, which was adopted at this conference called, 'Mission and Evangelism' states, that *"The Church is sent into the world to call people*

³¹⁰ The World Council of Churches, Geneva, Switzerland, *Report on the World Summit on Sustainable Development (WSSD, Brief history of ecumenical reflections on sustainable development, 2002*, <http://www.oikoumene.org/gr/resources/documents/wcc-programmes/public-witness-addressing-power-affirming-peace/poverty-wealth-and-ecology/neoliberal-paradigm/04-09-02-report-on-the-world-summit-on-sustainable-development-wssd.html>

³¹¹ World Council of Churches, Geneva, CH, <http://www.oikoumene.org/gr/who-are-we/organization-structure/consultative-bodies/world-mission-and-evangelism/history.html>

and nations to repentance, to announce forgiveness of sin and a new beginning in relations with God and with neighbors through Jesus Christ. This evangelistic calling has a new urgency today."³¹²

The General Synod of the Reformed Church in America, in 1982, received a report from the Christian Action Commission, titled *"Care for the Earth: Theology and Practice."*³¹³ In response, the General Synod of the Reformed Church in America approved resolutions suggesting the protection of the resources on the Earth. This report researched the Old Testament for the relationship between the people and the land. It concluded that *"God's gift of land to the people of Israel was conditional. It depended upon their living in a way that acknowledged the land to be the Lord's land and themselves to be the Lord's people. Because they chose instead to grasp and possess the land as if it were their own, they lost it...We, too, are called to treat the land as God's gift rather than as our possession."*³¹⁴

*"In 1983, the WCC Assembly in Vancouver adopted a process focused on 'Justice, Peace and Integrity of Creation' (JPIC) through which churches were encouraged to work together on these inter-related themes."*³¹⁵ They also declared that *"the present economic order is immoral and must be changed."*³¹⁶ Therefore, the statement calls member churches' attention to all kinds of threats to creation, especially to the Earth's atmosphere, mentioning the threat as 'greenhouse effects' caused by the

³¹² Philip, T.V., *Edinburgh to Salvador: Twentieth Century Ecumenical Missiology - Mission and Evangelism, An Ecumenical Affirmation*, World Council of Churches, Geneva, CH, 1982, <http://www.religion-online.org/showchapter.asp?title=1573&C=1525>

³¹³ Reformed Church of America, (RCA) 1982 *Minutes of the General Synod*, Grand Rapids, MI, Commission on Christian Action, pp. 63-70 <http://www.rca.org/Page.aspx?pid=2034> Accessed on 1-27-2010

³¹⁴ Ibid

³¹⁵ WCC, Geneva, CH, *Climate Change and the World Council of Churches, Background Information*, November 2008, http://www.oikoumene.org/fileadmin/files/wcc-main/2008pdfs/WCC_ClimateChange_BackgroundInfo2008.pdf Accessed on 1-27-2010

³¹⁶ Chial, Douglas L., *Covenant for Justice in the Economy and the Earth*, World Alliance of Reformed Churches, Geneva, CH, 2009, <http://warc.ch/24gc/study/13.pdf> Accessed on 1-27-2010

burning of fossil fuel. It also calls for an immediate halt on production of sprays, Styrofoam, and similar materials. Finally, all of these threats are recognized as threats against creation, and humans' needs to radically simplify their lifestyle, especially in the industrialized countries. Furthermore, the Sabbath, as the Biblical command for a day of rest for all creation, must be observed, taught, and followed in order to fulfill God's will and order for creation.

The original document of JPIC (Justice, Peace, and Integrity of Creation) containing theological expositions, affirmations, and covenant commitments, was called "*Between the Flood and the Rainbow*"³¹⁷ symbolizing, that humanity lives between the threats to life and God's promise of a new heaven and earth. This ecumenical process of JPIC declares that "*at the time when life and the earth that sustains it are both under the threat of death, the JPIC process can indeed be the Church's most authentic witness to Jesus Christ, the life of the world.*"³¹⁸ The central message of JPIC was summarized in the "*Final Document – Entering into Covenant Solidarity for Justice, Peace and the Integrity of Creation.*"³¹⁹ Here, where considerations are addressed to Christians and congregations, to churches and movements, the most important and urgent message to the Church about renewal and rejuvenation is hidden: "*we are invited to be open to the future and to interpret ever anew the signs of the times.*"³²⁰ By quoting "*sing to the LORD a new song; sing to the LORD, all the Earth*"³²¹ the document acknowledges that this invitation means more than just singing new songs in the local church; it means for humankind to celebrate the new things God is doing in its midst. As the JPIC reflects,

³¹⁷ Niles, D. Preman, *Between the Flood and the Rainbow*, WCC Publications, Geneva, Switzerland, 1992, Introduction

³¹⁸ Ibid. Cover page.

³¹⁹ Ibid. pg.164.

³²⁰ Ibid. 167.

³²¹ Psalm 96:1

the response by Christianity to God's covenant during these days should be the realization of how quickly the world scene is changing and how new challenges are emerging. The VII. Affirmation articulates that "*We affirm the creation as beloved of God.*"³²²

According to this affirmation, God, as the Creator, is also the Sustainer of the whole cosmos. Because creation is of God, humanity should hold all life as sacred. It is important in a practical way, because in this generation, it is apparent that all life, especially the life of future generations is in danger, because humanity failed to love the living earth. Biblical statements such as 'to have dominion, or subdue the earth' were hijacked by society in order to justify destructive actions towards the created order. The document highlights that Christianity should act as responsible servants by "*reflecting God's creating and sustaining love, to care for creation and to live in harmony with it.*"³²³ Finally, in the "*Third Concretization of the Act of Covenant*"³²⁴ the document strongly suggests that this present culture must be rebuilt in order to live in harmony with Creation's integrity and to sustain the world's life as a gift from God.

Within the Reformed Churches, all these rising interests were concentrated into a document in 1997, at the 23rd Conference of the World Alliance of Reformed Churches, in Debrecen. The document, "*Processus Confessionis*"³²⁵ called for a "*committed process of progressive recognition, education and confession within all WARC member churches at all levels regarding economic injustice and ecological destruction.*"³²⁶ This document included deep analysis and focused on an understanding

³²² Niles, D. Preman, *Between the Flood and the Rainbow*, WCC Publications, Geneva, Switzerland, 1992, pg.173.

³²³ Ibid. pg.174.

³²⁴ Ibid. pg185.

³²⁵ WARC, Source: *Reformed World*, Vol. 47, No.3&4, September and December, 1997, The 23rd General Council, Debrecen, Hungary, www.kairoseuropa.de/english/WARC-call.doc

³²⁶ Ibid.

of economic processes, and their consequences on people's lives. It also highlighted the importance of educating church members at all levels about how to develop a lifestyle, which rejects the materialism and consumerism of today. Furthermore, the objectives of a conference in Hungary in 2001, called "*Globalization in Central and Eastern Europe, Responses to the Ecological, Economic and Social Consequences*"³²⁷ identified several areas for the participants. Among other recommendations, communication, and information exchange among churches and partners, the study and analysis of social and economical consequences reshaping the world's economy, the role of global factors, and the effects of the enlargement of the European Union were the most important.³²⁸

The South-North Member Churches Forum, in London Colney, between February 8th and 11th, 2004, continued the journey begun by the 23rd General Council of the WARC, in Debrecen in 1997. In this forum, 26 member churches participated in order to develop a faith stance on the way to the 24th General Council of the WARC in Accra. This faith stance pointed to the growing recognition of issues like "*the way in which the capitalist market system works today*"³²⁹ which is through causing significant suffering and death to people and creation on a massive scale. This conference also recognized that ecologically, creation is in crisis, and nature, in many aspects is seen as an openly available substance for world consumption and wealth establishment. Based on Genesis 2:8-9, the conference basically called for repentance of distraction caused in the world, and Genesis 9:8-12 pointed to the basic foundation, which was affirmed here, that God has made a covenant with all of creation, and therefore, "*God's covenant*

³²⁷ WCC, *Globalization in Central and Eastern Europe, Responses to the Ecological, Economic and Social Consequences*, Geneva, CH, 2001, <http://www.oikoumene.org/en/resources/documents/wcc-programmes/public-witness-addressing-power-affirming-peace/poverty-wealth-and-ecology/neoliberal-paradigm/29-06-01-globalization-in-central-and-eastern-europe.html>

³²⁸ Confessio, 2002/1 *Globalizáció Közép és Kelet-Europában*, Kálvin Kiadó, Budapest, Hungary

³²⁹ WARC, *The Time Has Come, Reformed World*, Geneva, Switzerland, <http://warc.ch/24gc/rw041/05.pdf>

invites all creation into a relationship of participation in common living. We declare that God gives us the freedom to build, preserve and care for all creation."³³⁰

It is also worthwhile to mention the message of the 10th Assembly of the Lutheran World Federation, held in Winnipeg, Canada, between July 21st and 31st, 2003, which focused on the "*World in Need of Healing*."³³¹ The LWF's general secretary, Rev. Dr. Ishmael Noko described the theme of 'The Healing of the World' conference, "*as a timely and significant ecumenical theme because it conveys a sense of commitment to the global proclamation of the gospel.*"³³²

The Lausanne Movement³³³ reflects on many current issues facing the world today. In 2010 in Cape Town, with the World Evangelical Alliance, the Lausanne Movement will bring together 4,000 leaders from more than 200 countries to confront issues, such as other faiths, poverty, HIV/AIDS, persecution and seeking to better understand the issues of global economic injustice, disease, and the environment from a perspective focusing on how all of these concerns are relating to the future of the Church and world evangelization. The vision of the Congress will be: "*God in Christ, reconciling the world to Himself.*"

2.5.2. ROMAN CATHOLIC AND ORTHODOX RESPONSES

Human responsibilities towards creation begin their influence within the Roman Catholic Church as a social issue, concerning the just and equal distribution of all the wealth of the world. Within this matter, it was realized, that ecological harms and environmental pollution are the primary cause of this new and global phenomenon. All

³³⁰ Ibid.

³³¹ Lutheran World federation, 10th Assembly, Winnipeg, Canada, LWF's Tenth Assembly theme - "*For the Healing of the World*"
<http://www.lutheranworld.org/news/lwi/en/188.en.html>

³³² Ibid.

³³³ The Lausanne Movement, Lausanne, CH, <http://www.lausanne.org/> Accessed on 1-30-2010

these recognitions were first gathered together and focused on future equality in the document, called *Lumen Gentium*.³³⁴ Chapter 4, § 36. reads as follows: "*May the goods of this world be more equitably distributed among all men, and may they in their own way be conducive to universal progress in human and Christian freedom. In this manner, through the members of the Church, will Christ progressively illumine the whole of human society with His saving light.*"³³⁵

The 'Laborem Exercens' encyclical highlights the importance of harmony between creation and humanity, from John Paul II, on September 14th, 1981, which states in chapter II. § 4, that "*each and every individual, to the proper extent and in an incalculable number of ways, takes part in the giant process whereby man 'subdues the earth' through his work.*"³³⁶

The Gubbio Charter was born in Stockholm, on September 23rd, 1982, as a realization of the deepening problems and issues regarding the status and well-being of the environment. This international conference, called "Terra Mater"³³⁷, was held in the year of the 800th anniversary of the birth of Saint Francis of Assisi. The declaration of the conference primarily highlighted Saint Francis of Assisi's mission as a model of awareness for the future of a sustainable world. After the Chernobyl disaster in 1986, the Vatican became conscious that ecological disasters are serious dangers to the world. The 'Sollicitudo rei socialis' encyclical states that "*among today's positive signs we must also mention a greater realization of the limits of available resources, and of the need to*

³³⁴ Paul VI, *Dogmatic Constitution on the Church*, *Lumen Gentium*, Solemnly Promulgated by His Holiness on November 21, 1964, Vatican Archive, http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19641121_lumen-gentium_en.html

³³⁵ Ibid.

³³⁶ John Paul II., *Laborem Exercens To His Venerable Brothers in the Episcopate to the Priests to the Religious Families to the sons and daughters of the Church and to all Men and Women of good will on Human Work on the ninetieth anniversary of Rerum Novarum*, 1981.09.14 http://www.vatican.va/edocs/ENG0217/_INDEX.HTM

³³⁷ Istituto Italiano di Bioetica, *The Gubbio Charter*, Naples, Italy 2007, <http://www.istitutobioetica.org/documenti>

respect the integrity and the cycles of nature and to take them into account when planning for development, rather than sacrificing them to certain demagogic ideas about the latter. Today this is called ecological concern."³³⁸ Finally, 1990 brought the realization of global responsibility of all people by Pope John Paul II, regarding the environment and its preservation in his message for the celebration of the World Day of Peace on January 1st, 1990.³³⁹

"In our day, there is a growing awareness that world peace is threatened not only by the arms race, regional conflicts and continued injustices among peoples and nations, but also by a lack of due respect for nature, by the plundering of natural resources and by a progressive decline in the quality of life. The sense of precariousness and insecurity that such a situation engenders is a seedbed for collective selfishness, disregard for others and dishonesty. Faced with the widespread destruction of the environment, people everywhere are coming to understand that we cannot continue to use the goods of the Earth as we have in the past. The public in general as well as political leaders are concerned about this problem, and experts from a wide range of disciplines are studying its causes. Moreover, a new ecological awareness is beginning to emerge which, rather than being downplayed, ought to be encouraged to develop into concrete programmes and initiatives."³⁴⁰ At the end of this message, the Pope declared that *"Today the ecological crisis has assumed such proportions as to be the*

³³⁸ John Paul II., *Sollicitudo rei socialis To the Bishops, Priests Religious Families, sons and daughters of the Church and all people of good will for the twentieth anniversary of "Populorum Progressio"* 1987.12.30 http://www.vatican.va/edocs/ENG0223/_INDEX.HTM

³³⁹ John Paul II., *Peace with God the Creator, Peace with All of Creation*, January 1, 1990, § 1. http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html

³⁴⁰ John Paul II., *Peace With God The Creator, Peace With All Of Creation*, January 1, 1990, § 1. http://www.vatican.va/holy_father/john_paul_ii/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace_en.html

responsibility of everyone."³⁴¹ In Jesus, God came to Earth as a real God and as a real Human, becoming a member of the human race, sharing its existence and its global environment and climate as well.

Therefore, realistically, and symbolically, it is a testimony of God that the harmony of humanity and the love of the Creator are present in Jesus' incarnation and salvation. As Jesus stretches out his arms and legs on the cross, He illustrates, how "*wide and long and high and deep*"³⁴² His love is for his creation. In the risen Jesus, God fills the whole Earth, and all of creation. He is the Lord of the Universe. Furthermore, God's people, in Jesus, are fundamentally Christ's ambassadors "*as though God were making his appeal through us. We implore you on Christ's behalf: Be reconciled to God*"³⁴³, in a World, where humankind must represent God. That representation cannot contradict the Creator. Humankind is a part of a global community, and that is where He wants us to succeed. John says: "*My prayer is not that you take them out of the world but that you protect them from the evil one.*"³⁴⁴ In the representation of God, however, Christians have to adopt a new revolutionary approach, which has to replace the old routine. Humankind must learn how to care about the planet God created for all generations to come.

In 1998, the U.S. Conference of Catholic Bishops declared, that it is crucial "*that we show our respect for the Creator by our stewardship of creation. Care for the Earth is not just an Earth Day slogan; it is a requirement of our faith. We are called to protect people and the planet, living our faith in relationship with all of God's creation.*"

³⁴¹ Ibid, § 15.

³⁴² Ephesians 3: 18

³⁴³ 2 Corinthians 5:20

³⁴⁴ John 17:15

*This environmental challenge has fundamental moral and ethical dimensions that cannot be ignored.*³⁴⁵ The Bible declares that all things visible and invisible are God's.³⁴⁶ As history often questions the role of the human race, and its responsibility for Earth's community, it is evident, that humans are created in God's image³⁴⁷ and therefore, they are God's responsible representatives.

The Vatican also expressed its awareness regarding the environment and the Orthodox Church. In 2002, a joint declaration between Pope John Paul II and Ecumenical Patriarch Bartholomew stated that *"we are... concerned about the negative consequences for humanity and for all creation resulting from the degradation of some basic natural resources such as water, air and land, brought about by an economic and technological progress which does not recognize and take into account its limits."*³⁴⁸ This declaration had a significant technological circumstance. It was signed during a live video conference between Bartholomew I., who was at the Palazzo Ducale in Venice and the Pope who remained at the Vatican.³⁴⁹ The declaration was followed by a letter, dated in 2006 by Pope Benedict XVI, to Bartholomew I, Ecumenical Patriarch expressing that the *"common points must be found on which converge the commitments of each one to safeguard the habitat that the Creator has made available to the human being, in*

³⁴⁵ US Conference of Catholic Bishops, *Sharing Catholic Social Teaching: Challenges and Directions*, Washington DC, 1998, <http://www.usccb.org/sdwp/projects/socialteaching/socialteaching.shtml>

³⁴⁶ Psalm 104:24

³⁴⁷ Genesis 1:27

³⁴⁸ John Paul II., *Common Declaration On Environmental Ethics, Of John and The Ecumenical Patriarch His Holiness Bartholomew I*, Monday, 10 June 2002, http://www.vatican.va/holy_father/john_paul_ii/speeches/2002/june/documents/hf_jp-ii_spe_20020610_venice-declaration_en.html

³⁴⁹ Becatoros, Elena, *Ecumenical Patriarch Bartholomew and Pope John Paul II Sign Declaration on Protecting the Environment*, (Article, Jun 11, 2002) Greek Orthodox Archdiocese of America, New York, NY, <http://www.goarch.org/news/goa.news8>

whom he has impressed his own image."³⁵⁰ Based on all of these and other statements and declarations, it is clear, that the Roman Catholic Church unmistakably realized and expressed its awareness regarding environmental concerns, social, and economic justice and sustainable consequences, and its marching towards the realization, that the Church cannot live without deeply, leading, forecasting and participating in these issues for the glory of God and the benefit of humanity.

The Greek Orthodox Church, has been lead by ecumenical patriarch Bartholomew I since November 1st, 1991. He is a key figure in inter-orthodox, inter-Christian and inter-religious dialogs, and he is also a writer of yearly 'Message'-s regarding ecological and environmental issues. However, one of the latest and most significant statements came from Alexandros E. Papaderos, co-founder and president of the orthodox academy of Crete. His writing of "*Orthodoxy and Environment – The Seven Suggestions of Patmos*"³⁵¹ has many new and significant establishments. First and foremost, the first suggestion declares, that the definition of sin needs to be reanalyzed and newly determined. Sin is not only described by traditional classifications, but it needs to be extended by all kinds of actions, which are against creation.

In this matter, the Nádasladány ecumenical conference was held in Hungary, in 2002, as a demonstrative and forecasting cooperation between its participants. It took place in the city of Nádasladány, between the representatives of the Roman Catholic, Hungarian Reformed, Lutheran, and Jewish denominations. The declaration called, "*Nádasladányi Nyilatkozat*"³⁵² focuses on the rethinking of earthly life

³⁵⁰ Benedict XVI, *Letter Of His Holiness To His Holiness Bartholomew I, Ecumenical Patriarch On The Occasion Of The Sixth Symposium On "Religion, Science And The Environment" Focusing On The Amazon River*, July 6, 2006, http://www.vatican.va/holy_father/benedict_xvi/letters/2006/documents/hf_ben-xvi_let_20060706_bartolomeo-i_en.html

³⁵¹ Papaderos, Alexandros E., *Ortodoxia és Ökológia - a Hét Patmoszi Javaslat*, 1995, (Article) Fenntartható Civilizáció Portál, Székesfehérvár, Hungary, <http://bocs.hu/vall-oko-konf-2001b.htm>

³⁵² Nádasladányi Nyilatkozat, *Statement of the "Ecology and the Church Conference"*, August 30-31, 2002. Fenntartható Civilizáció Portál, Székesfehérvár, Hungary, <http://bocs.hu/index.php?&t=/fdk/minden.php?d=25>

regarding environmental issues in the context of daily actions between the Church, its leaders, and people. It highlights the communication of practical assignments regarding information, education, and cooperation for the benefit of all people.

