

**A thesis submitted to the Department of Environmental Sciences and Policy of
Central European University in part fulfilment of the
Degree of Master of Science**

**Has Pope Francis' Environmental Encyclical Made Waves? A Case Study of the
Los Angeles Archdiocese in the Wake of Laudato Si'.**

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July, 2016

Budapest

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ABSTRACT OF THESIS submitted by:

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for the degree of Master of Science and entitled: Has Pope Francis' Environmental Encyclical Made Waves? A Case Study of the Los Angeles Archdiocese in the Wake of Laudato Si'.
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In May 2015 Pope Francis published an encyclical, *Laudato Si': On Care for Our Common Home*, which is the first papal encyclical to be written primarily about ecological issues. Papal encyclicals are part of the body of Catholic Social Teaching and while not considered to be infallible, carry immense authority in the Catholic Community. Encouraging individual behavior towards sustainability is an important task and the Catholic Church has the capacity to influence millions.

This study empirically investigated the dissemination of Laudato Si' with a case study of the Los Angeles Archdiocese. A mixed methods approach was employed that engaged both the clergy and the laity, but each in a different capacity. Interviews with clergy members allowed for a more in-depth understanding of the decisions being made, and a survey approach allowed for a greater amount of the congregation to be consulted. A stage-based dissemination model, diffusion of innovations, was used to assess the level of dissemination.

Results showed that this region has not yet reached the stage of implementation, but is still in the stages of absorption and interpretation. Teachings regarding the environment have not changed significantly since the release of the letter, however all interviewed clergy acknowledged a heightened awareness and sense of urgency for ecological concerns. Specific dissemination strategies were not discovered, yet 22% of the surveyed participants reported an awareness of the letter. For now Pope Francis has caused only a swell, rather than a wave, of change.

Keywords: Laudato Si', Dissemination, Catholic Social Teaching, Environmental Encyclical, Pope Francis, Diffusion of Innovations, Environmental Lifestyle Change

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List of Definitions and Abbreviations

ADLA – Archdiocese of Los Angeles.

Apostolic exhortation – Apostolic exhortations are papal reflections on a particular topic which are addressed to all of the clergy and faithful.

Archbishop – the bishop of highest rank in a particular area

Archdiocese – the area an archbishop is in charge of: the diocese of an archbishop

Bishop – an official in some Christian religions who is ranked higher than a priest and who is usually in charge of church matters in a specific geographical area

Cardinal – a priest of the Roman Catholic Church who ranks immediately below the Pope

Catechism – a collection of questions and answers that are used to teach people about the Christian religion

Catechist – one that catechizes: as, a: a teacher of catechumens, b: a native in a missionary district who does Christian teaching

Clergy – people (such as priests) who are the leaders of a religion and who perform religious services

Diocese – the area that is controlled by a bishop in a Christian church

Encyclical – Encyclicals are papal letters that offer counsel and shed light on existing doctrine as part of the Holy Father's ordinary teaching authority.

Evangelize – to try to convert (a group or area) to a different religion (especially Christianity)

Ex cathedra – by virtue of or in the exercise of one's office or position

Laity – the people of a religion who are not priests, ministers, etc.

Natural law – a body of law or a specific principle held to be derived from nature and binding upon human society in the absence of or in addition to positive law

Parish – an area that has its own local church and priest or minister

Pontiff – bishop; specifically often capitalized: pope

Priest – a person who has the authority to lead or perform ceremonies in some religions and especially in some Christian religions

Sacraments – an important Christian ceremony (such as baptism or marriage)

USCCB – United States Conference of Catholic Bishops

1.0 Introduction

The first legally-binding global climate deal was agreed upon and adopted by 195 countries at the Paris climate conference in December 2015 (EC 2016). Just months before Paris more than 150 world leaders also adopted the Sustainable Development Goals, which are international targets hoping to address issues like poverty, world hunger, and gender equality in developing and industrialized countries alike (UNDP 2015). Monumental moments such as these show us that a consensus is beginning to appear and in order to lessen the anthropogenic impact on the earth, great changes will need to be adopted by governments, corporations, and even individuals. Changing individual behavior towards sustainability on a large scale will be a challenge. That is why it is important to continue educating the general public about how the choices they make each day can ultimately have a bigger impact on everyone's living conditions than they may realize. It's time to recognize that regardless of our differences, we share a common home and need to work together in some capacity to keep it in order.