CHAPTER 3.
THE FRAMEWORK FOR THE THEOLOGY OF CREATION, PROVIDENCE,
ESCHCATOLOGY, AND ETHICS
IN THE 20TH CENTURY

3.1. INITIATION

Since this dissertation's central point is to embrace the understanding of sustainability within the context of theology, it is a principal point to study the interaction between different theological views about creation, providence, eschatology, and ethics in the 20th century. The focal point of this investigation is to exhibit prominent scholars' examination on how they view the future of humanity, because of a changing world. The reason for this is to see these issues from a standpoint of critical comparison and to shed light on the importance and responsibility of sustainable theology in the future.

3.2. THEOLOGY OF CREATION

The great reformer, John Calvin, states that *"the custody of the garden was given in charge to Adam, to show that we possess the things which God has committed to our hands, on the condition, that being content with a frugal and moderate use of them, we should take care of what shall remain. Let him who possesses a field, so partake of its yearly fruits, that he may not suffer the ground to be injured by his negligence; but let him endeavor to hand it down to posterity as he received it, or even better cultivated. Let him so feed on its fruits that he neither dissipates it by luxury, nor permits to be marred or ruined by neglect. Moreover, that this economy, and this diligence, with respect to those good things which God has given us to enjoy, may flourish among us; let everyone regard himself as the steward of God in all things which he possesses. Then he will neither conduct himself dissolutely, nor corrupt by abuse*

those things which God requires to be preserved."³⁵³ In his comment, Calvin is clear about the main message of the Christian conditions of Creation- being a steward by maintaining God's economy and conducting life not corruptly, but rather, with an attitude of preservation. Calvin's perspective for his theological view is rooted in the context of creation's only assignment of glorifying and knowing God.³⁵⁴ In an essence, *"creation is meant to be a 'theatre' of God's sovereignty and glory."*³⁵⁵ Szűcs further comments that God and the created world are in delight and in a mutual dialogue with each other.³⁵⁶

For Barth,³⁵⁷ unlike most modern theologians, the work of creation *"focuses on what is known through the revealed Word of God: on God's side, creation is the creating and seeking of a distinct reality with which to share his life and glory; on the human side, it is an existence in grace; and both anticipate their completion in redemption."*³⁵⁸ Barth's handling of creation in his work, 'Church Dogmatics', can be seen as a significant attempt to make his doctrines characteristically Christian. Genesis states that *"God created the heavens and the earth."*³⁵⁹ However, the actual work was

³⁵³ Calvin, John, *Commentary on Genesis*, (2:15) Volume 1. Christian Classics Ethereal Library, Calvin College, Grand Rapids, MI, 2009

³⁵⁴ Calvin, John, *Romans and Thessalonians*, Calvin's New Testament Commentaries Series, Volume 8., Joint Publication by Eerdmans and Paternoster, Grand Rapids, MI, 1995, pg.32

³⁵⁵ Boer, Theo A., and Schroten, Egbert, *Life And Death Seen From A (Dutch) Reformed Position*, 2.3.(Article) Utrecht, October 18, 1996, http://www.protestantsetheologischeuniversiteit.nl/uploadedDocs/medewerkerspagina/boer/Boer-Life_and_Death.pdf

³⁵⁶ Szűcs, Ferenc, *A boldogság bibliai és teológiai kontextusban*, Confessio, 2006/4. Budapest

³⁵⁷ Barth, Karl, (1886-1968) Barth's magnum opus is "Church Dogmatics", where Barth describes his doctrines about creation and providence in order to reflect the centrality of Jesus Christ for understanding God and the world. Barth's total Christ centeredness was not based on sources, or information outside of Biblical revelation, but rather on Jesus as witnessed by the Old and New Testaments. In this light, Barth had come to see more and more fully that the central theme of Scripture is the "togetherness" of the sovereign God and creaturely man in Christ; God's "humanity" in the Incarnation. Karl Barth, *Church Dogmatics*, Continuum International Publishing, London, England, 2009

³⁵⁸ Ford, David, *The Modern Theologians*, Blackwell, West Sussex, UK, 2005, pg. 33

³⁵⁹ Genesis 1:1

done through Jesus, as John writes it: "*all things were made through Him, and without Him nothing was made that was made.*"³⁶⁰ Jesus accomplished the work of creation, and therefore, He is the one who is unsurpassed in all of creation, and became the central point of all that God has done.³⁶¹ In this complexity and understanding of creation, for Barth, it is evident, that the centrality of Jesus Christ cannot be by-passed in order to comprehend God and the world. This effort by Barth pinpoints the most obvious attempt of attacking natural theology, since humanity should not look for any views on creation through a general observation of nature and the world. Rather, humanity must turn to Jesus Christ for comprehending this world, which was created and is ruled by God, and then draw conclusions about all matters related to creation, life, and providence.

In order to understand creation from a new perspective, Pannenberg's³⁶² view suggests that theology ought to avail itself of the category of 'nature' rather than 'creation'.³⁶³ For him, the fundamental task of theology is better characterized as a theology of nature. Pannenberg doesn't neglect the concept of creation, but instead, for a better theological interpretation of natural reality, he suggests the use of the concept of theology of nature. In contrast to Pannenberg, McGrath affirms that "*a Christian 'theology of nature' is contained and subsumed in the insight that the natural order,*

³⁶⁰ John 1:3

³⁶¹ Barth, Karl, *Church Dogmatics, Volume 4. Part 1. The Doctrine of Reconciliation*, T&T Clark, New York, NY, 2004, pg.44

³⁶² Grenz, Stanley J., Wolfhart Pannenberg's Quest for Ultimate Truth, *The Christian Century*, Chicago, IL, September 14-21, 1988, pg. 795-798 "*Wolfhart Pannenberg, (1928-) contributed substantially to the philosophy of history and the philosophy of science. He was an eschatological realist and a great interdisciplinary thinker. Pannenberg's magnum opus, the three-volume Systematic Theology, where his focal point is; seeking universal truth through theology. According to his view, truth is to be discerned through theological reflection and reconstruction. Pannenberg's innovation is the reintroduction of the concept of logos. In his doctrine of creation he forges a link between the logos and the scientific concept of information.*"

³⁶³ Pannenberg, Wolfhart, *Toward a Theology of Nature: Essays on Science and Faith*, Westminster/John Knox, Philadelphia, PA, 1993, pg. 72.

including humanity, is God's creation. Christians see nature as creation."³⁶⁴ Novak also agrees that "nature is not an object right before us about which we can argue using the truth criteria of correspondence. It is something that can only be grasped abstractly from without our historical present, a present whose content is continually provided by revelation."³⁶⁵ If humans see creation as a specific way of nature, then Pannenberg's idea does not see any conflict between the two definitions whatsoever. This view by itself suggests that to see nature is against any other examination. "In what follows, we shall outline this specific way of reading the book of nature, and explore its importance for a scientific theology."³⁶⁶

Moltmann³⁶⁷ takes a step ahead, by paying full attention to this question, suggesting the need to obtain a renewed understanding of nature and humanity.³⁶⁸ This new understanding is a two-way road. One way is means comprehending nature and humanity as God's creation and the other is seeing God's relationship to the world as His creation. Moltmann, by realizing the crisis of creation in the 20th century, focuses on the cause of this crisis, pointing to humanity's abusive dominion over the created world.³⁶⁹ Moltmann "advocates a sense of human community with nature, respecting nature's independence and participating in mutual relationship with it. Humans as the image of God have a distinctive place within nature, but they are not the owners or

³⁶⁴ McGrath, Alister E., *A Scientific Theology*, T&T Clark Ltd. New York, NY, 2001 pg. 137.

³⁶⁵ Novak, David, *Natural Law in Judaism*, Cambridge University Press, UK, 1998, pg. 144-145

³⁶⁶ McGrath, Alister E., *A Scientific Theology*, T&T Clark Ltd. New York, NY, 2001 pg. 138

³⁶⁷ The Gifford Lectures, Authors: Jürgen Moltmann, Templeton Press, West Conshohocken, PA, 2009, "Jürgen Moltmann (1926-) The most significant work by Moltmann is his *Theology of Hope*, published in English in 1967. Here, Moltmann suggests, that the central motivating factor of the church and each Christian person should be hope. In it, Moltmann explains, that the whole creation longs for a specific renewal, which is the God of hope. As a response to this empowered hope, all Christian's should be present in the world as mission oriented to all, and express love for this damaged creation. He focuses on God's promise to act in the future, since it must be more important than how and what God has done in the past. This new orientation of faith - according to Moltmann - must result in an energetic participation in the world's concerns in order to assist in the coming of a better world."

³⁶⁸ Moltmann, Jürgen, *God in Creation*, Harper & Row, San Francisco, CA, 1985, pg.221

³⁶⁹ *Ibid.* pg.23

rulers of nature."³⁷⁰ This view incorporates humanity into the community of creation and outlines that creation is not anthropocentric but theocentric.³⁷¹ Therefore, "Moltmann appeals to his doctrine of God, whose own Trinitarian community provides the model for the life of his creation as a community of reciprocal relationship."³⁷²

The understanding and view of creation is a never-ending process, because it reflects the current theological knowledge in the context of historical, social, human, and global contexts. Since creation theology has arrived to the point where it is able to see creation as an incomplete and continuing process, the question is imminent: what is humanity's role in connection to and as a part of this process? From a theological and ethical standpoint, what is humanity's responsibility to be able to not only preserve, but prepare and assist God in His work? God does not need humankind's accomplishments, but humans, as beneficiaries, children, and inheritors of God's Kingdom have power to prevent the Earth from enduring further abuse and they can submit it back to the creator. The answer to the question of sustainability is not an open-ended direction. There is only one, distinct response that can fulfill the goal God has for the Earth; humankind must extend life until Jesus Christ returns. From this view, managing sustainability is a Christian process of obedience, which is done by submitting one's own will to the will of God which will bring about the purpose of all creation, which is a new life, on a new earth, and in a new heaven³⁷³. Jesus proclaimed, "I am the Alpha and the Omega, the First and the Last, the Beginning and the End."³⁷⁴ As creation returns to the Creator, it arrives to the end point. This means that sustainability is an action of assistance to God in obediently letting Him accomplish His will, and keeping Satan from

³⁷⁰ Ford, David, *The Modern Theologians*, Blackwell, West Sussex, UK, 2005, pg. 156

³⁷¹ Moltmann, Jürgen, *God in Creation*, Harper & Row, San Francisco, CA, 1985, pg.31

³⁷² Ibid.

³⁷³ Revelation 21:1

³⁷⁴ Revelation 22:13

destroying creation through temptation and conflicts with God's final plan before God's time. Therefore, at the beginning of end times, creation theology must no longer be theoretical. On the contrary, it is humankind's responsibility to have a practical, action-based, and sustainable conduct and submit its will to God by assisting Him in the preparation for His second coming.

3.3. THEOLOGY OF PROVIDENCE

The question of providence begins with the experience of salvation through the cross of Jesus Christ. The Reformers saw God's work in salvation's history. Luther's 'God for us' approach of redemptive history is quite the opposite of rational thought. Luther's 'theology of the cross' points to the cross as the only source of knowledge about who God is and how His salvation works. At the Heidelberg Disputation "*at the heart of his argument is his (Luther's) notion that human beings should not speculate about who God is or how he acts in advance of actually seeing whom he has revealed himself to be.*"³⁷⁵ Trueman disputes that Luther, however, also had a restrictive view of revelation. It is non-questionable that God revealed Himself as merciful to humanity in the Incarnation, but "*indeed, Luther sometimes referred enigmatically to Christ crucified as 'God's backside'—the point at which God appeared to be the very contradiction of all that one might reasonably have anticipated him to be.*"³⁷⁶

Calvin also returns to Biblical theology, and uses the Bible extensively in order to seek and develop a practical theology. Calvin however, "*understood God's knowledge and will to be absolutely independent of the creation. God does not look ahead and see what is going to happen, for that would make God dependent on what*

³⁷⁵ Trueman, Carl R., *Luther's Theology of the Cross*, OPC - New Horizon, Willow Grove, PA, October, 2005, http://www.opc.org/new_horizons/NH05/10b.html

³⁷⁶ Ibid.

*the creatures decide.*³⁷⁷ Therefore, in Calvin's view, God's will is not in relation to creation, but rather, it is independent, and relates to His own will only. As a consequence, there is no mutual relationship between God and his creatures, and the relationship is like a one-way street, which is characterized by restricted control over absolutely everything. Therefore, nothing happens "*except what is knowingly and willingly decreed by him.*"³⁷⁸

During the 20th century, the basic question was delivered from the same argument: what kind of relationship exists between God and his creatures? This can be imagined in at least four different ways. One is that humanity cannot have a personal relationship with God, whatsoever. The second view states, that humanity is able to have only a non-reciprocal relationship with God. Thirdly, there are those who believe that God is dependent on his creatures, if He wants to achieve His goals. "*Finally, some affirm, that God freely enters into reciprocal relations with us.*"³⁷⁹

For Barth, "*the only free God, who is the Father of Jesus Christ, is the Creator and basis of all freedom worthy of the name. But how absurd and sinister, how unworthy of the name, would be a freedom consisting in the fact that the creature is wholly or in part independent of this God.*"³⁸⁰ Here, Barth sees that in Jesus Christ, God remains faithful to His creature, since He is the creator. Also, God kindly preserves, accompanies, and leads his creatures, and saves them from emptiness, where there is no further future revealed.

Thomas Aquinas, in 'Summa Contra Gentiles', points to the question of the end writing that "*whenever certain things are ordered to a definite end they all come*

³⁷⁷ Sanders, John, *The God Who Risks - A Theology of Providence*, InterVarsity, Downers Grove, IL, 1998, pg. 155

³⁷⁸ Ibid.

³⁷⁹ Ibid. pg. 158

³⁸⁰ Barth, Karl, *Church Dogmatics, III/3*. T&T Clark, Edinburgh, Scotland, 1957, pg.130-131

*under the control of the one to whom the end primarily belongs.*³⁸¹ Aquinas concludes, that *"now, to order the actions of certain things toward their end is to govern them. Therefore, God provides governance and regulation for things by the providence of His wisdom."*³⁸² Pannenberg philosophically meditates on providence based on Aquinas' thinking by first asking the simple question: what can be preserved? Pannenberg simply answers that *"only that which already is can be preserved."*³⁸³ He means that preserving something is only possible if that something does not own its existence in itself. Since it is God, who establishes existence for all creatures, it is evident that creatures can only be preserved by God himself. Furthermore, God is clear about His will, and He wants to preserve the world by keeping creation in order, as it is revealed in *"the special theme of the Noachic covenant (Gen. 9:8-17)."*³⁸⁴ Pannenberg believes that God cares about each individual creature, because He sees each of their needs and the factor of time as a particular part of their existence. The explanation is based on the proposal that creation is not restricted to the beginning, since this would simply be an act of time; on the contrary, creation is an eternal act of God. *"If the act of creation were itself already an act of time, we would unavoidably have to inquire into the time preceding it."*³⁸⁵ Therefore, Pannenberg proclaims that the world was created not in time, but with time, which is the same idea that goes back even to St. Augustine. Within this time, God *"accepts the risk of sin and evil as a condition of realizing the goal*

³⁸¹ Aquinas, Thomas, *Summa Contra Gentiles*, Hanover House, NY, 1955-1957, book three, chapter 64/2, Original text; <http://www.op-stjoseph.org/Students/study/thomas/ContraGentiles.htm>

³⁸² Ibid. Chapter 3, 64/11.

³⁸³ Pannenberg, Wolfhart, *Systematic Theology, Volume 2*. T&T Clark, Edinburgh, Scotland, 1994, pg. 35

³⁸⁴ Ibid.

³⁸⁵ Ibid. pg.38

of a free fellowship of the creature with himself."³⁸⁶ Pannenberg calls this the "*sphere of the doctrine of providence.*"³⁸⁷

The insight of providence is further expanded in Moltmann's theology of hope, which is based on an eschatological approach to seeing the future as God's promise. For Moltmann, this future is not a combined topic of a relation between 'promise' and 'revelation'. Instead, it is a new "*view of the 'revelation of God', which is 'eschatological' in so far as it seeks to discover the language of promise.*"³⁸⁸ Moltmann sees the Old Testament as being full of statements, where the 'revealing of God' and the 'promise of God' are combined. Moltmann disputes that God reveals Himself in the form of a promise. This promise "*confronts systematic theology with the question whether the understanding of divine revelation by which it is governed must not be dominated by the nature and trend of the promise.*"³⁸⁹ As an alternative, "*it must be eschatologically understood, namely, in the field of the promise and expectation of the future of the truth.*"³⁹⁰ This promise is uncovered in the providence of God, since Moltmann's new kind of thinking about the world is directed toward the future and new things, "*in which hope trusts in the God of the promise.*"³⁹¹ Comparing the views of Pannenberg and Moltmann, the latter "*places relatively more emphasis upon the contrast and discontinuity between the old creation and the new*" and "*Pannenberg stresses their continuity and coherence.*"³⁹² In this case it is safe to say, that the two do not contradict, but rather, complement each other. This is because each stresses the

³⁸⁶ Ibid. pg.167

³⁸⁷ Ibid.

³⁸⁸ Moltmann, Jürgen, *Theology of Hope*, SCM Press, London, UK, 2002, pg. 28

³⁸⁹ Ibid.

³⁹⁰ Ibid. Pg.29

³⁹¹ Ibid. Pg. 23

³⁹² Thiselton, Anthony C. *Hermeneutics of Doctrine*, Eerdmans, Grand Rapids, MI, 2007, pg.546

possibility of novelty and surprise as God's promises become fulfilled in unexpected ways. *"But each also stresses divine faithfulness, as God remains true to his promise."*³⁹³

According to von Balthazar,³⁹⁴ this promise however, consists of two elements. One is human temporal freedom, and the second, an eternal immutability of the divine plan. The human element for understanding that is in agreement with the divine plan is dissolved, for the reason that *"the exercise of human freedom is made possible because the omnipotent God assumes a certain latency or incognito vis-à-vis creation, in such a way that the human will is not forced by the one choice of the overwhelming and absolute good that is God himself but is faced with many choices about various partial goods."*³⁹⁵ For Balthazar, God is not limited to humans or nature, by any precondition. Furthermore, he expresses that *"God's providence is free and limitlessly superior to nature, the logos or law of providence always takes priority over the logos of nature and cannot be derived from it."*³⁹⁶ This universal approach to all creation brings Balthazar to perceive that since God created all things with His limitless power and it is He, who brought them into being and holds them together, it is His providence, which links them all to Him and each other, as well. Even if they want to, nobody and no creature can isolate itself from God and therefore, *"this supreme power*

³⁹³ Ibid.

³⁹⁴ Gonzalez, Michelle A., Hans Urs Von Balthasar and Contemporary Feminist Theology, Theological Studies, Woodstock Theological Library, Washington DC, Vol. 65, 2004, *"Hans Urs von Balthasar (1905-1988) His theology, - while the influence of Scholasticism upon his work is clear, it is far from determinative, he makes reference to languishing in the desert of neo-scholasticism. Nevertheless Balthasar's thought may be placed within a broadly Thomistic tradition. His greatest theological achievement is the trilogy The Glory of the Lord, 1961-69, Theodramatik, 1973-83, and Theologik, 1985. Nothing has earned Balthasar the description of "controversial" more than his theological speculations on hell and the possibility of universal salvation. It is also controversial, that "feminist theologians find an unlikely partner in him, since he takes the category of gender as essential to his understanding of theology, the human, and divine action."*

³⁹⁵ O'Hanlon, Gerard F., *The Immutability of God in the theology of Hans Urs von Balthasar*, Cambridge Press, UK, 1990, pg.58

³⁹⁶ Balthasar, Hans Urs von, *The Universe According to Maximus the Confessor*, Johannes Verlag, Einsiedeln, Germany, 1988, pg. 126

overshadows the individual relationships that are to be seen in every individual nature not in a way that corrupts or eradicates or terminates them, but in order to dominate and illuminate them as the whole does its parts, or in order to reveal itself also as the cause of the whole of things."³⁹⁷

In this direction, providence is a theological perspective, where the dominant force of God that keeps creation in balance is sustainability. According to Hoogstraten, *"Social nature goes hand in hand with the providence of nature; it is the invisible hand of divine Providence."*³⁹⁸ In this balance, sustainability is a Christian responsibility of the obedient steward. God's priority is providing providence for humanity but also for all creation with a different perspective. The divine promise is infallible, regardless of to whom, and for what it is given. Humanity experiences an abundant God, grace, and care in life; nature is also a part of this life. All of humankind lives in a community as the representatives of God. *"As community, people's relatedness to one another and to nature is originated by the divine word. The community is sustained by their common belief, that the promise is true. God's promise is history and future development on the human fulfillment of their part of the covenant."*³⁹⁹

3.4. THEOLOGY OF ESCHATOLOGY

*"This is the end - for me the beginning of life."*⁴⁰⁰ These are Bonhoeffer's⁴⁰¹ final words to his fellow prisoners, before he dies. By this statement, Bonhoeffer

³⁹⁷ Ibid. pg.69

³⁹⁸ Hoogstraten, Hans Dirk van, *Deep Economy, Caring for Ecology, Humanity and Religion*, James Clarke, Cambridge, UK, 2001, pg.129,

³⁹⁹ Ibid. pg.133

⁴⁰⁰ Schoenherr, Albrecht, *Dietrich Bonhoeffer: The Message of a Life*, The Christian Century, Chicago, IL, November 27, 1985, pg.1090-1094

demonstrates that he knows what is going to happen to him. It was evident for him, that his life is protected and judged by God, since God gives life. However, what is Christian hope for all of humanity and creation? Is there more that can be seen and detected in present life? Since Christians believe that Christ will return, what is going to happen until then as well as after then? Eschatology is the topic in which the answers to these questions can be found. To drive the central point home, Karl Rahner claims, *"Christ himself is the hermeneutical principle of all eschatological assertions. Anything that cannot be read and understood as a Christological assertion is not a genuine eschatological assertion."*⁴⁰²

Following Rahner, Barth claims that the effective presence of Jesus Christ is the principal teaching of eschatology. Barth believes that Christ is present in a threefold personal form, called 'parousia'; thus, He is present in resurrected life, in Spirit, and in His second coming. Therefore, Barth sees that Jesus has already fulfilled all prophecies in the past, and He will fulfill all prophecies to come. He is humanity's faith and love. Furthermore, *"Jesus Christ is our hope."*⁴⁰³ Barth argues that hope's *"final and decisive basis lies in the fact that the prophetic action of Jesus Christ, and therefore - the kingdom of God come and the will of God done in Him, -while it is complete in itself, is only moving towards its fulfillment."*⁴⁰⁴ In summary, for Barth, eschatology cannot simply be the study of the last things, surrounded by uncertainties. The 'eschatos' does

⁴⁰¹ Bonhoeffer (dedicated website) Alexandria, VA, 2009, *"Dietrich Bonhoeffer (1906-1945) Bonhoeffer's Christology began to take shape in his Habilitationsschrift, Act and Being. In this book, Bonhoeffer analyzes the epistemologies of transcendental and ontological philosophies in terms of the problems they pose for an understanding of revelation. What made him well known is his project, Christianity without religion. For Bonhoeffer, Christianity's identity was a problem because the world had come of age; that is, the world had become conscious of itself and the laws that governed its existence, and thus it did not need the trappings of religion any longer"*. <http://www.bonhoeffer.com/bon2.htm>

⁴⁰² Rahner, Karl, *The Hermeneutics of Eschatological Assertions*, Theological Investigations 23 Volumes, Darton, Longman and Todd, London, UK, 1961-199, pg.4:326-46 (342)

⁴⁰³ Barth, Karl, *Credo, A Presentation of the Chief Problems of Dogmatics with Reference to the Apostles' Creed*, Hodder & Stoughton, London, UK, 1936, pg.120

⁴⁰⁴ Barth, Karl, *Church Dogmatics*, Continuum International Publishing, London, England, 2009 IV.3.2, pg.903

not refer to a last time or place, but instead it refers to Jesus Christ Himself as humanity's final end.

As for Moltmann, the main stress of eschatology is on its implication. Primarily, the practical consequences of a Biblical eschatological perspective refer to the life of the church, social justice, and individual freedom. In his famous book, Moltmann tailors his whole concept around hope, "*which embraces both the object hoped for and also the hope inspired by it.*"⁴⁰⁵ In this book, the concentration of eschatology is written in the Doctrine of Christian hope, where Moltmann doesn't focus on the speculation of what will happen at the end. On the contrary, he believes that the main factor is the whole cause, which drives toward this end. He claims that therefore, eschatology is not just a chapter of Christianity; moreover, it is a total concept because nothing that pertains to it is free from it. The question of contrasting fulfillment and future returns, since for Moltmann, the history of the Old Testament is not just fulfilled in the New Testament, but it also finds its future in the gospel.⁴⁰⁶ Therefore, Christ's resurrection for Christianity and history is a turning point, a "*history making event*"⁴⁰⁷, that becomes a central point to which all other history is linked. Since Moltmann is a future-oriented theologian, for him, all Christ events, from the cross to the resurrection, point toward the future in promising the righteousness of God. This new life from God, as a result of the resurrection, promises a new future, which will be fulfilled by hope "*in a new totality of being.*"⁴⁰⁸

Clement of Alexandria (c.150 - 215), the head of the Catechetical School of Alexandria, and Origen Adamantius, (c. 185–254) one of the most distinguished of the

⁴⁰⁵ Moltmann, Jürgen, *Theology of Hope, On the Ground and the Implications of a Christian Eschatology*, Harper & Row, New York, NY, 1967, pg.16.

⁴⁰⁶ Ibid. pg.148

⁴⁰⁷ Ibid. pg.180

⁴⁰⁸ Ibid. pg.203

early fathers of the Christian Church in the form of universal restoration, both leaned towards a more universal approach to the question of who will or will not be part of the new totality of being. They adapted Platonic terminology and called their doctrine 'apokatástasis panton' -restoration to the original condition - , but in 543, the Synod of Constantinople condemned this view, which almost disappeared from Christian thought during the centuries. Küng⁴⁰⁹ returns to this dilemma in the 20th century with a different approach. He calls his design universal reconciliation, and remains faithful to basic Biblical teachings. He states that his view about eternity and the punishment of hell may never be regarded as absolute, because it is always subject to God, to His will, and His grace.⁴¹⁰ According to La Due, Küng suggests that "*superficial universalism – in which all are saved from the outset- that does not do justice to the seriousness of life.*"⁴¹¹ La Due claims that Küng believes that heaven is not a physical place but instead it can be described as a mode of existing within the incomprehensible sphere of God.

The image of Biblical judgment is a cosmic dimension of human destiny. Whether or not all will be saved, all are part of this future. Since all humans will die, and their earthly life will end, they should all be concerned with the new heaven and the new earth. Humankind does not live without heading towards an absolute meaning for life, and for the hope that this meaning will be realized. The meaningful significance of the future can be reached only by merging with God's will and realizing destiny here in the midst of present life conditions, since every understanding of the future is based on the

⁴⁰⁹ Answers Corporation, Biography: Hans Küng, , New York, NY, 2006, "*Hans Küng (1928-) Küng's doctoral dissertation was on Karl Barth's theory of justification and its relationship to traditional Roman Catholic understanding with the title of Justification: The Doctrine of Karl Barth and a Catholic Reflection. In his writing, Küng expressed his interest in the reconciliation of separated Christian churches. In his late years, Küng's center of attention is on researching on interreligious cooperation and the creation of a global ethic.*" <http://www.answers.com/topic/hans-k-ng-2>

⁴¹⁰ Küng, Hans, *Eternal Life: Life After Death As a Medical, Philosophical, and Theological Problem*, Doubleday Books, Camp Hill, PA, 1984, pg.140-143

⁴¹¹ La Due, William J., *The Trinity Guide to Eschatology*, The Continuum International, New York, NY, 1989, pg.71

message of the cross. Sustaining creation is a modified action of sustaining life for eternity. Loving what God loves, and wanting what He wants sows the seeds of salvation on earth with an ecological implication as well. "Küng insists, that we are confident that all of human life will not end in a void, and... God then will not merely be in everything, as he is now, but truly all in all ... transforming everything into himself because he gives to all a share in his eternal life in unrestricted, endless fullness."⁴¹² This endless fullness is a cosmic sustainability of all creation, because the future is a return to the original past. By fulfilling humanity's potential in the present sustainable life, humans will once again be a part of God's all in all existence. This leads to the question of how all this can be done; the answer can be found by looking in the subject matter of theological ethics.

3.5. THEOLOGICAL ETHICS

Christian ethics' main focus is on principles and actions resulting from faith. It is the central decisions about what to do and what not to do. Ethics is a compass, which helps and guides individuals in their quest for living a life according to the scriptures and as followers of Jesus Christ. In this regard, Barth's view on ethics is pre-developed by his Dogmatics, where he states that "*Dogmatics has the problem of ethics in view from the very first.*"⁴¹³ In his ethics, Barth is devoted to explaining the task of space, which agents occupy, and at the same time, he is devoted to giving low priority to character and analysis of insecurity. For Barth, "*moral problems are resolvable by correct theological description of moral space.*"⁴¹⁴ Also, Barth states that "*for an abstract doctrine of God has no place in the Christian realm, only a doctrine of God and*

⁴¹² Ibid. pg.72

⁴¹³ Barth, Karl, *Church Dogmatics*, Continuum International Publishing, London, England, 2009 III.4., pg.3

⁴¹⁴ Webster, John, *Barth's Ethics of Reconciliation*, Cambridge University, UK, 1995, pg.2

of man, a doctrine of the commerce and communion between God and man"⁴¹⁵ has a place. Critics, like Webster, argue that for Barth, ethics is a Christian ontology, described by human actions, which are controlled by the work of God in Christ, and are powered by the Holy Spirit. Therefore, this kind of ethics is not centered on humanity, or on morality; so consequently, it is a "*history of encounter between God as prime agent and themselves as those called to act in correspondence to the grace of God.*"⁴¹⁶ Critics write, that one of the most serious difficulties in the way of accepting Barth's view is the inadequate grasp of the fact that his work is a moral theology, and moreover, a moral ontology.⁴¹⁷ Specifically, the complexity lies in the extended role given deliberative reason in evaluating options and making decisions. According to Willis, in Barth's view, "*suggestion is clearly given that man is noetically involved from his side at least, in deciding what the command of God (and so God's will) is for a given situation. This appears, however, to conflict with the strictness with which the command was initially developed.*"⁴¹⁸

Bonhoeffer was also a Christ-centered theologian, who claimed that "*the one who is present in World, sacrament and community is in the centre of human existence, history and nature. It is part of his person that he stands in the centre.*"⁴¹⁹ His personal suffering and resistant activity altered his theology, which in turn impacted his Christology to becoming more and more centrally focused on Christ. This was also reflected in his 'Ethics', which proclaimed that the incarnation of Christ, by taking up the world into himself, established an ontological harmony of God's reality and the reality of

⁴¹⁵ Barth, Karl, *Evangelical Theology in the Nineteenth Century, in the Humanity of God*, Collins, London, UK, 1961, pg.11

⁴¹⁶ Ibid. pg.4

⁴¹⁷ Ibid. pg.2

⁴¹⁸ Willis, Robert E. *The Ethics of Karl Barth*, Leiden, Netherlands, 1971, pg.443

⁴¹⁹ Bonhoeffer, Dietrich, *Christ the Center*, Harper, New York, NY, 1966, pg.62

the world. Bonhoeffer maintains that *"in Jesus Christ, the reality of God entered into the reality of the world. The place where the answer is given, both to the question concerning the reality of God and to the question concerning the reality of the world, is designated solely and alone by the name of Jesus Christ, God and the world are comprised in this name. In Him, all things consist (Col. 1:17), henceforward one can speak neither of God nor of the world without speaking of Jesus Christ. All concepts of reality which do not take account of Him are abstractions."*⁴²⁰ This specific harmony of the two realities, the one belonging to God and the other to the world, means that this vision is a *"Christo-universal one, his is a christocratic understanding of all reality."*⁴²¹ Furthermore, in his actions, Bonhoeffer dismissed the so-called German obedience needed for being a good German Christian. At the same time, he also distinguished himself from Luther's doctrine of 'Two Kingdoms.' As a result of what he saw and witnessed in his personal life, he concluded that in condemning the state idolatry represented by Nazism, he was acting out of faithfulness to his tradition, rather than in opposition to it.⁴²² In essence, Bonhoeffer also claims that because Christ is in, and with human society, a man only finds self-fulfillment, indeed self-formation, in being with and for others; and being with and for others is the way in which a man is formed in Christ.⁴²³ In his 'Letters and papers from prison', Bonhoeffer summarizes his ethics briefly, but strongly; God in human form is not the 'man in himself', but *"the man for others, and therefore the Crucified. The man who lives out of the transcendent."*⁴²⁴ As

⁴²⁰ Bonhoeffer, Dietrich, *Ethics*, S.C.M. Press, London, UK, 1955, pg.192

⁴²¹ Rasmussen, Larry L., *Dietrich Bonhoeffer - Reality and Resistance*, Abingdon, Press, Nashville, TN, 1972, pg.16

⁴²² Elshtain, Jean Bethke, *Dietrich Bonhoeffer's Ethics*, First Things, New York, NY, 2000, (Article) <http://www.firstthings.com/article/2007/01/dietrich-bonhoefferethics-1949-4>

⁴²³ Rasmussen, Larry L., *Dietrich Bonhoeffer - Reality and Resistance*, Abingdon, Press, Nashville, TN, 1972, pg.19-20

⁴²⁴ Bonhoeffer, Dietrich, *Letters and Papers from Prison*, SCM Press, London, UK, 1953, pg.144

a consequence, all of humanity is humanity, only when it exists for others, and "the church is the church only when it exists for others."⁴²⁵ Bonhoeffer's statement of ethics, which is consistent with his way of life as a martyr for Christ, outlines the 'purpose of existence.'

The phrase 'for others' was extremely expanded by Küng, who in his book 'Global Responsibility', "*developed programmatically the idea that the religions of the world can make a contribution to the peace of humankind only if they reflect on those elements of an ethic which they already have in common: on a fundamental consensus on binding values, irrevocable standards and personal attitudes.*"⁴²⁶ Küng, as the leader on the idea of global ethics, proclaims that there will be no peace among nations without peace among the religions, no peace among the religions without dialogue between the religions, and no dialogue between the religions without investigation of the foundations of the religions. In 1993, Küng's 'Declaration towards a Global Ethic', which was written at the Institute for Ecumenical Research at the University of Tübingen, was endorsed by the Parliament of the World's Religions in Chicago. Here, representatives of all religions reached an agreement on principles for a global ethic, which took the following concrete form:

- Commitment to a culture of non-violence and respect for life.
- Commitment to a culture of solidarity and a just economic order.
- Commitment to a culture of tolerance and a life of truthfulness.
- Commitment to a culture of equal rights and partnership between men and women.⁴²⁷

⁴²⁵ Ibid.

⁴²⁶ Global Ethic Foundation, *History of the Foundation Page*, Tübingen, Germany, 2009, <http://www.weltethos.org/dat-english/01-history.htm>

⁴²⁷ Ibid.

Küng, in his global ethical view, simply states that *"without an ethics and self-restraint humankind would revert to then jungle."*⁴²⁸ For Christians, he simply waters it down saying, that *"for believers this ethic is rooted in belief in a first and last reality, but it can also be shared in by non-believers on the basic of humanity, so that it can embrace quite different social groups and political parties, nations and religions."*⁴²⁹ Here, there is no mention of Christ, of a personal relationship with the Creator, or of motivational goals collected from the Bible. Unfortunately, the idealism of dialog between Christianity and all other religions is a one-way street. Christians take the dialogue seriously, while other religions use the dialogue to gain time as part of their strategy in defeating Christianity and Western society. As Huntington envisions, *"conflict between civilizations will be the latest phase of the evolution of conflict in the modern world."*⁴³⁰ Since today's reality of history claims that *"international politics moves out of its Western phase, and its center-piece becomes the interaction between the West and non-Western civilizations and among non-Western civilizations."*⁴³¹ Huntington, the author of 100 review of values in different societies, says that the real challenge is trying to balance the 'West with the rest' since "the values that are most important in the West are least important worldwide."⁴³² Instead of trying to convert the Christian belief system into something more acceptable, its core values must be ethically represented in order to reflect the true God, the creator of the Universe in the crucified Christ.

⁴²⁸ Küng, Hans, *Global Ethic for Global Politics and Economics*, Oxford University, UK, 1997, pg.109

⁴²⁹ Ibid. pg.141

⁴³⁰ Huntington, Samuel, *The Clash of Civilizations?*, Olin Institute of Harvard University, Cambridge, MA, 1993, (Article)
<http://history.club.fatih.edu.tr/103%20Huntington%20Clash%20of%20Civilizations%20full%20text.htm>

⁴³¹ Ibid.

⁴³² Ibid.

In this context, sustainable ethics explains what it means to know that the Earth's resources are limited. This also presumes that all of humanity is part of one dependent unit that is also a part of the natural environment. Understanding that all of life will suffer, when the health of a natural ecosystem is damaged, is a basic step in this direction. Christian environmental ethics on the other hand, takes another step forward. It states that Christianity needs to be the guiding light of what is right and wrong by determining individual morals. In addition, Christians need to live by example so that the ethics of the entire society can be changed. This example is in God, incarnated in Christ, and shown to humanity in the image of God.

However, responsibility goes along with reflecting the image of God. Today, technology and modern lifestyles put the whole world at humanity's finger tips. As a result, humans pollute and waste resources irresponsibly. This approach does not glorify the Creator. In order to exercise authority over nature, as borrowers of everything, individuals need to recall – as an ethical guideline - the parable of the talents in Matthew 25. There, the steward who simply buried his talent out of fear, lost it all, and those, who multiplied it were rewarded. When Christ returns, His earth must be handed back to Him. To what degree humanity as a whole and every individual by him or herself is able to accomplish this, is the answer to Christian environmental ethics. This is the point where sustainability as a Christian response enters theology. The theology of sustainability is therefore, an ethical and eschatological answer to what has been given to humanity and what and how that given authority was handled. Revealing what kind of new heaven and new earth is coming is under God's sovereign authority. Humankind's responsibility is the ethical handover of what was credited to it.

CHAPTER 4.

THE FRAMEWORK FOR SUSTAINABILITY

4.1. INITIATION

At the beginning of the 21st century, climate change is already acknowledged as the major environmental problem facing the world. It has serious consequences for life as a whole, and it can lead the Earth and all living creatures to an end. It is catastrophic from any perspective. Therefore, humanity must challenge the course of this crisis in a responsible manner. Humanity must reconsider its lifestyle, energy consumption, environmental pollution, and every other aspect, which influences the direction of the current situation on this planet today. Humanity must stand up as together, as one unit to be able to successfully challenge the current trend.