Since it will be expected for many levels of society to make changes it is imperative to explore outlets that can be used as vehicles of change. Evidence shows that religious institutions are a compelling force in shaping how individuals choose to live and behave, (Pargament & Maton 2000) which is why it is necessary to study how major organized religions could play a significant role in reforming individual behavior towards a more sustainable lifestyle. If people are further influenced to become more conscious consumers, they may lessen their impact on the environment and positively influence social issues that are generally coupled with environmental degradation.

The Catholic Church is a major religious organization with a worldwide following of approximately 1.1 billion people as of 2010 (Pew Research Center 2013). Survey data from 2015 revealed that approximately 68 million people were officially listed as Catholic in the

United States, with another 25 million who were raised Catholic but no longer self-identify as such (CARA 2015). This statistic demonstrates that a large portion of the population in the U.S. is influenced by the Catholic Church in some way. In America it has even been estimated that people have more confidence in religious institutions than any other social institution (Pargament & Maton 2000). If individuals are expected to change their habits in the name of the environment, then the main sources from which humans develop their habits need to be examined as well.

In the wake of *Laudato Si'*, which is a well-timed encyclical letter focused on the environment, it is more appropriate than ever to study the Catholic Church as a vehicle of change moving towards a sustainable lifestyle. While in the past the Catholic Church has not explicitly stated a strong opinion regarding environmental issues. Pope Francis released this encyclical letter in May 2015, which for the first time was focused on the environment (Yale 2015). Unlike the Paris climate agreement or the Sustainable Development Goals, this message was delivered by a religious institution: the Roman Catholic Church. *Laudato Si'* is yet another call for unity against a problem that affects all human life. *Laudato Si'* is an “urgent challenge to protect our common home [which] includes a concern to bring the whole human family together to seek a sustainable and integral development...” (Pope Francis 2015). While many global issues are discussed throughout the document, the main and recurring theme is well captured in this excerpt:

“Humanity is called to recognize the need for changes of lifestyle, production and consumption, in order to combat this warming or at least the human causes which produce or aggravate it” (Pope Francis 2015).

Encyclical letters issued within the Roman Catholic Church are social teachings from the pope that are generally concerned with issues that affect the welfare of the Church. They are usually

addressed to the whole Church and occasionally to bishops or archbishops of specific countries (Thurston 1909, Yale 2015). *Laudato Si'* however, was not addressed to the Catholic community alone, but to “every person living on this planet” and strengthens this inclusivity by referencing secular as well as religious documents throughout the letter (Pope Francis 2015). Despite this scope, the Catholic community would be expected to be more aware of it compared to people of other, or no faith. Since this document deals with issues of human behavior and their relationship with creation and one another, the **main aim** of this research is to:

Evaluate how the Catholic Church is disseminating Laudato Si' with a case study of the Los Angeles Archdiocese.

Objectives of the research are:

- *To determine whether and how teachings or proceedings related to the environment have changed within the Catholic Church since the release of Laudato Si',*
- *To gauge the level of awareness of the letter on a parish-level,*
- *To determine and assess what actions have been taken, or will be taken, by the clergy to disseminate the encyclical letter.*

While encyclicals do not force Catholics to believe or act in accordance with what is discussed, it is hoped that the community will listen and use the teachings as a guide for their moral and lifestyle choices (Yale 2015).

The Catholic Church is a hierarchical institution with its tiers displayed in Figure 1.1. The pope is the leader of the Church and is based in Vatican City, followed by cardinals that are appointed by the pope and are stationed in various locations around the world (Vatican.com 2013). Their main responsibility is to advise the pope and elect a new pope in case of resignation or death

(Vatican.com 2013). Bishops and archbishops are ordained to one station and are considered to be teachers of church doctrine who provide pastoral governance for the diocese (Vatican.com 2013). Priests are ordained ministers responsible for leading a congregation and administering most of the sacraments; they may be assisted by deacons in their region (Vatican.com 2013). Each parish is part of a diocese with larger metropolitan areas referred to as an archdiocese. While the pope and the cardinals direct and represent the Church from various locations, most lay people will experience church-related-teachings and events at a parish level. Parishes are directed by their presiding bishop or archbishop, therefore it is reasonable to suppose that a study of one major archdiocese will generate insight into what the Church generally does to disseminate and implement a new papal encyclical.

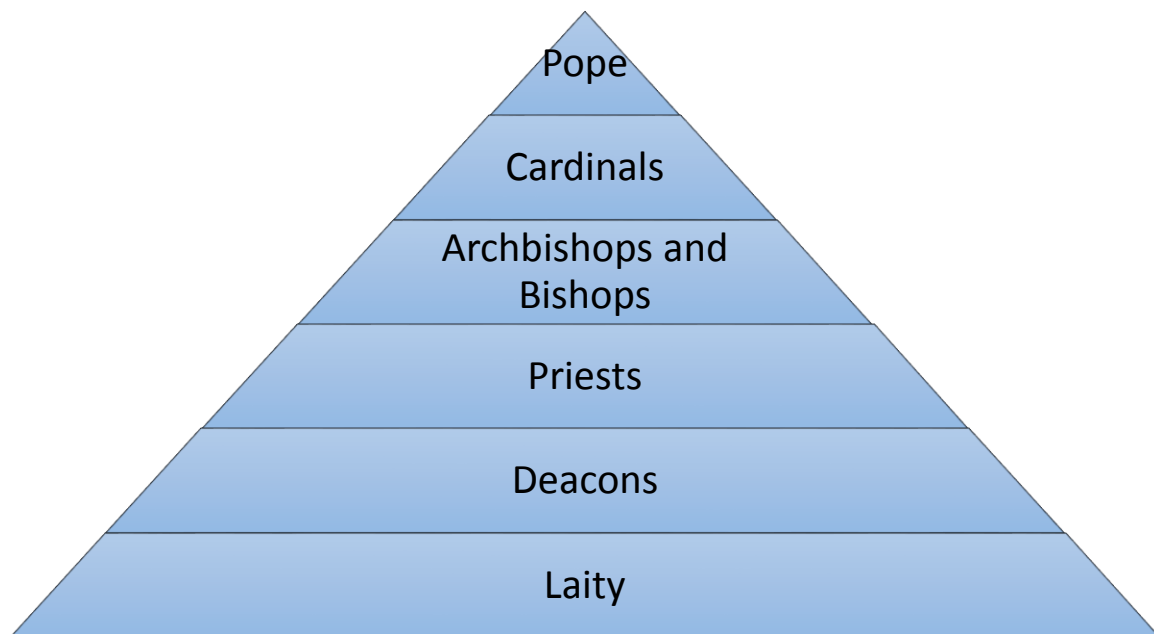


Figure 1.1 Hierarchy of the Roman Catholic Church. Adapted from Vatican.com.

For reasons of proximity and a limitation in time for data collection, the scope of this project was limited to the Los Angeles Archdiocese, which includes my hometown of San Pedro, California. Roughly 5 million Catholics currently worship in the Los Angeles Archdiocese which is made up of Los Angeles, Ventura, and Santa Barbara counties (ADLA 2016). This research was an

empirical study employing a mixed-methods approach which involved both in-depth semi-structured interviews of bishops and priests, and a questionnaire completed by members of their corresponding congregations. The data was collected concurrently and integrated during analysis. Due to the size of the archdiocese and the limited data gathered, the results of the case study were not used to generalize above and beyond the region itself, but do provide general insights that could be applicable elsewhere.