In the process of facing this situation, Christianity has a serious and God-commanded responsibility towards this holistic circumstance. Christians must love the Creator, Almighty God, with their whole hearts. This love should also be extended to fellow brothers and sisters, and neighbors, with an obligation to care for all of creation with obedience, as part of worshipping Him, who is in Christ, and who is *"the image of the invisible God."*⁴³³ *"God was pleased to have all his fullness dwell in him, and through him to reconcile to himself all things, whether things on earth or things in heaven, by making peace through his blood, shed on the cross."*⁴³⁴ Since all of creation was created and sustained by Christ, it belongs to Him as His inheritance. For humans, it is obligatory to be vigilant in caring for creation. Consequently, *"Biblical stewardship of the earth should have been an evangelical theme long before the threat of climate*

⁴³³ Colossians 1:15

⁴³⁴ Colossians 1:19-20

change turned it into a matter of self-preservation."⁴³⁵ In addition, it is vital to see sustainability from the viewpoint of the future while looking backwards, within the context of eschatology and from the perspective of new creation.

How can these two approaches, one from the profane natural science and the other from Christian theology be formed into one resolution? The answer lies in the understanding of sustainability.

4.2. CHARACTERIZATION

4.2.1. SUSTAINABILITY IN MODERN TIMES

In modern times, the word 'sustainable' first appeared in 1290 as 'sustenir' meaning "hold up, endure."⁴³⁶ Interestingly, the phrase in a context of 'sustainable growth' was recorded only in 1965.⁴³⁷ The modern meaning of this word is "*to support, hold, or bear up from below; bear the weight of, as a structure, to supply with food, drink, and other necessities of life, or to keep up or keep going, as an action or process: to sustain a conversation.*"⁴³⁸ The Princeton University dictionary explains the word 'sustainability' as simply "*the property of being sustainable.*"⁴³⁹ This term became important in the academic field and within the global community, after it appeared in a United Nations Report explaining its meaning and context refocusing it towards a holistic view of future global activity, saying "*believing that sustainable*

⁴³⁵ Wright, Christopher J. H., *Whole Gospel, Whole Church, Whole World*, (Article) The Lausanne Movement, Lausanne, Switzerland, http://www.lausanne.org/global-conversation/whole-gospel-whole-church-whole-world.html#_ftn1 Accessed on 2-4-2010

⁴³⁶ Online Etymology Dictionary, Douglas Harper, 2001
<http://www.etymonline.com/index.php?search=sustainable&searchmode=none>

⁴³⁷ Ibid

⁴³⁸ Ask, US Multi-Source Dictionary, Oakland, CA, 2009, <http://dictionary.reference.com/browse/sustain>

⁴³⁹ Princeton University WordNet Services, Princeton, NJ, 2009,
<http://wordnetweb.princeton.edu/perl/webwn?s=sustainability&sub=Search+WordNet&o2=&o0=1&o7=&o5=&o1=1&o6=&o4=&o3=&h=>

development, which implies meeting the needs of the present without compromising the ability of future generations to meet their own needs, should become a central guiding principle."⁴⁴⁰

Looking at sustainability from an academic perspective, the area seems to ask a question more than it seems to provide an answer. This is because it deals with many unknown components, unanswered questions in an uncertain world, and with limited resources about the future. However, it is a very helpful "*abstract concept that can be infused into any subject, a secondary lens through which to view principles.*"⁴⁴¹ As the world moves faster and faster into the 'information age' and becomes more connected than ever before, concerns about the future of the world, and questions of sustainability become increasingly imperative in today's society. There is a need for conserving and maintaining key ecological functions, and engaging and encouraging corporations and societies for an environmentally friendly and responsible behavior in the micro and macro level as well. Thus, sustainable efforts are those that eventually inspire consciousness of how human actions influence society and the outlook on the world.

Finally, from a business standpoint, "*sustainability is a natural extension of other organizational change.*"⁴⁴² It is important to see it that way, because sustainability is at the highest level of social expectations. At the beginning of the 20th century, while capitalism was at its strongest regarding colonialism and monopoly, governments began to regulate and oversee work by establishing policies over trade and business. In the early 1900s, laws and regulations began forming, around 1970

⁴⁴⁰ United Nations, *General Assembly, 42/187. Report of the World Commission on Environment and Development*, New York, December 11, 1987. <http://www.un.org/documents/ga/res/42/ares42-187.htm>

⁴⁴¹ Ibid.

⁴⁴² Hitchcock, Darcy, Willard, Marcha, *The Business Guide to Sustainability*, Earthscan Publishing, London, UK, 2006, pg. 11

employee rights developed, and in the 1980s customer began establishing expectations of quality. After the Exxon Valdez accident in 1989, which was one of the most publicized and studied environmental tragedies in history,⁴⁴³ environmental protection came into mainstream attention. At the beginning of the 21st century, mainly because of the Internet and society's newly developed interest, corporate social responsibility started growing swiftly out of a recognized need for complying with the limits of nature. Today, major corporations worldwide are already competing to be in the top "Global100"⁴⁴⁴ list.

Since sustainability is at the highest level of social expectations, it is vital to see its development through the entire process. In this chart, this natural development of social expectations is shown. (Image⁴⁴⁵)



In the context of the 21st century, sustainability represents a balanced state where people live by environmentally sound and socially just principals in a way, which does not compromise the ability of present and future generations to do the

⁴⁴³ Exxon Valdez Oil Spill Trustee Council, Anchorage, AK 2008, <http://www.evostc.state.ak.us/>

⁴⁴⁴ Global100, *Most Sustainable Corporations in the World*, Toronto, ON, Canada, Accessed on 2-5-2010 http://www.global100.org/index.php?option=com_content&view=article&id=53&Itemid=66&sort=rank

⁴⁴⁵ Hitchcock, Darcy, Willard, Marcha, *The Business Guide to Sustainability*, Earthscan Publishing, London, UK, 2006, pg. 12

same. In practical terms, this is a way of life, which attempts to merge development and preservation of the environment in a mutually beneficial way for the common good of present and future generations alike. This means, discovering, adopting, implementing, establishing, and adjusting policies, strategies, technology, and institutions, such as the government and the church to practice a just transition that moves society toward the goals stated above.

4.2.2. SUSTAINABILITY IN BUSINESS

Sustainability in the business world, from where the definition originated, focuses on the growing awareness, that neither nations, countries, corporations, nor the Church can grow in any way without considering the well-being of the future. In other words, sustainability is the approach to all prosperity, including spiritual welfare, where organizations and societies live off of interest, instead of depending on their capital. In this case, capital means natural resources in the environment, human and social assets in societies, and spiritual, Godly values in Churches. Leading corporations, like General Electric, PG&E, Nokia, Siemens, or Unilever, are all expressing this view and trying to be examples for others to follow. Moreover, all of these efforts are not just for charity. A new study described by the Harvard Business Review has found that corporate sustainability is a 'key driver' of innovation and it also generates real financial rewards rather than extra costs. According to this study, *"by treating sustainability as a goal today, early movers will develop competencies that rivals will be hard-pressed to match."*⁴⁴⁶

⁴⁴⁶ Nidomolu, Ram, Prahalad, C.K., Rangaswami, M.R., *Why Sustainability is the Key Driver of Innovation*, Harvard Business Review, Boston, MA, September 1, 2009, pg.4.
<http://graphics8.nytimes.com/images/blogs/greeninc/harvardstudy.pdf>

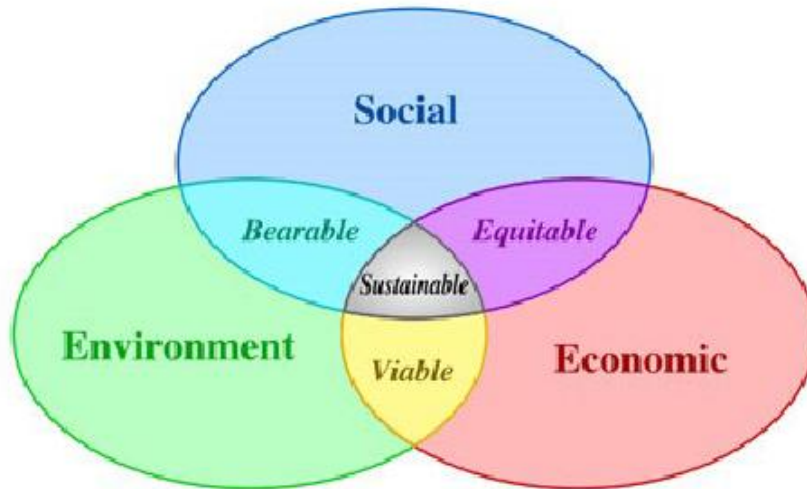
The main characteristic of sustainability is interdependence, in several forms.⁴⁴⁷ According to Savitz, "*sustainability also respects the interdependence of differing aspects of human existence.*"⁴⁴⁸ It is also important to recognize, that interdependence extends to social, human, and religious aspects as well. By acknowledging the needs of others, community groups, educational, public and religious institutions, help to reinforce relationships that make societies stronger. Also, economic and financial success requires not just a profit orientation, but the consideration of moral, spiritual, family, and human values in every decision. The concept of sustainability is future-oriented by considering the needs of the current situation, but sustaining the needs of the arising future generations as well. The focus of sustainability suggests that "*businesses need to measure their success not only by the traditional bottom line of financial performance... but also by their impact on the broader economy, the environment, and on the society in which they operate.*"⁴⁴⁹ John Elkington, the world authority on corporate and social responsibility, developed a powerful way to demonstrate how organizations should balance their activities between economic, environmental, and social aspects, which are together called the 'Triple Bottom Line'. He articulated this concept in his 1997 book, 'Cannibals with Forks: the Triple Bottom Line of 21st Century Business'. A triple bottom line (TBL) represents a balanced approach toward creating a sustainable business. (Image⁴⁵⁰)

⁴⁴⁷ Savitz, Andrew W., *The Triple Bottom Line*, Jossey-Bass A Wiley Imprint, San Francisco, CA, 2006, pg. x-xi

⁴⁴⁸ Ibid.

⁴⁴⁹ Ibid

⁴⁵⁰ Indiana State University, *Facets of Sustainability*, Terre Haute, IN, 2008, <http://www1.indstate.edu/facilities/sustainability>



This chart is actually a balanced scorecard, which is used as an expanded spectrum of values and criteria measuring the organizational and societal success by extending the financial performance to the fields of ecology and sociology. The main idea of TBL is that it determines how a company is responsible – not to the shareholders, as it is usually the case – but to the ‘stakeholders’, as Elkington frames it. The term ‘stakeholder’ refers to anyone who is even indirectly affected by the actions of the firm. Corporations are responsible for their stakeholders’ interests, despite shareholder profit. The TBL can be described in an oversimplified chart that measures the impact of an organization’s activities on the world. (Image⁴⁵¹)

⁴⁵¹ Savitz, Andrew W., *The Triple Bottom Line*, Jossey-Bass A Wiley Imprint, San Francisco, CA, 2006, pg. xiii

Figure I.1 The Triple Bottom Line

	<i>Economic</i>	<i>Environmental</i>	<i>Social</i>
Typical Measures	Sales, profits, ROI	Air quality	Labor practices
	Taxes paid	Water quality	Community impacts
	Monetary flows	Energy usage	Human rights
	Jobs created	Waste produced	Product responsibility
	TOTAL	TOTAL	TOTAL

From a corporate standpoint, sustainability cannot be mistaken for a positive corporate approach, or as a kind of business ethic. Now, in the beginning of the 21st century, sustainability is an essential element, a fundamental principle of future-oriented management. Savits explains that these days, businesses are formed by investors, politicians, human rights advocates, lawyers, and environmentalists, and these formers are equipped not just with the traditional media, but with the global powerhouse, called the Internet, as well. As a result, organizations, businesses, and corporations are forced to respond to social, economic, and environmental challenges all around the globe. Therefore, *"if sustainability is more important today than ever before, it's probably because corporations have, over the past decades, entered what we call the Age of Accountability."*⁴⁵²

⁴⁵² Ibid pg. xiv

4.2.3. SUSTAINABILITY AND EVANGELISM IN THE CHURCH

According to Kittel, the Greek word 'euangelízomai' means "to proclaim good news."⁴⁵³ In the Old Testament, the basic sense was to deliver a communication, a message, like "a worthy man like you must be bringing good news."⁴⁵⁴ Kittel highlights, that this term is in particular noteworthy, where the carrier of the message, the messenger, comes to Zion to "proclaim the worldwide victory of God"⁴⁵⁵ saying, "how beautiful on the mountains are the feet of those who bring good news, who proclaim peace, who bring good tidings, who proclaim salvation, who say to Zion, 'Your God reigns!'"⁴⁵⁶ By declaring the message, the messenger speaks not just his human words, but also the words of God, which are communicated through him. In the New Testament, beside others like John the Baptist, angels, or the host of witnesses, it is Jesus who "brings the good news of the expected last time."⁴⁵⁷ Kittel explains that with Jesus' whole life, the good news of God's Kingdom is proclaimed, as the signs of the messianic age. That Gospel in a nutshell is this: "for God so loved the world, that He gave his only-begotten Son, that whoever believes in Him should not perish, but have everlasting life."⁴⁵⁸ After Jesus was resurrected from the dead, He made five statements about evangelization. He said:

⁴⁵³ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.267

⁴⁵⁴ 1. Kings 1:42

⁴⁵⁵ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.267

⁴⁵⁶ Isaiah 52:7

⁴⁵⁷ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.268

⁴⁵⁸ John 3:16

A/ *"All authority in heaven and on earth has been given to me. Therefore go and make disciples of all nations, baptizing them in the name of the Father and of the Son and of the Holy Spirit."*⁴⁵⁹

B/ *"Go into all the world and preach the good news to all creation."*⁴⁶⁰

C/ *"Repentance and forgiveness of sins will be preached in his name to all nations, beginning at Jerusalem."*⁴⁶¹

D/ *"Peace be with you! As the Father has sent me, I am sending you."*⁴⁶²

E/ *"You will receive power when the Holy Spirit comes on you; and you will be my witnesses in Jerusalem, and in all Judea and Samaria, and to the ends of the earth."*⁴⁶³

For Christians, the theological rationale for making disciples is the obligation based on God's love. Christians must go into the world and evangelize because the love of Christ requires them to do so. Paul describes this by saying, *"I am compelled to preach. Woe to me if I do not preach the gospel."*⁴⁶⁴ It is precisely this obligation, the love of Christ, which leaves Christians no choice but to engage in the ministry of reconciliation and evangelization.

Today, to evangelize means to offer 'Good News' or a 'welcome message'. Unfortunately, for many people in this world, Christian or non-Christian alike, evangelism is neither welcomed nor acceptable. In the context of this increasingly pluralistic culture, the very idea of evangelizing is routinely associated with intolerance or some kind of belief of superiority over others. Evangelism for many Christians means

⁴⁵⁹ Matthew 28:18-19

⁴⁶⁰ Mark 16:15

⁴⁶¹ Luke 24:47

⁴⁶² John 20:21

⁴⁶³ Acts 1:8

⁴⁶⁴ 1 Corinthians 9:16

a one-sided attempt to change other people's actions and life, and most of the time this results in failure. In some nations, the expansion of Western power, ideas, way of life, consumer mentality, and ideas of justice is simply not what people want to follow. In the United States, a disgraceful history of forced conversions, dishonest television preachers, and religious intolerance definitely does not electrify the unchurched for God. Evangelism, or the 'E' word, has become a dirty word – an embarrassment in front of the world.

Then, what is evangelism? Bosch describes evangelism as part of a broader perspective, saying that "*mission includes evangelism as one of its essential dimensions. Evangelism is the proclamation of salvation in Christ to those who do not believe in him, calling them to repentance and conversion.*"⁴⁶⁵ Therefore, mission becomes a much greater body by incorporating not just evangelism, but also social and medical care to help those who are suffering or are in need. In this context, the three basic target groups for 'evangelism and mission' have been identified: "*secularized peoples, resistant peoples and responsive peoples.*"⁴⁶⁶ There are two more categories which can be added to this group: neutrals and seekers. Neutral are those who are distressed by life and are not motivated, closed or open to any direction. Seekers are those who are privately searching for answers and spiritual experience in a broader sense. Newbigin highlights, that within the pluralistic society, evangelism is no longer a simple call back to the spiritual roots; it is a "*speak of dialogue.*"⁴⁶⁷

In the context of the Church, this concept can be used in a very spiritual way. Almost all mainline denominations believe that if they would have more people who attend and are involved, more money to work with, and more space or facilities,

⁴⁶⁵ Bosch, David J., *Transforming Mission*, Orbis Books, Maryknoll, N.Y. 1991, pg.10

⁴⁶⁶ Forum of Bible Agencies, *Living Word for a Dying World - Bringing The Bible Back On To Centre Stage*, (Common Commitment) De Bron, Holland, April 20-25, 1994

⁴⁶⁷ Newbigin, Leslie, *The Gospel in a Pluralist Society*, Eerdmans, Grand Rapids, MI, 1989, pg.4.

then they would be able to do more. This stresses, that a church's responsibility must be to people rather than to the church organization. People, in this case, refer to those, who are subject directly or indirectly, to the actions of the local church. Consequently, the local church must engage in a dialogue with them. These people are not primarily the members of a church organization. In parallel with the stakeholder theory⁴⁶⁸, the local church entity should be used as a vehicle for representing, coordinating, and living for the interest of God and His Kingdom, instead of maximizing local church proceeds, like money, resources, ministry, activities, and anything else that has a primary focus on satisfying those, who are officially part of the organization. The Church does not belong to humans, but rather to God, as the following statements reveal.

The Catechism of the Catholic Church declares:

"The word 'Church' (Latin ecclesia, from the Greek ek-ka-lein, to 'call out of') means convocation or an assembly. It designates the assemblies of the people, usually for a religious purpose. Ekklesia is used frequently in the Greek Old Testament for the assembly of the Chosen People before God, above all for their assembly on Mount Sinai where Israel received the Law and was established by God as his holy people. By calling itself 'Church,' the first community of Christian believers recognized itself as heir to that assembly. In the Church, God is "calling together" his people from all the ends of the earth. The equivalent Greek term Kyriake, from which the English word Church and the German Kirche are derived, means "what belongs to the Lord."⁴⁶⁹

The Augsburg Confession defines the Church:

"Also they teach that one holy Church is to continue forever. The Church is the congregation of saints, in which the Gospel is rightly taught and the Sacraments are rightly administered. And to the true unity of the Church it is enough to agree concerning the doctrine of the Gospel and the administration of the Sacraments. Nor is it necessary that human traditions, that is, rites or ceremonies, instituted by men, should be everywhere alike."⁴⁷⁰ As Paul says; "There is one body and one Spirit, just

⁴⁶⁸ Freeman, Edward R, *Stakeholder Theory (1984)*, Joint Summary by the Appalachian State University, Boone, NC, and York University, Toronto, Canada, October 27, 2006, <http://www.istheory.yorku.ca/stakeholdertheory.htm>

⁴⁶⁹ Catechism Of The Catholic Church, #751, Holy See, Vatican Archive, 1993, http://www.vatican.va/archive/ENG0015/___P27.HTM

⁴⁷⁰ The Book of Concord: The Confessions of the Lutheran Church, *Augsburg Confession*, AC VII 1-4, 1530, Minneapolis, MN, <http://www.bookofconcord.org/augsburgconfession.php>

as you were called to the one hope that belongs to your call, one Lord, one faith, one baptism."⁴⁷¹

The Heidelberg Catechism summarizes:

"The Son of God (a) from the beginning to the end of the world, (b) gathers, defends, and preserves (c) to himself by his Spirit and word, (d) out of the whole human race, (e) a church chosen to everlasting life, (f) agreeing in true faith; (g) and that I am and forever shall remain, (h) a living member thereof."⁴⁷² According to these three major Catechisms, the Catholic Church states, that *God is "calling together his people from all the ends of the earth"*. The Lutherans teach, that *"one holy Christian Church will be and remain forever."* The Reformed Church also believes, as God declares to Peter, that *"I will build my church, and the gates of Hades will not overcome it."*⁴⁷³

All three confessions simultaneously express the continuation and edification of the Church, for future purposes of sustainability. That means, that if the Church serves only the needs of today, Her life is based on Her own efforts, and thus, God, who is actually in charge, will be disregarded. Therefore, the stewardship of the Church cannot be anything else than the contrary, which is assisting God in His effort to carry on His Church's life on this Earth. Consequently, focusing on the present tasks, without considering the future, is a failure to follow God's requirements. Paul explains the sustainable power of Jesus, saying: *"The Son is the radiance of God's glory and the exact representation of his being, sustaining all things by his powerful word."*⁴⁷⁴ God's effort is to sustain this Universe, and all of His creation until the time, which God will decide on His own, will come. Until then, Christianity's priority must be the same as God's; this priority is to keep and sustain all things for future purposes and for the future generations to come.