Since environmental issues have recently taken on a more urgent tone, it was important to understand how effectively information can be distributed within a large organization. The results of this study can provide useful information to members of the clergy within the Los Angeles Archdiocese about how their efforts have been received by their congregations. This will potentially help fine-tune how information is circulated to encourage changes in habits and concerns. There has been little empirical research of dissemination within the Catholic Church or of the effects of a specific encyclical letter. Since *Laudato Si'* is very recent, no other empirical studies exist about the dissemination of this social teaching. This research will also contribute to the body of literature regarding Catholic stewardship of the environment.

The next chapter will comprehensively discuss relevant background issues followed by an in-depth chapter of the methods used for this research. The subsequent chapters will include the results and analysis of the research and a conclusion.

2.0 Literature Review

This case study examines how the Los Angeles Archdiocese has disseminated its most recent addition to Catholic Social Teaching, which is a topic that touches on a number of bodies of literature. The first section of this review will discuss the topic of Catholicism and the environment and will begin by briefly exploring the relationship that exists between religion and attitudes towards the environment. This section will not be in-depth because this research is not focused on environmental attitudes, however it is important to establish the nature of the relationship between the two. A large amount of research exists trying to prove or disprove the main argument of the Lynn White Jr. essay, “The Roots of our Ecological Crisis”, which is: that Judeo-Christian traditions and beliefs are the reason for the overexploitation of the earth. This document caused a large spike in the research surrounding religion and the environment, therefore an in-depth account of the history of environmental concern within a Catholic setting is appropriate at this stage in the review.

Encyclical letters do not force views upon Catholics, but they are teachings of the Holy Father and are not meant to be ignored. The second section of this literature review will examine the concept of papal authority, specifically through the use of the encyclical letter. After this an in-depth discussion will take place about how *Laudato Si'*, the most recent papal encyclical, is a benchmark in Catholic history by comparing its contents to a historical account of many previously published encyclicals.

The following section will discuss the Catholic Church's social mission and how it traditionally and currently disseminates social messages to its followers. Since this study is focused on determining how effectively the church has disseminated *Laudato Si'* (just one year after its release), it is essential to understand how information is expected to flow through such a large organization. This concept will be explored in a section describing the theoretical framework this project was designed upon.

2.1 Catholicism and the Environment

2.1.1 Religious Influence on Environmental Attitudes.

Lynn White Jr. and his notorious paper “The Historical Roots of Our Ecological Crisis” (1967) is often credited for the emergence of this field of research. The paper alleges that Judeo-Christian beliefs and traditions are to blame for the overexploitation of the Earth (White 1967). While many studies exist that attempt to define the relationship and effects of religion on people’s environmental attitudes, a clear consensus about the nature of this relationship does not currently exist; some studies have found negative effects while others found positive influences or no influence at all (Sherkat and Ellison 2007, Clements et al 2014). This section will be limited to recent studies and is only meant to establish a basic understanding of the relationship between religion and environmental attitudes, rather than review all related studies.

Social structures are defined by two components - schemata and resources (Sherkat and Ellison 2007). Sociologist William H. Sewell, Jr. argued that schemata are known to be understandings, beliefs, and preferences, while resources are the physical representations of these beliefs, such as actual objects, formal doctrine, or dogma (Sherkat and Ellison 2007). In 2007 Sherkat and Ellison conducted a study and applied Sewell’s concepts of schemata and resources to the social structures of both religion and the environment. The study used data from the 1993 General Social Survey to explore how religious affiliation and participation can affect environmental concern and activism (Sherkat and Ellison 2007). While the conclusions of this study were uncertain about the exact role religion plays in environmental attitudes, it was noted that religious understandings do inform and engage environmental behavior, however they are diverse and multiplex therefore can be interpreted in many ways (Sherkat and Ellison 2007).

Another pertinent study in 2009 chose to embrace the multifaceted nature of religion by focusing on the role of the congregation and the effects of church membership on environmental attitudes (Djupe and Hunt 2009). The implications of religious beliefs occur in a dynamic social setting and religious organizations act as a social nexus, where political information is conveyed and religious norms and beliefs are interpreted and presented (Djupe and Hunt 2009). Previous studies viewed religious beliefs as fixed priors, however Djupe and Hunt argue further that religiosity is the partial product of social location, and that information distributed within the church has a stronger effect on attitudes than that of doctrinal or religiosity measures. This is not to detract from the importance of doctrine, but rather to emphasize the strong possibility of influence within each parish. The study also concluded that religious beliefs are constructed by the same types of sources that affect political opinions (Djupe and Hunt 2009). Similarly, Sherkat and Ellison found that engaging the environment usually involves political collective action.

Religious factors are not the only source of influence for environmental attitudes, however it should be noted that many studies do show some type of relationship between religion and environmental attitudes (Eckberg and Blocker 1989, Greeley 1993, Guth et al 1995, Sherkat and Ellison 2007, Djupe and Hunt 2009).

2.1.2 The History of Catholicism and the Environment in the United States

The modern environmental movement, developed in the 1970's as a response to public dissatisfaction of pollution in the 1950's and '60's, displayed indications of increased public awareness and concern after both the publication of Rachel Carson's (1962) *Silent Spring* and the infamous Cuyahoga River fire of 1969 (Allitt 1998, Mickey et al 2013, Scheid 2016). Despite growing national interest, early signs of concern for the environment within the Catholic Church did not appear until 1991, when the American Catholic Bishops published their first pastoral

declaration regarding the environment (Allitt 1998). Early developments in environmental thought were appropriate responses that encouraged Catholics to think differently about the natural world, but were not necessarily accepted without problems (Allitt 1998). Questions of religious and philosophical beliefs were brought into the foreground:

“Did God want people to dominate the natural world and exploit its resources, or to tread lightly upon its surface and cause the least possible disturbance? Did "nature" include or exclude human beings, and what were the implications for theories of "natural law"? What counted as relevant evidence in answering these questions?” (Allitt 1998).

Christians were forced onto the defensive and pressured to provide answers to these questions when early environmentalists including Lynn White Jr. and Paul Ehrlich began to lay blame upon them, pointing to thoughtless domination of the Earth and opposition to contraceptives as a cause of overpopulation (Allitt 1998).

While the environmental movement was growing and making these criticisms leading into the 1980's, most American Catholics were involved with many issues of human rights including the fallout from Vatican Council II, the Civil Rights Movement, and the beginnings of liberation theology (Allitt 1998). Catholics were indifferent to environmental issues during this period and even opposed them due to the belief that they were merely a distraction from more important issues like poverty and continued economic growth (Allitt 1998). An example of the anthropocentric type of thinking that was circulating around Earth Day in the 1970's is captured in this quote:

"We ought to get it quite clear where we stand," wrote Sidney Callahan in the National Catholic Reporter. "Faced with the choice of saving the redwood forests or one child's

brain potential which will be damaged by lack of protein, then I say 'good-bye redwoods, and good-bye trumpeter swans, and good-bye wild rivers, which only a family making \$20,000 [a lot in 1970 dollars!] can afford to enjoy... Sorry, but people do come first, last, and always." (Allitt 1998).

Social issues related to environmental degradation seemed to be sources of discontent, perhaps because issues like population control and abortion were presented as secular concepts that did not align with traditional Catholic teachings. *Humanae Vitae* was an encyclical released in 1968 by Pope Paul VI that focused on issues surrounding sex and contraception:

"But the most remarkable development of all is to be seen in man's stupendous progress in the domination and rational organization of the forces of nature to the point that he is endeavoring to extend this control over every aspect of his own life -- over his body, over his mind and emotions, over his social life, and even over the laws that regulate the transmission of life" (Pope Paul VI 1968).