⁴⁷¹ Ephesians 4:5-6

⁴⁷² The Heidelberg Catechism, Question 54, The Christian Classics Ethereal Library, Grand Rapids, MI, 2009, <http://www.reformed.org>,

⁴⁷³ Matthew 16:18b

⁴⁷⁴ Hebrew 1:3a

For these reasons, mission, and evangelism could be a big factor in helping all of humanity to understand the reality and importance of climate change. Faith has the power to encourage people in ways no other factor can. It also has a great benefit over many environmental movements and 'tree hugger' ideals, because faith works itself out in families and communities. Believers aren't usually green-oriented or environmentally friendly people,⁴⁷⁵ but they come attached to organizations, networks and interest groups. Taking climate change seriously is up to the world's major religions. For Christians, it is a never-returning opportunity to lead and to be an example for supporting this planet within the communities around the world. This by itself would change the world alone.

Naturally, the most complex thing about the manifestation of a responsible lifestyle change is that people don't want to do things alone. Nobody wants to recycle, save on gas, and eat eco-friendly food, until the next-door neighbor is doing the same. Faith-based communities can do this, of course not alone, but together, so this is a great opportunity. Faith and religion could be a powerful instrument for change. However, the call is the same: unite the created world once again into harmony and understanding of each other, according to the Creator, according to God's original purpose.

4.3. SUSTAINABILITY IN BIBLICAL THEOLOGY

It appears that the basic idea of modern sustainability, which is principally based on a present time maintenance by the current generation for the benefit of the future generations, is actually in the Bible. Since God created this universe, the Earth, and life, this means that God Himself existed before all else. He created His creation for

⁴⁷⁵ Barna Group, *Evangelicals Go "Green" with Caution*, September 22, 2008, Ventura, CA, <http://www.barna.org/barna-update/article/13-culture/23-evangelicals-go-qgreenq-with-caution>
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His purpose based on His own free will. The very first verse from the Bible says, that *"In the beginning God created the heavens and the earth"*⁴⁷⁶ and the very first verse from John declares, that *"In the beginning was the Word, and the Word was with God, and the Word was God. He was with God in the beginning. Through him all things were made; without him nothing was made that has been made."*⁴⁷⁷ These two verses are in full harmony, reflecting each other's truth that God owns everything and there is absolutely nothing that was made without Him. God is the sovereign Lord over all of creation, including the Earth, humanity, and all life, because *"the earth is the LORD's, and everything in it, the world, and all who live in it."*⁴⁷⁸ This creation is also a manifestation in God, since God states about His own work that *"it was very good."*⁴⁷⁹ This affirmation means that it is God who is glorified and praised in His creation, so therefore, His work reflects on His character, just as the Psalmist says: *"the heavens declare the glory of God; the skies proclaim the work of his hands."*⁴⁸⁰ In the New Testament it is Paul, who replicates this statement: *"for since the creation of the world God's invisible qualities—his eternal power and divine nature—have been clearly seen, being understood from what has been made, so that men are without excuse."*⁴⁸¹ Therefore, the created world, and everything in it is good, beautiful, perfect and non re-makeable. Its status, beauty, and existence are fully independent of humankind, and it was made perfect without humanity.

God cares for His creation and God also wants humanity to care for His creation as well. In the beginning of the Bible, *"the LORD God took the man and put*

⁴⁷⁶ Genesis 1:1

⁴⁷⁷ John 1:1

⁴⁷⁸ Psalm 24:1

⁴⁷⁹ Genesis 1:31b

⁴⁸⁰ Psalm 19:1

⁴⁸¹ Romans 1:20

him in the Garden of Eden to work it and take care of it."⁴⁸² In 1563, Calvin wrote about this passage: "let him who possesses a field, so partake of its yearly fruits, that he may not suffer the ground to be injured by his negligence; but let him endeavor to hand it down to posterity as he received it, or even better cultivated. Let him so feed on its fruits that he neither dissipates it by luxury, nor permits to be married or ruined by neglect. Moreover, that this economy, and this diligence, with respect to those good things which God has given us to enjoy, may flourish among us; let everyone regard himself as the steward of God in all things which he possesses. Then he will neither conduct himself dissolutely, nor corrupt by abuse those things which God requires to be preserved."⁴⁸³ Calvin's hope for stewardship considering the environment did not come true, because humankind is sinful and filled with evil. Nothing has changed, and in this situation, Nelson's observation is quite serious saying, that even "environmentalism today often portrays a similar corrupt and sinful world, brought to this fallen state in the modern era through the misguided attempt to remake the world in the name of progress."⁴⁸⁴ This is a clear judgment that involves the Church since She has done very little in order to truly support environmentalism, and teach its members the importance of saving the planet on a daily basis.

The responsibility of Christians is not to worship nature, but as guardians or stewards, to take care of it. "We are allowed to use it as trustees, not as tyrants and we certainly do not have any license to trash the place, quite the contrary, since God cares for all of His creation,"⁴⁸⁵ humankind must care for it as well. In Psalm 65, the

⁴⁸² Genesis 2:15

⁴⁸³ Calvin, John, *Commentary on the Book of Genesis - Volume 1* (calcom01.viii) Christian Classics Ethereal Library, Calvin College, Gr. Rapids, MI <http://www.ccel.org>

⁴⁸⁴ Nelson, Robert H., *Environmental Calvinism: The Judeo-Christian Roots of Eco-Theology*, edited by Meiners, Roger E. & Yandle, Bruce, Taking the Environment Seriously, Rowman & Littlefield, Lanham, MD, 1995, pg.234

⁴⁸⁵ Bliese, John, *The Greening of Conservative America*, Westview Press, Boulder CO, 2002, pg. 15

word describes God, who is deeply involved in caring for His creation: *"You care for the land and water it; you enrich it abundantly. The streams of God are filled with water to provide the people with grain, for so you have ordained it."*⁴⁸⁶ It continues with a long list of explaining this care in detail; the care is not merely a maintenance effort but a caring one. This is God's goodness, His responsible approach to all what is His. God's active presence in His creation is independent of humanity, and it solely rests upon the Creator.

According to George W. Fischer, the Old Testament *"suggests that sustainability must be grounded in social and ecological justice and that just ways of living can emerge from a deep sense of the ways in which nature and all of humanity are interdependent."*⁴⁸⁷ Secondly, Marshall J. Berger states that *"the Bible sees sustainability primarily as a religious issue."*⁴⁸⁸ However it is also evident, that Old Testament sustainability is also a choice of environmental and economic consideration, as Abram and Lot made a decision, because *"the land could not support them while they stayed together, for their possessions were so great that they were not able to stay together."*⁴⁸⁹ He underlines this by citing the idea of preservation of the present and passing on value to the future generation; this is found in the Bible. Most importantly, from a theological standpoint, passing on Jewish heritage is the commanding force in the Old Testament, which is primarily based on God's blessings, His holy name, and His worship. All of these traditions need to be passed on to the next generation. These phrases appear frequently in the Old Testament. For example: *"I will sing of the LORD's great love forever; with my mouth I will make your faithfulness known through all*

⁴⁸⁶ Psalm 65:9

⁴⁸⁷ Fisher, George W., Gretchen van Utt, *Science, Religious Naturalism, and Biblical Theology: Ground for the Emergence of Sustainable Living* – (Article), Wiley InterScience, Volume 42, Issue 4, Malden, MA, November, 2007 pages 929 – 943

⁴⁸⁸ Berger, Marchall J., *Public Policy and Social Issues*, Greenwood Publishing, Santa Barbara, CA, 2003 pg. 123

⁴⁸⁹ Genesis 13:6

*generations. I will declare that your love stands firm forever, that you established your faithfulness in heaven itself. You said, 'I have made a covenant with my chosen one, I have sworn to David my servant, I will establish your line forever and make your throne firm through all generations'.*⁴⁹⁰; *"I will perpetuate your memory through all generations; therefore the nations will praise you forever and ever."*⁴⁹¹; *"Even when I am old and gray, do not forsake me, O God, till I declare your power to the next generation, your might to all who are to come."*⁴⁹² All of these examples explain and underline the very reason for Israel's existence, which was to communicate the knowledge and blessings of God Almighty that has been entrusted to them from God with the purpose of being passed on to future generations. This custom, which was based upon God's call, suggests that the passing on God's blessings to future generations in itself can be described as relational sustainability. This however, is more than just simply keeping something going from generation to generation. That kind of Old Testament sustainability suggests, that the action of passing down something was first and foremost about God Himself; this means that it was focused on loving, obeying, and following Him, His teachings, His law, and His sense of togetherness as a chosen nation. That is what was meant to be passed down from generation to generation. Therefore, Old Testament sustainability is a connection and an interaction between individuals and generations as well, as *"the biblical concept of sustainability was relational,"*⁴⁹³ as Spencer suggests.

In addition, Isaiah chapters 40-66 are a central part of understanding Biblical sustainability. Spencer comments about these chapters that *"imagine the*

⁴⁹⁰ Psalm 89:1-4

⁴⁹¹ Psalm 45:17

⁴⁹² Psalm 71:18

⁴⁹³ Spencer, Nick, *From Sustainability to Fruitfulness*, (Article), June, 2006, Jubilee Centre, Christian Social Reform Organization, Cambridge, NZ, <http://www.jubilee-centre.org/document.php?id=151>

*deliverance and restoration of God's people, the vindication of God's rule and the inauguration of a renewed order, that reflects God's plan for creation; they present a vision of 'sustainable living' of life as it is meant to be.*⁴⁹⁴ Here, God projects that He will create a "new heaven and new earth."⁴⁹⁵ Calvin's interpretation talks about a remarkable change of affairs, meaning, that God has "both the inclination and the power not only to restore his Church, but to restore it in such a manner that it shall appear to gain new life and to dwell in a new world."⁴⁹⁶ Kittel points to Christ as the actual rock, the bridge if you will, because it is "the same Christ (who) acts in history in both the old covenant and the new to sustain his people."⁴⁹⁷ Therefore, it is fair to consider that sustainability destined Israel to protect its relationship with God for future generations to come. In this context, the idea of Biblical sustainability is not a fictional idea, but rather a factor in the Scripture, through which humanity should see and understand the Creator and His will for all of creation.

In the New Testament, the same idea of sustainability is also found in a different context. By examining the Scriptures, it is unmistakable, that the greatest command to follow is God's love.⁴⁹⁸ That love is apparent in Jesus' words, when He says: "As the Father has loved me, so have I loved you. Now remain in my love. If you obey my commands, you will remain in my love, just as I have obeyed my Father's commands and remain in his love. I have told you this so that my joy may be in you and that your joy may be complete. My command is this: Love each other as I have

⁴⁹⁴ Spencer, Nick, & White, Robert, *Christianity, Climate Change and Sustainable Living*, Society for Promoting Christian Knowledge, London, GB, 2007, pg.101

⁴⁹⁵ Isaiah 65:17

⁴⁹⁶ Calvin, John, *Commentaries on Isaiah Volume 4*, The Christian Classics Ethereal Library, Grand Rapids, MI, 2009, <http://www.ccel.org/ccel/calvin/calcom16.xviii.i.html>

⁴⁹⁷ Kittel, Gerhard, *Theological Dictionary of the New Testament, Volume 1*, William B. Eerdmans, Grand Rapids, MI, 1985, pg.834

⁴⁹⁸ 1. Corinthians 13:13

loved you."⁴⁹⁹ This love suggests that living this life based on God's love, is a consequence of loving the Father, and all members of the human race, regardless of any discrimination based on ethnicity, skin color, gender, or social status. This consequence is the basic foundation for a common effort of sustainable life. Therefore, love is a gift to the people for which they have to be grateful. Love will guide them in a way that they can make the most of their lives. *"This is where the biggest gap between modern and biblical concepts of sustainability appears."*⁵⁰⁰ The Biblical concept was based on faith and hope. *"Now faith is being sure of what we hope for and certain of what we do not see."*⁵⁰¹ Faith helps envision all that the course of history, life, and salvation are bringing to humanity. Hope, Spencer says, is a state of being, which helps to understand that all things are bound together for the better, and that the practical and generous God has equipped His creation and all people with all of the necessary resources for life. We must be able to let His work be a part of the future.

This created world, according to the Bible, is in the hands of Jesus Christ, since He is the one who holds everything together, who sustains it on a daily operational basis, just like a manager who carries out the owner's will. *"The Son is the radiance of God's glory and the exact representation of his being, sustaining all things by his powerful word. After he had provided purification for sins, he sat down at the right hand of the Majesty in heaven."*⁵⁰² This verse states that everything is in Jesus and that without Him everything falls apart and is in chaos, because He is the one who holds all things together. This is also evident in Colossians: *"For by him all things were created: things in heaven and on earth, visible and invisible, whether thrones or powers or rulers*

⁴⁹⁹ John 15:9-12

⁵⁰⁰ Spencer, Nick, *From Sustainability to Fruitfulness*, (Article), June, 2006, Jubilee Centre, Christian Social Reform Organization, Cambridge, NZ, <http://www.jubilee-centre.org/document.php?id=151>

⁵⁰¹ Hebrews 11:1

⁵⁰² Hebrews 1:3

or authorities; all things were created by him and for him. He is before all things, and in him all things hold together."⁵⁰³

Since everything is in Jesus, and everything falls apart without Jesus, there is only one way in which humans can respond, which is by worshipping and praising the Creator. From an environmental perspective, as Christians worship God, they also care for the rest of creation by allowing it to give glory to Him, which is what He intended. This intention does not replace salvation; however, it realizes and appreciates the possibility of communicating an understanding from a creature's standpoint towards God. This understanding is a realization of how precious this world is for God; therefore, it must be as important to humankind as it is to God. If God's attitude indicates how important this creation is for Him, humans' attitude cannot be different from His if they worship Him since *"true worshipers will worship the Father in the Spirit and in truth, for they are the kind of worshipers the Father seeks."*⁵⁰⁴ Therefore, in order to express love for Jesus Christ, humankind has to care for the things He has cared for, created, and blessed. If nothing else, this sole and one motivation must be sufficient enough for Christianity to take responsibility for the whole Earth.

In a historical context, it is essential to recognize that Jesus was a Jew and lived in a rural area, which was transformed by the domestication of both the land and of animals, notably sheep. In Jesus' time, there was a common understanding of the need to be stewards of the Earth, and this was especially important for successful long-term agricultural productivity. Locating Jesus in this context is crucial for understanding the environmental heritage of that time. *"The available archaeological and fossil evidence indicates that the ancient move from nomadic hunter-gathering to settled agricultural society was the occasion of the first large-scale permanent human*

⁵⁰³ Colossians 1:16-17

⁵⁰⁴ John 4:23b

*impact on the natural environment... The transition of semi-nomadic tribes into settled pastoral societies of village and town dwellers is traced in the Bible...*⁵⁰⁵ This transition can also be located in the Old Testament, where God said to Moses on Mount Sinai, *"when you enter the land I am going to give you, the land itself must observe a sabbath to the LORD."*⁵⁰⁶ God clearly speaks about this new lifestyle and indicates how the people should care for the land and observe the *"sabbath of rest."*⁵⁰⁷ Because Jesus was a Jew and He was part of the daily life of the people of Judea, presumably, He lived His life based on this profound ecological ethics founded on the Old Testament requirements. Still, there is no direct evidence for a sufficient, environmental ethic in the New Testament about Jesus' life. *"No amount of selective quoting of the Bible can make for a third great commandment: Christians are simply not commanded to love nature as they are to love God and their neighbors."*⁵⁰⁸

People during Biblical times had great respect for animals, since they experienced the limitations of food and water. There was a deep relationship between individuals and the land as well as the cultural inheritance. Traditions were all part of Jesus' life naturally, because He was also one man among all. However, Jesus' justification with the fig tree is controversial. *"Seeing a fig tree by the road, he went up to it but found nothing on it except leaves. Then he said to it, 'May you never bear fruit again!' Immediately the tree withered."*⁵⁰⁹ This is an often misunderstood example in the search for evidence of Jesus' environmental view. This is one of the reasons why many Christians turned towards the Old Testament to look for guidance, and see Jesus

⁵⁰⁵ Northcott, Michael, *The Environment and Christian Ethics*, pg. 44, Cambridge University Press, 1996, Cambridge, U.K.

⁵⁰⁶ Leviticus 25:2

⁵⁰⁷ Leviticus 25:4

⁵⁰⁸ Fowler, Robert B., *The Greening of Protestant Thought*, University of North Carolina Press, 1995, Chapel Hill, NC, pg. 38

⁵⁰⁹ Matthew 21:19

as a person who lived His natural life based on the natural environmental understanding of His days. *"On the basis of both historical research and reasonable conjecture, therefore, we must assume that Jesus personally lived a profound ecological ethic, even though it was kept in the background in the context of Jesus' particular historical situation. If we did nothing else but retrieve the ecological ethic by which Jesus lived and adapt it to our own situation, we could make a significant contribution to the solution of the environmental crisis."*⁵¹⁰

Conceivably, the Biblical concept of sustainability sees the Creator as the center of the world. The ultimate relationship with God is made possible by loving Him and obeying His commands. This vision offers a respectable way by summarizing the Christian way of life. Bacon describes this process of becoming a disciple: *"no man should think of being Christ's disciple, unless it be his aim and aspiration to become one of those disciples in whom the word of Christ brings forth fruit to eternal life."*⁵¹¹ This kind of approach requires careful stewardship of all God-given resources. Obeying the commandments in a committed and disciplined way can fulfill it. This New Testament explanation of sustainability is a response of obedient stewardship that allows for others to enjoy the same process over and over again, from generation to generation.

The Old Testament and New Testament approaches suggest that Biblical sustainability is an exclusively modern idea. It was born on day one, and with a judgment, it will end on the last day of this Creation, as it is cited in Revelation: *"the nations were angry; and your wrath has come. The time has come for judging the dead, and for rewarding your servants the prophets and your saints and those who reverence*

⁵¹⁰ DeWitt, Calvin B., *The Environment and the Christian: What Can We Learn From the New Testament?* with contribution by Vernon Visick, Creation's Care and Keeping in the Life of Jesus, Baker Book House, Grand Rapids, MI, 1991, pg.98

⁵¹¹ Bacon, Leonard, *Christian Self-Culture*, Andrew Elliot, Edinburgh, GB, 1864, pg.239

your name, both small and great— and for destroying those who destroy the earth."⁵¹²

Biblical sustainability however, needs to be extended to all people because stewardship is also an obligation of future generations to come. People in Biblical times could not have predicted the course of the Earth as it is seen today, with all of the technological developments and the threats against humankind's future. It is clear, however, that through technology, humanity has been given the potential to improve the quality of life. On the other hand, "*Biblical tradition is also realistic about the abuse of power.*"⁵¹³ Conversely, Christianity must have the obligation to combine and convert the Biblical teachings of generational and stewardship-based sustainability for the benefit of all people. This leads to a sustainable future, where the emphasis is on obeying the moral commands of the Creator and finding the God, whose second coming in Jesus Christ is near.