Not all Catholics were satisfied by the teachings of *Humanae Vitae*, and those who had been hoping for a change used claims of overpopulation to criticize the Pope (Allitt 1998). During this time, pro-contraception Catholics found support in the population branch of environmentalism, but became less enthusiastic after the historic *Roe v. Wade* (1973) ruling in fear that it may imply pro-abortion sympathies (Allitt 1998).

By the late 1980's and early 1990's more of the American public was beginning to accept that nature was something that needed to be nurtured rather than conquered (Allitt 1998). American politics displayed this attitude when President Reagan was forced to swap out two members of the cabinet in 1983 in favor of 'greener' candidates (Allitt 1998). Republican candidate George

Bush ran on an environmental platform and when eventually elected appointed William K. Reilly as his EPA administrator, the first Catholic to hold such a high position in government (Allitt 1998). Reilly urged Catholics to take their role as stewards more seriously and urged the nation's bishops to make a pastoral declaration on the environment during his first year in office (Allitt 1998). During the next general election in 1992, Al Gore Jr., a prominent environmental advocate, was chosen as the vice-presidential candidate showcasing that regardless of political affiliation, environmental issues were becoming part of the conversation in the political realm (Allitt 1998).

Many figures have claimed that since the mid-1990's a 'greening' of Christianity has occurred (e.g. Clements *et al* 2014). Catholic interest in the environment was becoming a subject fit for theology, which triggered a reassessment of earlier works in hopes to link various aspects of Catholic tradition to environmental concerns. Thomas Berry, perhaps the best known Catholic environmental writer, urged his fellow followers to revitalize their views on the 'most urgent of issues' and even criticized the Ten Commandments for neglecting ecological issues (Allitt 1998). More Catholic theologians began incorporating the environment into their writing after the pastoral declaration by the American Catholic Bishops in 1991, which maintained a strictly anthropocentric focus, summarized biblical teachings, and used resources only from the Church's history (Allitt 1998). The meaning of the Genesis creation story was reinterpreted, the Noah story was re-examined and the meaning of celebrations of the natural world in Psalms was also reconsidered (Allitt 1998). However relevant, biblical evidence was easily contested and since the Bible was written before the concept of environmentalism existed, the idea of the biblical element in environmental theology was vulnerable to harsh criticism (Allitt 1998). How could ancient faith communities actually be 'green', when they are based on pre-modern text that knew nothing of the environmental crisis that we find ourselves in today (Troster 2013)? Traditional religions cannot be 'green' because there is a striking difference in current and past

technology and how it affects the environment, and secondly scientific knowledge has increased exponentially leading to a different worldview compared to our ancestors (Troster 2013). This point of view was gaining support and in 1990 Sean McDonagh published a paper which argued that concern for God's creation was a low priority for Catholics (McDonagh 2013).

The field of integral ecology began to emerge around this time, as three thinkers independently proposed integral approaches to ecology: Thomas Berry, Leonardo Boff, and Ken Wilber (Kelly et al 2013, Mickey et al 2013). Widely used in contemporary environmental circles, the definition of the term itself is often unclear (Conley 2015). Integral ecology has been defined as a quest for knowledge of the depth and complexity of relationships between beings (Mickey et al 2013). It has also been defined as a multidisciplinary study of environmental entities, while some economists use the term to argue that environmental issues cannot be decoupled from questions of production and consumption (Conley 2015). Integral ecologies both challenge the mechanistic approach that characterize imperial views of nature, while including the insights achieved by those very approaches (Mickey et al 2013). Although the field of integral ecology continued to grow through the 1990's and beyond, its intricacies will not be covered nor will all contributions during this time be reviewed. This section is only meant to provide a general background as to how the term developed in reference to its more contemporary use.