4.4. EFFECTIVE SUSTAINABLE LIVING

4.4.1. LIVING TOGETHER WITH FELLOW CREATURES

Humankind's well-being is directly connected to the environment. In Genesis, it is written how God "*formed the man*"⁵¹⁴ and "*the LORD God had formed out of the ground all the beasts of the field and all the birds of the air.*"⁵¹⁵ All these creatures, man included, were formed from the ground, from the dust, while the same kind of breath of life was given to them. Psalm 104 describes how all living creatures, humans and animals alike have the same needs, while God, the creator provides them abundantly. Therefore, humans' response towards creation cannot be selective.

⁵¹² Revelation 11:18

⁵¹³ Barbour, Ian G., *Nature, Human Nature, and God*, Fortress Press, Minneapolis, MN, 2002 pg.136

⁵¹⁴ Genesis 2:6

⁵¹⁵ Genesis 2:19

Humankind must care for the whole system, because they are a part of it, and are entirely dependent on it. This interaction is the key to any environmental approach because one cannot be without the other. It is life in symbiosis with its surroundings.

Humanity's future on this planet depends on the well being of the environment and humankind's relationship with God. The beginning of Genesis describes the relationship between humankind and all creatures. Wright explains⁵¹⁶ that humans share the same food, same needs, and the same environmental surroundings as other creatures. Therefore, to care for creation is also to care for the whole system, of which creation is a part of; Humans must depend on each other and on the system. During the whole Bible, this continuation of dependence is clearly visible. When people rise up against God, the penalty for being sinful is always settled through the physical environment on which the well-being of people depends.

Humans should also care about creation, because even though the life circumstances are similar to those of other creatures, people are made in the image of God. "*God created man in his own image, in the image of God he created him; male and female he created them.*"⁵¹⁷ This is the first objective. The second one is that God commanded humankind to take care of all the living and the nonliving creation. Both these propositions include and explain humankind's responsibility and the way it should relate to nature and the environment.

Since climate change is real and humans have primarily caused its current condition and direction, this brings a potential danger to the created world. Thus, God's command is clear: "*Love the Lord your God with all your heart and with all your soul and with all your strength and with all your mind*" and, "*Love your neighbor as*

⁵¹⁶ Wright, Christopher J. H., *Old Testament Ethics for the People of God*, Intervarsity Press, 2004, Downers Grove, IL, pg.103-144

⁵¹⁷ Genesis 1:27

yourself.⁵¹⁸ This commandment presents an obligation to protect all creation, love God with the same love as He loves this world, and love others with the same responsible love that has been given to people from God.

What does humankind have to do to maintain this order? How can it be translated into a sustainable mandate that comes from a Biblical vision meant to guide the principles of daily life? From a Christian standpoint, what needs to be done for sustainable life to emerge into the modern setting?

These questions can be answered by dividing the solution into two areas. Unfolding the definition and the description of a sustainable society is the first subject matter. The second is about what direction, strategy, practices, and guiding principles need to be implemented in order to accomplish this vision.

Sustainable living has many forms. There is no one obvious structure, pattern, or type that must be followed or incorporated into daily life. Therefore, the direction of sustainable living at this time of history cannot be anything other than a visualization or a template that points in the right direction. Responsible Christian stewardship for sustainable living requires the willingness to start and to continue pursuing the goals, even if this has to be done alone. Society as a whole will not move forward, unless individuals take one step at a time and collectively join forces.

4.4.2. GOD'S OIKONOMIA AND HUMAN STEWARDSHIP

Historically, stewardship took place in the context when the landlord of an estate, the ruler, the king of a realm, or in general, the one who is in charge went away for some time, and it was necessary for someone to govern and take control until the landlord returned. Stewardship therefore, means *"to hold something in trust for*

⁵¹⁸ Luke 10:27

another.⁵¹⁹ Stewardship is also mentioned in the Bible,⁵²⁰ as a managerial function of someone else's value and use of wealth. In this context, the Greek word "oikonomos"⁵²¹ meaning house-keeper, points to the capacity of the human being to manage in the framework of household management or as a steward. This approach however, suggests a conservationist attitude to nature, for the reason that the steward is appointed to conserve, to keep intact what was given to him or her. Therefore, stewardship in the case of creation implies a managerial approach to nature. This lacks at least two central facts.

First, humans are called to cultivate the land. Genesis states that "*The LORD God took the man and put him in the Garden of Eden to work it and take care of it.*"⁵²² Calvin's comments, referring to a human and nature are that the human "*should occupy himself in its cultivation.*"⁵²³ To be a steward on one hand means to '*not change it, just keep it as it is.*' Cultivating the land consequently means improving nature's capacity for its best. Secondly, today, as the global development of this planet goes further, in many cases, it is impossible to conserve anything anymore. The world has already reached the point where any environmental conservation could be unrealistic or in some cases, even undesirable, because of population growth. Even though the idea of stewardship sounds very Biblical or even desirable, it is a moralistic approach that guides humanity in a merely functional relationship with nature. The consequence of ecological sin is only moral, since if humanity destroys nature, it disobeys and transgresses the law and becomes unethical.

⁵¹⁹ Block, Peter, *Stewardship: Choosing Service Over Self Interest*, Berrett-Koehler Publishers, San Francisco, CA 1996, page XX.

⁵²⁰ Luke 16:1-12 and 19:11-27

⁵²¹ Greek Dictionary, Winchester, MA, 2009, <http://www.kypros.org/cgi-bin/lexicon>

⁵²² Genesis 2:15

⁵²³ Calvin, John, *Commentary on Genesis - Volume 1*, Christian Classics Ethereal Library, Calvin College, Grand Rapids, MI, 2009, <http://www.ccel.org/ccel/calvin/calcom01.i.html?highlight=john,calvin,commentary,on,genesis#highlight>
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Secondly, God's representation for future generations, according to Metropolitan John of Pergamon, is in the form of priesthood. He explains this approach from the Orthodox Church's liturgy. The central point of this liturgy is when the priest exclaims: "*Thine of thine own we offer unto Thee.*"⁵²⁴ "*This means precisely that the world, the creation, is recognized as belonging to God, and is referred back to him. It is precisely the reversal of Adam's attitude, who took the world as his own and referred it to himself. In the Eucharist, the Church does precisely the opposite: the world belongs to God and we refer it back to its Creator through the priestly action of Christ as the real and true man, who is the head of the Body of the Church.*"⁵²⁵ In this approach, humanity's role of creation is not passive or managerial and it is not related to nature functionally, but rather ontologically. "*By being the steward of creation the human being relates to nature by what he does, whereas by being the priest of creation he relates to nature by what he is.*"⁵²⁶ Pergamon sees ecological sin as existential. His key point is that "*our ecological crisis is due not so much to a wrong ethic as to a bad ethos; ... and an ethic which is not rooted in ethos is of little use to ecology.*"⁵²⁷ The priesthood approach therefore, lies on the foundation of the meaning of ethos- morals, principles, and the doctrine of general priesthood from Martin Luther. Luther in his work "*To the Christian Nobility of the German Nation*" says, that "*there is really no difference between laymen and priests, princes and bishops spirituals and temporal... since, Christ*

⁵²⁴ George, Thomas, *Words of Life*, (Article) Orthodox Research Institute, Rollinsford, NH, Spring/Summer 2001, http://www.orthodoxresearchinstitute.org/articles/liturgics/george_words_of_life.htm

⁵²⁵ Pergamon, John, *Proprietors or Priests of Creation?* Keynote Address of the Fifth Symposium of Religion, Science, and the Environment, June 2, 2003, (Location: The 5th Symposium took place on a ship circumnavigating the Baltic Sea between May 31 and June 8, 2003) <http://www.orthodoxytoday.org/articles2/MetJohnCreation.php>

⁵²⁶ Ibid.

⁵²⁷ Ibid.

*has not two different bodies, one temporal, the other spiritual. He is one Head, and He has one body.*⁵²⁸

However, considering Calvin's teaching in this matter, the threefold office called the 'Munus Triplex', presents Jesus Christ as a prophet, priest, and king. In this complexity, Jesus Christ fulfilled all the anointed offices of the Old Testament and emphasized the importance and equivalence of all three. The doctrine of 'Munus Triplex', translated as the 'Threefold Office of Christ' was developed by John Calvin who presented this complex idea of the ministry of Christ. The doctrine served several purposes. It presented a Christology, which principally focuses on Christ's work in terms of being a mediator of a covenant of redemption. *"The Son of God, therefore, is not properly called Christ apart from his office, for it is there, in his official capacity that he manifests as the true fulfillment of the offices of the Old Testament his threefold work as prophet, priest, and king."*⁵²⁹

Because of the three Old Testament offices of prophet, priest, and king where fulfilled with appointed people, and this also corresponds to Christ's three offices, the doctrine connects incarnation directly to Christ's work as a mediator. *"The prophet, the king, and the priest are united in Christ, are perfected, and are thereby fulfilled and brought to conclusion in the one who is both king and priest forever after the order of Melchizedek."*⁵³⁰

Francis Turretin, presented the 'Munus Triplex' as the divinely revealed solution to the threefold disease of ignorance, guilt, and pollution described above. It is Christ, as prophet, priest, and king, who offers the threefold cure to humankind's fatal

⁵²⁸ Placher, William Carl, *Callings: Twenty Centuries of Christian Wisdom on Vocation*, Wm. B. Eerdmans Publishing, Grand Rapids, MI, 2005, pg. 211-213

⁵²⁹ Muller, Richard A., *Christ and the Decree*, Baker Book House, Grand Rapids, MI, 1988, pg.31 ff.

⁵³⁰ *Ibid.*, p. 32.

disease. *"The threefold misery of men introduced by sin-ignorance, guilt, and tyranny and bondage by sin-required this conjunction of a threefold office. Ignorance is healed by the prophetic; guilt by the priestly; the tyranny and corruption of sin by the kingly office. Prophetic light scatters the darkness of error; the merit of the Priest takes away guilt and procures reconciliation for us; the Power of the King removes the bondage of sin and death. The Prophet shows God to us; the Priest leads us to God; and the King joins us together and glorifies us with God. The Prophet enlightens the mind by the Spirit of illumination; the Priest by the Spirit of consolation tranquilizes the heart and conscience; the King by the Spirit of sanctification subdues rebellious affections."*⁵³¹

In Christ, the offices are well represented. *"In one figure alone were all offices adequately united, sufficiently displayed, and fully consummated — Jesus Christ."*⁵³² Truly in His earthly ministry, Christ appeared as a prophet, and then in his suffering and death, he revealed His identity as a priest. In his glorification, He rules over His kingdom as Head of the church, and will return to earth to establish His rule over the world as king of kings. Walvoord describes this as the 'key' to the purpose of the incarnation.⁵³³ Therefore, Christ brought the offices of the Old Testament to perfect expression; He was God's own living Word.

In this case, there is a need for humanity as a prophet to mediate God's Word, as a priest to mediate God's forgiveness, and as a king to mediate God's rule. *"Since Christ's three offices, prophet, priest, and king, represent the three offices of ancient Israel to which men were appointed as servants of God, Calvin could connect the incarnation directly to Christ's work as mediator."*⁵³⁴ Consequently, all three offices

⁵³¹ Turretin, Francis, *Institutes of Elenctic Theology*, Presbyterian and Reformed Publishing, Phillipsburg, NJ, 1994, Vol. 2, pg.393.

⁵³² Oden, Thosam C., *The Word of Life*, Hendrickson Publishing, 2006, pg.285.

⁵³³ Walvoord, John F., *Jesus Christ Our Lord*, Chicago, IL, Moody, 1969, pg.137.

⁵³⁴ Riddlebarger, Kim, *The Triple Cure: Jesus Christ - Our Prophet, Priest and King*, (Article), Modern Reformation, Escondido, CA, November/December issue, 1995, Volume: 4 Num:6.

are needed to have one common understanding of Christ, and therefore, emphasizing just one office out of three might not give humanity a clear Christological answer as to how it should deal with the challenges of environmental situations on a full scale.

The third representation of God's call for future generations lies in the simple form of *imago Dei*. Taking into account all former concepts, notions and ideas, none of them offers a full and complex view about the relationship between God as creator and humanity as creature. As God made a decision about humanity, nature in every aspect was created for human living. His determination rested on a notion that, humanity will have dignity and commitment to ecologically sustainable practices. In Genesis, God says; *"Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground."*⁵³⁵ God says that human beings are creatures in *imago Dei*; therefore, they also receive and reflect the essence of God, which is love for His creation. Since this image of likeness, together with God's love is in humanity, every human person carries this love for loving God, each other, and creation as well, and in turn every human is also a subject of God's own love towards him or her. God's respect for human life stimulates practical actions and personal engagement towards creating and sustaining conditions for righteous human life. If such an approach to the current environmental crisis would generate humans to have an obligation to protect nature, it would correspond with God's commitment to protect and improve the ability of all human beings for a sustainable life. This obligation to care for creation expands humanity's ecological vocation for future generations by allowing them to see the beauty of this world and meet its designer/creator as well. This outlook places God in the center of a theocentric worldview, which directs humanity to see the

⁵³⁵ Genesis 1:26

same ecological solutions as God sees. This solution however, is not just a reflection on the ecological crisis. Sustaining nature has a much higher goal, than just mere self-existence. Its central objective is to redeem this created world into a new world. Therefore, neither 'conservatio mundi' nor 'creatio continua' expresses God's final will, since both traditions look backwards to the original creation. The final goal of sustaining the world lies in Romans, where Paul says, "*The creation waits in eager expectation for the sons of God to be revealed. For the creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope*" that the creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God."⁵³⁶ For humanity, to participate in this process means "*to participate in the suffering of Creation, which is the suffering of God.*"⁵³⁷ As a result, through a new creation, this current world will escape from beneath time's grasp into eternity, where it is surrounded by God's loving embrace.⁵³⁸ Consequently, whoever calls upon the Creating Spirit is surely and readily awaiting the resurrection of the body and nature but in the same time, they are also awaiting Jesus' resurrection. Based on Jesus' resurrection, humans are also awaiting the rebirth of the cosmos.⁵³⁹ In this essence, sustainability is a new creation-oriented, Imago Dei based, and action formed; it is humanity's voluntary response to God's salvation.

4.4.3. INDIVIDUAL AND PERSONAL RESPONSIBILITY

Individual moral responsibility underlines the complexity in which every person must act. It is critical to see, that "*within transitional periods of time even small*

⁵³⁶ Romans 8:19-20

⁵³⁷ Moltmann, Jürgen, *Az élet forrása*, (Original title: Die Quelle des Lebens) Református Zsinati Iroda, Budapest, 1997, pg.140.

⁵³⁸ Ibid. pg.143

⁵³⁹ Ibid. pg.144.

alterations lead to big transformations."⁵⁴⁰ It starts by taking small steps. For example, instead of making expensive large-scale changes, people can begin with changing small, household possibilities. Personal actions begin with acts like reducing carbon emission. This first step is a very difficult one for many, since this decision includes less driving, less heat and air conditioning, and less personal pleasure in daily life. Also, waste management with selective collection is a daily life exercise. The next level is investing in a longer return, like installing more energy efficient equipment. Thirdly, consciousness is an important step, because consuming and buying all households items, such as food and supplies only from reliable green, organic, and clean energy-using companies will really make a difference in this process. The next step is one that deals with ethics. By not buying products from companies who are not socially, ethically, or environmentally sensitive, the companies themselves, as well as their industry will be forced to change course. Finally, creating an environment where these behavior styles overcome the general population's daily practices is substantial in the education and evangelism process, since living by example will generate an authentic Christian lifestyle for the public.

Personal responses to global challenges are based on the culture humanity lives in. It means that the most powerful effort in fighting global warming is in the hands of individuals, families, and small communities. Larger organizations, companies, churches, or even countries and nations, consist of individuals, and it is the most obvious opportunity one must take. For Christians, the most important group is churches, which means much more than just buildings. Churches are on the forefront by demonstrating the coming of God's Kingdom, and as part of this, the joy and benefit of a sustainable lifestyle. By implementing energy-saving measures, a responsible lifestyle,

⁵⁴⁰ Végh, László, *A rövidlátó ember megrontja a világot*, (The Nearsighted Men Deteriorates The World) Article, Debrecen, Hungary, 2009, <http://www.angelfire.com/moon/vl/html/vldolg05.html>

and green, organic, and a local approach to sustainability, they will help people to understand the problem itself and also the appropriate Christian solution to it.

By capturing the spiritual dimensions on Biblical sustainability, it is also important to notice Isaiah's emphasis on how this action needs to be carried out. Isaiah is very strong on how, with what feelings, and with what kind of an approach people should see this issue. It is presented this way: *"I have swept away your offenses like a cloud, your sins like the morning mist. Return to me, for I have redeemed you. Sing for joy, O heavens, for the LORD has done this; shout aloud, O earth beneath. Burst into song, you mountains, you forests and all your trees, for the LORD has redeemed Jacob; he displays his glory in Israel."*⁵⁴¹ First, the moral element of what God is saying can be noticed with the phrase 'return to me...'. In order to start, God emphasizes what He did for the people. 'I', says the Lord, 'swept away...', therefore you must 'return to me'. God reminds the always-forgetful people of how He kept His promise. Now, He says, you have the freedom of 'joy' as the way of celebrating the redemption. 'Singing for joy' is a state of humanity. Since sins were forgiven, people have to have an authentic state of joy, which is not just emotional. This joy is a distinguishing quality of the redeemed. This joy is a sign of the new creation. Everlasting joy is a heavenly attribute, since *"The ransomed of the LORD will return. They will enter Zion with singing; everlasting joy will crown their heads. Gladness and joy will overtake them, and sorrow and sighing will flee away."*⁵⁴² In this, Isaiah illuminates the importance of joy, which becomes a character of those who believe in God. Joy is present in faith, thus, people can celebrate a difficult solution even before the solution to it has been given or arrived to. That joy is the joy of the assurance of redemption, deep inside of humanity, before God starts to act visibly. Now, the promise is this: *"I will make you the everlasting*

⁵⁴¹ Isaiah 44:22-23

⁵⁴² Isaiah 51:11

pride and the joy of all generations."⁵⁴³ This guiding power for the vision is not a replacement of a sustainable life. It does not mean, that just by having this joy, people have to do nothing more. Instead, it is the beginning of a new life where the vision is emphasized in order to obey God in this Biblical concept of a sustainable life. Therefore, under God's directives, a sustainable life is a celebration. One is joyful to be able to live sustainably, obey God reverently, and believe in the future that God has promised to all people.

The reality of the world is whether a person is a Christian or not, they are unfortunately part of a civilization that is full of arrogance, greed, selfishness, want of power, corrupt politics and irresponsibility. *"Because the Christian faith is not associated in people's minds with a comprehensively different way of life than they would lead if they were not Christian, the impact of that faith is largely limited to those dimensions of thought and behavior that are obviously religious in nature."*⁵⁴⁴ Considering this situation, White's position requires the proposition of a new vision. This new vision grows out of sustainability in a sense that its impacts extend not only to nature, but to all people as well. This educational, faith process is very actual since *"most devoted Christians see no connection between their faith and recycling, or gambling or even participation in the political process."*⁵⁴⁵ In this avenue, the sustainable Church is the continuation of St. Francis of Assisi's vision, in a new form, as a modern sense regarding the environment, nature, and the preservation of the Earth against global warming. In Mark, one can read: *"He (Jesus) said to them, "Go into all the world and preach the*

⁵⁴³ Isaiah 60:15b

⁵⁴⁴ Barna, George, *Survey Shows Faith Impacts Some Behaviors But Not Others*, Ventura, CA, October 22, 2002, <http://www.barna.org/barna-update/article/5-barna-update/83-survey-shows-faith-impacts-some-behaviors-but-not-others>

⁵⁴⁵ Ibid

good news to all creation."⁵⁴⁶ In this text, the Greek word 'cosmos' means "the world, the universe, world affairs, the whole circle of Earthly goods, and endowments riches."⁵⁴⁷ Also, the word 'creation' has an all-encompassing meaning, like the sum or combination of all things created. These two words suggest that the outreach of a disciple of Christ is not supposed to be just for another human being. White states that: "I am not suggesting that many contemporary Americans who are concerned about our ecologic crisis will be either able or willing to counsel with wolves or exhort birds."⁵⁴⁸ However, this does not mean that there will be no relationship between concerned humans and nature. Although the two cannot communicate verbally, humans can show their concern through responsible actions. All of God's creatures are included in this conduct. Obviously, the approach, the message, and the treatment is different; preaching and evangelism in a verbal form are for human beings. However, consideration, respect, understanding, and a willingness to restore and preserve nature are all necessary in this process.

⁵⁴⁶ Mark 16:15

⁵⁴⁷ The New Testament Greek Lexicon, Abilene, TX, 2010, <http://www.searchgodsword.org/lex/grk/view.cgi?number=2889>

⁵⁴⁸ White, Lynn, *The Historical Roots of Our Ecological Crisis*, Science Magazine, Vol. 155, pg 1203-1207, March 10, 1967, Washington DC,

CHAPTER 5.

CONCLUSION

5.1. TRENDS IN THE CHURCH

The possible impact of future trends on the Western Christian Church requires not just a prolonged deliberation at the crossroads, but the willingness and ability to move towards any of the directions which promise answers and solutions to the Christian Church's problems, namely, losing Her grip on people in the context of pluralism and global issues. This phenomenon has several visible and invisible signs, called "*trends of the forces*,"⁵⁴⁹ which shape the Church regardless of Her standing. Howard and Runyon envision a future Church that will be dramatically altered.

Until the 20th century, the core of Christianity was based on the Caucasian race and the focal point was in the Western Hemisphere. Thus, this effort was centered in the midst of Europe and America. In 1910, at the time of the World Mission Conference in Edinburg, "*80 percent of those who professed Christianity lived in Europe or North America.*"⁵⁵⁰ Since then, a major shift has started to develop. As a result, Walls states that at the corner of the 21st century, the majority of Christians, so "*60 percent live in the southern continents of Africa, Asia, Latin America and the Pacific, and that proportion grows annually.*"⁵⁵¹ In the near future, this will shift to a membership of

⁵⁴⁹ Snyder, Howard A., and Runyon, Daniel V., *Ten Major Trends Facing the Church*, International Bulletin of Missionary Research, April 1987, New Haven, CT, pg.67-70.

⁵⁵⁰ Walls, Andrew F., *The Cross-Cultural Process in Christian History*, Orbis Books, Maryknoll, New York, 2002, pg.64

⁵⁵¹ Ibid.

20% white Christians worldwide, which will continue to decline.⁵⁵² As a result, a new globalization is taking place, which will refresh and revitalize news for the Kingdom of God. There will be a Church that is diverse ethnically and culturally and will consist of members who will demonstrate mutual respect for different worship styles, ministries, and traditions of other Christian believers. The focus of the Church will change from the self-centered Western way, to ministry in urban regions aimed at the poor, oppressed, and those who are suffering.

The world has become a global, well-connected, networked society of people, influenced by culture, media and the digital age. At the same time, the Western Church has lost sight of the new needs of a new world. It is vital to see this, because for humanity, the Church is the direct continuation of God's original business, of finishing His creation and preparing Jesus' glorious return. However, the Church is pleased with Herself, offering empty worship, formalities, outdated traditions, and the same old language. In order to be understood by those whom She wants to reach, the Western Church needs to change. The question is not how to water down Christian beliefs so that others can accept them. The core value of Christianity, the truth about Jesus, and the Bible itself will and must stay intact. The question is how to present these values and build a type of communication, trust, and a relationship with those who need to be reached for Christ. The world has entered into the area of pluralism. The Christian Church cannot neglect that the world has changed and "*must welcome some measure of plurality but reject pluralism.*"⁵⁵³ Newbigin argues that Christianity must welcome the plural society, because it offers the Church broader diversity and a scope to experience,

⁵⁵² Boyd, Greg, *The Good News In The Decline Of American Christianity*, Minnesota Christian Chronicle, August 2009, St. Paul-Minneapolis, MN, http://www.mcchronicle.com/Articles/Aug09/Art_Aug09_oped1.html

⁵⁵³ Newbigin, Lesslie *The Gospel in a Pluralist Society*, Eerdmans Publishing, 1989, Kindle digital version, location: 3,687-95.

which will make Christian knowledge much richer and test Christian faith much better than a monochrome society can. In this context, human experience about God will be enabled by learning about God's immeasurable love, through the people who come from many different cultural and religious backgrounds.⁵⁵⁴

Furthermore, a growing world with less borders but expanding connections within mixed societies requires a global theology. All Christians understand theology based on their life and culture, as well as social, economic, and political developments that now influence the world. Finding a common ground does not mean watering down any doctrines or beliefs; on the other hand, it means refocusing on God's will in the current world situation. All people need Christ and the privatization of Christianity by the Western culture does not help to accomplish Biblical goals. In order to expand Christianity, people need to understand their role in the field of justice in economic, political, and social relationships, and they must focus on ecological harmony and a balance throughout creation. *"The promise of global theology... is its hope that God is indeed active in the world and that the Church is invited in divine freedom and mystery, to participate in witnessing to that event of hope."*⁵⁵⁵

This new theology needs to be carried out by a new model of pastoral leadership. Instead of the pastor-centered, passive congregational style, a new model will emerge, where a team of spiritually mature leaders leads congregations. This new model is based on Paul's teaching, where the emphasis is on shared ministry. *"It was he who gave some to be apostles, some to be prophets, some to be evangelists, and some to be pastors and teachers, to prepare God's people for works of service, so that the*

⁵⁵⁴ Ibid.

⁵⁵⁵ Marks, Darren C, *Shaping a Global Theological Mind*, Ashgate Publishing, Burlington, VT, 2008, pg.8

*body of Christ may be built up.*⁵⁵⁶ Here, instead of a top-down authority order, the focus is on nurturing and leading the congregation in such a way, that each member of the Body of Christ grows and finds his or her unique function and ministry. It is also fundamental to see, that this new leadership will consist nearly equally of men and women.

Global responsibility toward individuals, societies, and the environment is essential these days. The notion that the nucleus of society is the 'typical family' has almost vanished from the face of the earth. Divorce rates are high and the traditional marriage is in danger.⁵⁵⁷ The traditional Western Hemisphere style white family with two parents, and two or more children, has been modified by diversity, lifestyles, consumerism and rootlessness. The Western Church has become disillusioned, because She is just simply not ready to deal with diversity and She is not equipped to deal with a style other than the classical Western one. Sociology as a discipline, deals in part with the statistical description of many different groups, styles, and formats of families and individuals that do not fit only the traditional profile.⁵⁵⁸ Therefore, it is safe to say, that conventional family patterns are not the only model groups of Christianity, and it is time for the Church to learn that diversity and homogeneity both have their place in society and within the walls of the Church as well. Diversity is a notion that humankind lives in the midst of a pluralistic society and comes from different cultural and social backgrounds. Homogeneity means that the one Lord and Creator creates all people to be equal. In this context, there are single households, extended families, shared households, and many other forms of social life, and thus, the real challenge for the

⁵⁵⁶ Ephesians 4:11-12

⁵⁵⁷ Organization for Economic Co-operation and Development, Paris, France, December 15, 2008, <http://www.oecd.org/dataoecd/4/19/40321815.pdf>

⁵⁵⁸ US Census Bureau, Washington DC, 2009, <http://www.census.gov/compendia/statab/tables/09s1294.pdf>

Church is to figure out how to minister to diverse groups without compromising the Gospel and the message of the Bible. Therefore, it is clear that the Church has a global responsibility to all people in order to reach all for Christ and not just those whom She selects, based on similarity, likeability, race, or social status.

Humanity, besides for being socially diverse, exists in the midst of three major world treats: the widening gap between the rich and the poor, the risk of nuclear weapons, and the endangered ecosystem. This situation is a worldwide phenomenon, and diseases, earthquakes, tsunamis, floods, starvation, and many other types of danger attack creation daily. It is now evident, that humans because of the irresponsible behavior toward nature, the environment, and the earth cause the majority of these threats. At the beginning of the 21st century, however, these issues are unprecedented in their scale and magnitude, and in the way they attack the very essence of life.

From a Christian standpoint, the Church lives and serves in the midst of these realities. Consequently, it is imperative to enhance the idea of global responsibility in the time of a global crisis, because these times are shaking the structures of the social and environmental systems respectively. Humanity is one family and all members live on one earth. Everything, which points to these dangers, must be carefully examined, and Christianity must respond faithfully to the loving call of God in this matter. The future of this world and humanity is in God's sovereign hands. Nevertheless, it also rests on the faithfulness or faithlessness of the Church. Consequently, preparing the Church for these challenges will also make Her more equipped with the most Biblical and theological accuracy so that She is able to respond to the future trends approaching Her. This new state of the Church is in need of a vision.

5.2. THE VISION

5.2.1. THE CONDITIONS

*"Where there is no vision, the people perish: but he that keepeth the law, happy is he."*⁵⁵⁹ If Christianity has a duty to care for creation, the environment, sustainable living, future generations, and for the future ministry of the Church, it requires a vision regarding how to coordinate all of these purposes into a single effort. It is a question which must be answered not just individually, but collectively as well. Climate change poses an unprecedented challenge to the present time of life, facing even greater consequences for the future. The vision that Christianity needs to discover is first and foremost a guideline and unifying direction, in which all denominations, different aspects of Christianity, and even non-believers can agree for an effective outcome. This vision is a way of life. In other words, sustainable living is evangelism, because it demonstrates obedience to God, responsibility for the future, and reflects humanity and down-to-earth Christianity for all people. Using this powerful tool is an obligation for those, who call themselves Christians. Having a Bible-based, collective vision in sustainable living, helps to bring together different opinions and responses to this matter. Having a clear vision is imperative, because a comprehensive idea is required of what direction the vision is going in and how it would like to achieve its goals. A vision also helps people to be motivated and to 'get them on the wagon'; it also helps people realize that every single individual is responsible for the current situation, how the situation was arrived at, and where humanity is heading. The biggest obstacle to taking responsible action against climate change is that most people believe that one individual's actions cannot make a difference, action is too expensive, and that responsible action and the joys of life are mutually exclusive. Nevertheless, taking into consideration that the Earth is the LORD's, individual responsibility towards the Creator

⁵⁵⁹ Proverbs 29:18 KJV

cannot be ignored. A well-articulated vision can help one to get around these problems. A vision can unify, clarify, and inspire the best possible outcome in tailoring a coordinated plan and establishing goals for those, who are otherwise resistant to change. *“Christian faith, therefore has to have a particular vision of the world and of humanity, a vision that is founded upon the relationship between God and God’s creation as revealed in the person and ministry of Jesus Christ.”*⁵⁶⁰ In this search, the Bible contains sound examples and stories, which people can use as a reference to move closer to a sustainable lifestyle and adopt the common direction.

From a New Testament standpoint, except for *Psalms*, the book of Isaiah is the most quoted. In it, the section comprising chapters 40-66 is considered as the key section from which Jesus Himself often quoted verses speaking about a future-oriented new hope for the Kingdom. Therefore, the focus of an environmental vision is on Isaiah’s writings, especially because Jesus Himself also used them as a reference for His ministry. Isaiah is significant because *“these chapters in Isaiah express that perception of a new heaven and earth wherein nature is rejuvenated, long life and peace are enjoyed, warfare and predatory relationships in nature are ended, fellowship with God is restored, the peace and paradise of Eden is regained, and sorrow is banished.”*⁵⁶¹ Revelation is also quite essential in this matter. Revelation and Isaiah both express the fact of God that He is *“the first and the last.”*⁵⁶² The description of old and new things and the understanding of the importance of the future are based on Isaiah: *“see, the former things have taken place, and new things I declare; before they spring into being I announce them to you.”*⁵⁶³ This appears again in Revelation: *“He will wipe every tear*

⁵⁶⁰ Sachs, John Randall, *The Christian Vision of Humanity: Basic Christian Anthropology*, Liturgical Press, Collegeville, MN, 1991 pg.8

⁵⁶¹ Zerbe, Gordon, *The Kingdom of God and Stewardship of Creation, (The Environment and the Christian)* Baker Book House, Grand Rapids, MI, 1991, pg.76

⁵⁶² Revelation 1:17 and Isaiah 44:6

⁵⁶³ Isaiah 42:9

from their eyes. There will be no more death or mourning or crying or pain, for the old order of things has passed away."⁵⁶⁴ As Isaiah sees God, who says, "*behold, I will create new heavens and a new earth*"⁵⁶⁵ similarly John says, that "*then I saw a new heaven and a new earth*"⁵⁶⁶ created by God. Isaiah 40-66 explains the objectives of God for all generations and all creation by inspiring visions, which are central to understanding why Isaiah is so important in the Bible. Furthermore, this section explains the teaching from the Kingdom of God and how it can be applied to sustainable living.

The vision of sustainability is fundamentally based on how and why God performed the action of creation. In Genesis, God created this world by His power. Calvin comments that "*what before did not exist was now made... and that the world is not eternal but was created by God.*"⁵⁶⁷ The original word describing God's act "to create"⁵⁶⁸ occurs 45 times (KJV) in 38 verses in the Old Testament. This is the only used word, with God as a subject. In Isaiah, it is evident that God is unambiguously the creator God. Isaiah says: "*For this is what the LORD says— he, who created the heavens, he is God; he who fashioned and made the earth, he founded it; he did not create it to be empty, but formed it to be inhabited— he says:*

*"I am the LORD, and there is no other."*⁵⁶⁹ "*Who has measured the waters in the hollow of his hand, or with the breadth of his hand marked off the heavens? Who has held the dust of the earth in a basket, or weighed the mountains on the scales and the*

⁵⁶⁴ Revelation 21:4

⁵⁶⁵ Isaiah 65:17a

⁵⁶⁶ Revelation 21:1a

⁵⁶⁷ Calvin, John, *Commentaries on the First Book of Moses Called Genesis*, The Christian Classics Ethereal Library, Grand Rapids, MI, 2009, <http://www.ccel.org/ccel/calvin/calcom01.vii.i.html>

⁵⁶⁸ Hebrew Dictionary - Strong's number: 1254 <http://strongnumbers.com/hebrew/1254.htm>

⁵⁶⁹ Isaiah 45:18

*hills in a balance?*⁵⁷⁰ To further illustrate, *“He sits enthroned above the circle of the earth, and its people are like grasshoppers. He stretches out the heavens like a canopy, and spreads them out like a tent to live in.”*⁵⁷¹ God’s environmental regeneration is most evident in chapter 41. *“I will make rivers flow on barren heights, and springs within the valleys. I will turn the desert into pools of water, and the parched ground into springs. I will put in the desert the cedar and the acacia, the myrtle and the olive. I will set pines in the wasteland, the fir and the cypress together.”*⁵⁷²

According to Fishbane, *“Isaiah 40-66 constitutes one of the richest theological collections in the Hebrew Bible. These chapters compose a virtual handbook of theological arguments and doctrines.”*⁵⁷³ In it, it is astonishing to read that God is particularly interested in His created environment. It also suggests that for God, the redemption of the natural order is very important. This importance however is not only to rebuild, recreate, or partially repair creation and the environment. This includes humanity as well. Even The New Testament speaks about creation groaning in the pains of childbirth, waiting for its redemption. *“The creation waits in eager expectation for the sons of God to be revealed. For the creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God.”*⁵⁷⁴ An interest in daily life and a recreation of surroundings are a part of God’s total care concept. In other words, humanity and the environment are

⁵⁷⁰ Isaiah 40:12

⁵⁷¹ Isaiah 40:22

⁵⁷² Isaiah 41:18-19

⁵⁷³ Fishbane, Michael, *Isaiah 40-66: Return and Restoration*, (Article) 2009, http://www.myjewishlearning.com/texts/Bible/Prophets/Latter_Prophets/Isaiah/Isaiah_40-66.shtml 2009

⁵⁷⁴ Romans 8:19-21

deeply linked together. The evidence for this concept can be seen in the details and line-by-line accuracy of environmental redemption in Isaiah. It is therefore clear, that if the Earth is so important to God, the creator, then it simply cannot exist for the mere pleasure or dominance of humanity; it is not like a bank with unlimited loans that never have to be paid back. It must have a higher objective. This objective is the relationship and the connection of environmental restoration and social, human, and spiritual redemption as well. This goal is manifested in the action of testimony. The transformation of creation in Isaiah does not happen for its own benefit because it is a direct and clear order from God, to help demonstrate His power so people can see and understand, learn and consider, that the world is in the hands of the Lord, and He is the one who created it, so that all of Israel and the rest of humanity can recognize Him in it. This plan is part of God's complex plan for reinstating and revealing Himself to us, in order to understand that society and the environment are not separated, but connected as two sides of one coin. Therefore, from the Old Testament, it is clear that sustainability can be defined from the current meaning of this subject, mainly painting the idea of protection of the present without drawing on tomorrow's capital. Sustainability is first and foremost keeping God's name alive, living a godly lifestyle, and expressing His love in testimonies by passing them down to future generations. In other words, the needs of the present time can only be served if the future is not compromised by today's actions. This idea in the Biblical context means living by the right order of God, where God has a plan for all of His creation, not just in the present time, but for the future generations as well.

5.2.2. THE FUTURE

John Calvin, describes creation as the theater of God's glory,⁵⁷⁵ and sees God, who by His wisdom designated this wonder for humanity for the purpose of enabling it to know God. *"But this we do with little profit; and, therefore, he invites us to faith in Christ."*⁵⁷⁶ Calvin also realizes that *"the greater part of mankind, enslaved by error, walk blindfold in this glorious theatre."*⁵⁷⁷ This description definitely does not refer to humanity's irresponsible actions at the time of the ecological crisis, which was not envisioned by Calvin. However, the destruction of the world's natural system does reflect the nature of humanity, a nature, which is just as irresponsible as described by Calvin. This new and fast moving crisis of the ecosystem therefore, requires a new Christian approach, responsible actions, and a vision about the future of creation. In order for humanity to achieve this status of being, Calvin suggests that a human should seriously *"employ his eyes in considering the works of God, since a place has been assigned him in this most glorious theatre that he may be a spectator of them, his special duty is to give ear to the Word, that he may the better profit."*⁵⁷⁸

Based on the Scripture, Calvin meditates on the future life in his Magnum Opus.⁵⁷⁹ For him, the resurrected Christ gives humanity a glance of heaven and what humankind will be like in future life. The resurrection, for Calvin, shows the power of God over all obstacles to carrying out His will, because in heaven, sinfulness is removed. On the other hand, Calvin did stress the value of life on earth, and the desire to make this world a better place, but he was also aware of the limits of improvement here on

⁵⁷⁵ Calvin, John, *Institutio*, II. 6.1.

⁵⁷⁶ *Ibid.*

⁵⁷⁷ *Ibid.* I. 5.8

⁵⁷⁸ *Ibid.* I. 6.2.

⁵⁷⁹ *Ibid.* III.9.

this earth, because *"we should always consider the end of it to be, that we may be trained to despise the present, and thereby stimulated to aspire to the future life."*⁵⁸⁰

Therefore, faithfully taking into consideration heaven as the continuation of earth is a principal Christian belief. Heaven is what humanity cannot ignore, because heaven is where hopes are fulfilled by God's will and future desire. The fact that Calvin says that humans ought to meditate on the future life is an invitation to all mankind to come and join the Christendom. Therefore, the Christian dream is to continue to put humanity's hope in God and heaven, and as a consequence, it is not possible anymore to see creation, the environment, and any safeguarding efforts just from an earthly angle. All this has a heavenly aspect, a continuation and an explanation from above. Furthermore, humanity cannot see the present without considering the future. Everything must be approached from the end of time as answers are gathered for the present time of history.

This understanding about time and space is authentically based on the Biblical relationship between God and humanity. Calvin states that a visible and recognizable God is positioned in the center of His creation, because God *"manifests his perfections in the whole structure of the universe, and daily places himself in our view, that we cannot open our eyes without being compelled to behold him."*⁵⁸¹ Furthermore, Calvin, together with the Psalmist, presents God to humanity, but not only for the reason that humanity sees His glory, but in addition, so that God can see Himself in His own creation. *"He covereth himself with light as with a garment," (Psalm 104:2); "as if he had said, that God for the first time was arrayed in visible attire when, in the creation of the world, he displayed those glorious banners, on which, to whatever side*

⁵⁸⁰ Ibid. III.9.1.

⁵⁸¹ Calvin, John, *Institutio*, I. 5.1.

we turn, we behold his perfections visibly portrayed."⁵⁸² This two- way communication represents the relationship between God and humanity. First, it is God who willingly wants to appear, to be understood, and has chosen all the circumstances about His visibility. In this way, humanity can see the Creator, be amazed by His glory, and as a response, long for a relationship with Him. This relationship is based on God's love towards all creation, and humanity's thankfulness represented in obedience, glorification, and joy towards God. In these responses, all of creation returns to God, because all of it wants to glorify Him, and to enjoy His presence forever. This relationship is also the move from and to God since this is the basic principle of creation as well. Humanity is part of a God-centered cosmos, where all individuals have their ways and possibilities for being reconnected with the Creator, as Calvin called this scenario the 'theatrum gloriae Dei.'

Connecting this expression of Calvin to Karl Barth's conclusion of the 19th century theology, Barth says: "*Creation is not an end in itself but the area and ground of God's great final work of redemption. Calvin said that the world as God created it is the 'theatrum gloriae Dei', the theater of God's glory. God's glory is what he does in the world, but in order to do what he does, he must have this theater, this place and realm- heaven and earth, creation, the creature, man himself. That's the relation between creation and redemption seen from the side of creation. From the side of redemption, I would say that redemption is the end and goal of God's will for the world and creation. Redemption is God's glory in the realization of his mercy towards his creation and his creature. Creation is the natural ground for redemption, and redemption is the spiritual ground of creation.*"⁵⁸³ Here for Barth, Calvin's metaphor means that the creation and

⁵⁸² Ibid.

⁵⁸³ Barth, Karl, *A Theological Dialogue*, (Article), *Theology Today*, Princeton, NY, Vol.19.No 2 July, 1962, pg.172.

everything God performs in it, has a goal. It happens due to redemption. This redemption is also the direction for humanity to find their way back to the Creator, and reduce the distance between God and humanity that centuries of false worldviews have lead to the edge of its own existence. This creation is not a onetime action of God, but a continuing action, "*Creatio Continua*"⁵⁸⁴ as Barth frames it. Connecting it to providence, its meaning is overwhelming especially for sustainability, since "*what we have to understand specifically as God's providence, as the preservation and government of man and the world by Him, is also creation, continuing creation.*"⁵⁸⁵ For Barth therefore, creation, providence, and eschatology are not three individual subjects, but one subject which gets its meaning from the end, through redemption by God.

By pointing to this goal, however, Moltmann argues that "*redemption, and the new creation of all created things can be expected only from the coming of Christ in glory.*"⁵⁸⁶ Moltmann's cosmic Christology guides to moral conclusions. "*Reconciliation in Christ must lead to reconciliation with all God's creatures.*"⁵⁸⁷ Ford points to Moltmann's idea of mutuality of God and creation, and highlights that this theology also takes the non-human creation into the general concept of Trinitarian history. The explanation by Ford says; "*because God is transcendent beyond the world, it dwells in God, but because, as the Spirit, God is also immanent within the world, God dwells in it.*"⁵⁸⁸ Furthermore, the main direction of Moltmann's new theology of creation reaches the point of the future through '*creatio continua*'. "*The goal of this history of creation is*

⁵⁸⁴ Barth, Karl, *Church Dogmatics*, Volume 3. Part 1. The Doctrine of Creation, T&T Clark, New York, NY, 2004, Pg.60

⁵⁸⁵ *Ibid.*

⁵⁸⁶ Moltmann, Jürgen, *The Way of Jesus Christ: Christology in Messianic Dimensions*, SCM Press, 1990, , Pg.304

⁵⁸⁷ Edwards, Denis, *The God of Evolution: a Trinitarian Theology*, Paulist Press, Mahwah, NJ, 1999, pg.110

⁵⁸⁸ *Ibid.*

not a return to the paradisaical primordial condition. Its goal is the revelation of the glory of God... the new creation of heaven and earth in the kingdom of glory surpasses everything that can be told about creation in the beginning."⁵⁸⁹

This new future requires humankind to participate in the will and program of God not because God needs help or advice, but because humanity needs to understand, incorporate, and follow God's order and direction here, in the midst of the created and continually changing world. Christian Link⁵⁹⁰ observed this need and suggests that theology also desires to see the world beyond just being created for humanity.⁵⁹¹ Link points out that the heart of creation as a whole is fullness and solidarity. Ecology, as a subject within the framework of theology, needs a new, Biblically founded horizon in order to see creation and its future side by side to be able to recognize the endangered unity of nature and history. This new horizon, according to Link⁵⁹² can be realized in two ways. One is a dogmatic direction, where the key to creation theology is the order of the Sabbath. From this approach, Link argues about the way, where all of creation will find their destiny, which is the promised future from God. Here, the promise is God's permanent presence. On the other hand, the second horizon for Link is an ethical approach, where ecology is deeply rooted in the framework of the covenant. This concept reflects a balance between the rights of humanity and the rights of nature. Here, Link focuses on the covenant, because the covenant as an institution is the form through which humanity legally accepts God's connection to

⁵⁸⁹ Moltmann, Jürgen, *God in Creation*, Harper & Row, San Francisco, CA, 1985, pg.207

⁵⁹⁰ Ruhr University, Bochum, Germany, Biographie von Prof. Dr. Christian Link, 2009, Link, Christian, (1938-) "*Link's magnum opus is the two volume Creation Theology, was published in 1991. In the first volume, he processes the tradition of creation in the context of reformation theology, employing the teaching of Luther, Melancton, Calvin, Elert, Althaus, Tillich and Barth. The second volume is a complex Creation Theology in the in the context of the challenges of the 20th century.*"

⁵⁹¹ Link, Christian, *A Teremtés Teológiája*, (The Theology of Creation), Károli University, Nagykőrös, 2007, pg. 226

⁵⁹² *Ibid.* 226-227

creation. This is the base of a new life in Christ that shows the severity of the ecological crisis, which is nothing else than a departure from God. Therefore, salvation, according to Link, takes place looking to the future that the approaching God has opened before humankind.

The approaching God cannot be reached just by wanting a better solution for humankind. The theological hope is not in the change of behavior, in a better understanding of others, in the inquiry of equal opportunity for all people, or in the power of a scientific or government-designed program. It comes from the Scripture, like Romans 8, where the emphasis of creation theology is on the eschatology. *"The creation waits in eager expectation for the sons of God to be revealed. For the creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole creation has been groaning as in the pains of childbirth right up to the present time. Not only so, but we ourselves, who have the first fruits of the Spirit, groan inwardly as we wait eagerly for our adoption as sons, the redemption of our bodies."*⁵⁹³ The ecological catastrophe which will not go away by itself, appears here as an apocalyptic vision for this generation. According to this Bible reference, in the time of creation's frustration, the freedom of the sons of God brings hope for a solution. The answer for today's ecological and human catastrophe therefore, must be found within the paradox of the Glory of God and the frustrated creation itself. As Link⁵⁹⁴ disputes, this tension can be solved only by equally emphasizing a balance between both sides: creation's eager

⁵⁹³ Romans 8:19-23

⁵⁹⁴ Link, Christian, (1938-) Emeritus Professor of Systematic Theology, Ruhr University, Bochum, Germany, <http://www.uv.ruhr-uni-bochum.de/pvz-planung/i3v/00032900/01404022.htm>

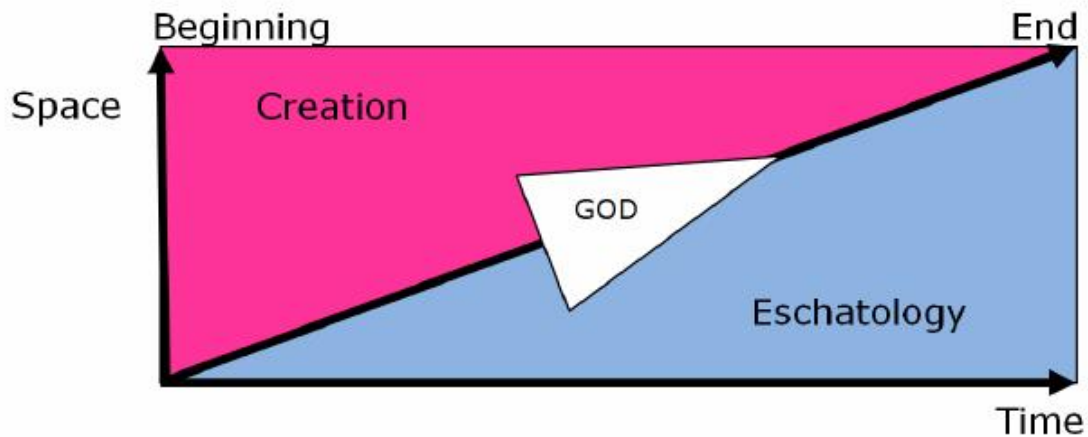
expectation for salvation and the visible signs of the Creator's fingerprint.⁵⁹⁵ This dual approach leads to an understanding of God's order about creation; the world is not God, but it is divine in all aspects. It is given not just to humankind, but with respect and responsibility to all creation as well. This is the arena of God for His creation, as Calvin sees it as the theater of God's glory. Here, God moves forward to the goal (telos) of completion and not to the end (finish) without any purpose.⁵⁹⁶

In summary, sustainability is a balance between creation and eschatology within the parameters of space and time, which moves from the beginning to the end, which is also a new beginning. This is so, because Christ's death is not an end, but a new beginning, and therefore, the end of the world is not the apocalyptic end, but the beginning of a new heaven and new earth. Stewardship and ethical concerns about creation happen hand in hand with eschatology, as God moves forward in time. The exact position of present time on the time scale is unknown, but the more the world enters into the 'end of times', the more eschatology becomes the main concern and the balance and condition between creation and eschatology changes. Moltmann sees this order of 'creation continua' as the world, which is being moved forward by God. This world lies between 'creatio originalis' (beginning) and 'creatio nova' (end). (Image⁵⁹⁷)

⁵⁹⁵ Link, Christian, *A teremtés teológiája*, Nagykőrös, 2007. 231-237.

⁵⁹⁶ Moltmann, Jürgen, *A végén új kezdet*, (*At the End a New Beginning*), Kaessmann, Margot, Hit a terroron túl, - Isten hatalmáról, mindnehatóságáról és erőtlenségéről, Calvin Press, Reformed Church in Hungary, Budapest 2004. pg. 22

⁵⁹⁷ Gabor Lassu

BIBLICAL SUSTAINABILITY

Consequently, the theology of sustainability is an ethical and an eschatological answer to what has been given to humanity, and what and how that given authority has been handled. Christian safeguarding, conservation, or efforts to save the environment therefore, are not just actions fulfilling ecological goals, but rather, they are actions pointing towards God that will be fulfilled in God at the end of time. Those engaging in these actions will be participating in God's ongoing creation as inheritors of His Kingdom. In this context, managing sustainability is a Christian process of obedience, by submitting humanity's will to the will of the Creator. For that reason, from the perspective of the future, any ecological approach or environmental effort cannot be only scientifically viewed and anthropocentrically based. On the contrary, these actions of humanity must testify the acts of God in His creation and redemption. Thus, sustainability is an action of assistance to God's final plan, which is not theoretical. Instead, sustainability is a practical action-based enduring way of conduct for the purpose of all creation, which is a new life, based on the promise of the new heaven and new earth. What kind of new heaven and new earth is coming? It is under God's sovereign authority. Humanity's accountability is the ethical handover to God of

what was credited to it by Him. In this order, environmental theology must point in the direction of the eschatological dimensions of hope towards eternal life, and the Kingdom of God and place ecology and environmentalism into the viewpoint of eschatology. Therefore, the perspective of sustainability consequently is neither established in linear timing nor endorsed by limited actions. In time, it must be viewed not forwards, but instead, it must be seen and examined backwards, from the end of time, because sustainability is about God's desire for preparing the way for Christ's second coming.

5.3. CLOSING REMARKS

The chronicle of humankind can be seen and evaluated through many different paths. The most common approach is the traditional study of history, where the focus is on the record of the activities of human beings over time. Its resolutions are based on research, which objectively examines and analyses the sequence of events, and studies the cause and effect that determine these measures.

Furthermore, the chronicle of humankind can be viewed through social science as well, since it is the study of society and the way people impact the world around them. In this matter, the society itself has become the object of knowledge. The chronicle of humankind can also be seen by using outside disciplines such as economics, anthropology, and geography, by emphasizing the role of large-scale socio-economic factors in the development of history. Following these new disciplines, ecological history focuses on human beings' behavior, lifestyle, and understanding of ecology and the environment as a progress that has cost the planet, rather than a progress in the traditional meaning of advancing forward. This understanding about the history of humankind looks first and foremost at the attitudes and beliefs of people in every stage of history. As a result, it evaluates all of the events that are connected to

humankind and ecology, like air, land and water pollution, extermination of species, and deforestation. These have all led to global warming, as an outcome of humankind's irresponsible behavior toward nature.

Sustainability - Environmental Theology, which is a new advancement in this dissertation, centers its explanation and understanding about the chronicle of humankind around describing physical and spiritual worldviews and associated ethics, and also all the causes that have led to humanity being at a distance from God. Its philosophical understanding is based on the Judeo-Christian beliefs' ethical and moral standards. It considers that humankind is responsible for tearing down nature and the environment, since the philosophical worldview of humanism has influenced the world. Environmental theology argues that only a change of humankind's attitude toward God, and a full repentance and return to Him, will cause society to make a real effort in preserving nature, the environment, and this Earth. All of this can happen only through an eschatological understanding of creation with God the creator in the center of life. Therefore, Environmental theology contributes to the discovery, evaluation, and employment of this worldview of humankind, from a theological standpoint, by measuring the distance of how far humanity has fallen from God, its Creator.

In these days, humanity lives in a complex world that is swiftly moving and constantly changing. In this environment, humanity needs to understand its roots and origin, in order to understand life's circumstances. Concerning humankind's philosophical and theological space within the holistic view of the universe, it is sad to say, that humans are failing to appreciate not just the Creator, or all other aspects of creation, but themselves as well. In order to be able to navigate within this subject matter, from a theological perspective, humankind must first be placed into God's order. In this way, God is in the center of the whole world, as the creator of everything,

including humankind. He is the one, who created the universe and everything in it and is able to be known by humanity. He has the capacity of creating things into existence, but these things are not limited to just life itself or galaxies, but they include everything, even solutions to today's tribulations. He has the ultimate power, and He wants humans to be aware of it and to rely on it. This relationship between God and humankind is described in the Old Testament by Jeremiah: *"This is what the LORD says: "Let not the wise man boast of his wisdom or the strong man boast of his strength or the rich man boast of his riches, but let him who boasts boast about this: that he understands and knows me, that I am the LORD, who exercises kindness, justice and righteousness on earth, for in these I delight declares the LORD."*⁵⁹⁸ This state, as the grounds for the existence of humanity, is the basic foundation of the proper relationship between God and humankind. God is the Lord, so the holder of all power must be respected as the center of His creation. It is Him, by Him, and with Him that humankind can exist, live, and respect the rest of the creation, nature, and the environment.

In the midst of the global crisis and environmental degradation, ethical and theological answers must be sought. Hans Küng's view sheds light on the first issue. His outlook is a global ethic for global politics and economics, in order to stop humanity's own effort which for the *"first time in its history produces its own downfall. If humankind is to survive, global solutions must be striven for."*⁵⁹⁹ His effort is realized through the *"Global Ethic Foundation"*⁶⁰⁰ and he developed the *"Declaration of the Religions for a Global Ethic"*⁶⁰¹ which was endorsed by the Parliament of the World's

⁵⁹⁸ Jeremiah 9:23-24

⁵⁹⁹ Küng, Hans, *A Global Ethic for Global Politics and Economics*, Oxford Press, New York, NY, 1997, pg.67

⁶⁰⁰ Global Ethic Foundation, Tübingen, Germany, <http://www.weltethos.org/dat-english/index.htm>

⁶⁰¹ Ibid. Text of the Declaration.

Religions in 1993. Küng believes that there cannot be peace among the nations without peace among the religions, no peace among the religions without dialogue between the religions, and consequently no dialogue between the religions without investigation of the foundations of the religions.⁶⁰² His solution to the crisis is evident; until humanity accepts the facts of the crisis and seeks solutions together as a homogenous entity, it might be suicidal against its own existence.

On the second issue, Moltmann sees the solution from another angle. He presents the account of Noah as the basis of his argument. Here, Noah⁶⁰³ teaches that today's ecological and human conditions on Earth represent a similar situation as in Noah's time. Moltmann suggests⁶⁰⁴ that in order for humankind and for future children to stay alive on this Earth, humankind must survive with Noah, because only by Noah's justice and God's loyalty will "*the everlasting covenant between God and all living creatures of every kind on the earth*"⁶⁰⁵ be kept. The hope therefore, for humanity is the promise and a "*warning for God himself to help Him recall his promise*"⁶⁰⁶ that "*whenever I bring clouds over the earth and the rainbow appears in the clouds, I will remember my covenant between me and you and all living creatures of every kind.*"⁶⁰⁷ This is humanity's real and only hope during this time of being.

⁶⁰² Ibid. History and Aims.

⁶⁰³ Genesis 6:9-8:22

⁶⁰⁴ Moltmann, Jürgen, *Noéval túlélési*, (Surviving with Noah), (Article), *Theológiai Szemle*, Budapest, 1978, pg.241

⁶⁰⁵ Genesis 9:16b

⁶⁰⁶ Ibid. 243

⁶⁰⁷ Genesis 9:14-15a

Therefore, humanity has to ask and to choose: does it want to perish or exist together? The Bible has a very positive message about the future and existence of humankind and all of creation. Sin and condemnation is not the last word of God. The Christian hope is about a new life, a new existence with God, which will be unimaginably magnificent. This position integrates all of humanity and all religions in one hope of Christ. That one hope is the vision, like a new ark for this world.

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BIOGRAPHY**Gábor Lassu**

Gábor Lassu was born in 1956 in Budapest, Hungary, European Union. He graduated from the Béla Bartók Conservatory in Budapest, with a B.A. in Jazz Music in 1981. He also graduated from the Academy of Theology in Budapest with a M.Div. in 1985 and was ordained in 1987 as a reformed minister. He married Dr. Magdolna M. Vörös in 1984 and served as an assistant, associate, and senior pastor as a member of the Reformed Church in Hungary. Gábor and Magdolna have two daughters, Réka and Nóra who were born in 1986 and 1989 respectively. In 1993, Gábor was called and elected to be a pastor in the United States, and served several churches in Michigan and California as well. Between 2006 and 2010, he studied and taught courses at the Károli Gáspár University of the Reformed Church in Hungary.