St. John Paul II (papacy from 1978-2005) and, more significantly, Pope Benedict XVI (papacy from 2005 - 2013) are often credited with laying the foundation for the ecological thinking that Pope Francis is known for today (Drummond 2012, Scheid 2015). In "Peace with God the Creator, Peace with All of Creation," John Paul II wrote:

"Modern society will find no solution to the ecological problem unless it takes a serious look at its lifestyle. ... Simplicity, moderation and discipline, as well as a spirit of sacrifice,

must become a part of everyday life, lest all suffer the negative consequences of the careless habits of a few" (Warner 2010).

In 2007 an article in the National Catholic Reporter interviewed Walt Grazer, manager of the Environmental Justice Program for the U.S. Conference of Catholic Bishops, who said that Catholic environmental activism had grown to such an extent that he was unable to keep track of it all (Allen 2007). The interviewer in this article finishes by saying that he believes ecology and natural resources have finally made it onto the list of trends shaping global Catholicism (Allen 2007).

Some critics would argue that although the two previous papal pontificates may have started the dialogue, their efforts were not earth-shattering, nor were they very successful in gaining support for the Catholic environmental movement (Warner 2010, McDonagh 2013). "Are we just throwing holy water on a secular environmental movement?", asked the U.S. Catholic in 2010 in an interview with Keith Douglass Warner, O.F.M. In 2014 a study was published that used data from the 1993 and 2010 General Social Surveys to compare and analyze how 'green' self-identified Christians have become (Clements et al 2014). The results showed no clear evidence of a greening of rank-and-file Christians in the general public from 1993 to 2010, and stated that self-identified Christians actually reported lower levels of environmental concern than did non-Christians or nonreligious individuals (Clements et al 2014). While to some it may have appeared that the church was becoming more 'green', another point of view describes why ecological concern in the Catholic Church is still in its infancy: none of the previous documents give a strong sense of urgency or a sense of the magnitude of the ecological crisis, nor are the documents based on ecological reflections of empirical or scientific data (Warner 2010).

In the background of all this supposed 'greening', eco-theology emerged and has been described as the integration of traditional theological concepts with a new scientific perspective

on the natural world (Troster 2013). Although there is no clear definition of eco-theology, one of the first Christian eco-theologians, H. Paul Santmire, describes it as “theological discourse that highlights the whole ‘household’ of God’s creation, especially the world of nature, as an interrelated system” (Troster 2013). An alternate view posed by Jay McDaniel sees the philosophical foundation of the eco-theology movement as an orientation towards life, rather than consumerism and fundamentalism (Troster 2013). Catholic theologian John Haught described early religious responses to the Lynn White Jr. attack against Judeo-Christian traditions as an ‘apologetic’ religious response to environmentalism; the traditions as they were, could be an adequate response the environmental crisis while espousing a stewardship ethic (Troster 2013). However, Lawrence Troster believes that eco-theology has the potential to go beyond this ‘apologetic’ response and bring a more ethical response to the foreground. Troster attempts to better define eco-theology with some of the following characteristics: Eco-theology proceeds from new scientific perspectives, usually includes some type of personal story (often expressed through a deep sense of place), has been motivated by ecofeminism (ecological and feminist concerns combined both of which resulting from a male dominated society), and uses retrieval, reinterpretation, and reconstruction as methods to transform traditional religion (Troster 2013). Much of the recent literature about eco-theology is written from a Christian or Jewish perspective, but not focused in the Catholic denomination.

Similar to eco-theology, integral ecology has seen a resurgence of interest since the release of *Laudato Si'*, in which integral ecology is a key concept (Conley 2015, Reese 2015, Castillo 2016). Integral ecologists who consider religious dimensions of environmental problems, bring ethical considerations to the center of the conversation (Mickey et al 2013). Many religious leaders have argued that the ecological crisis is also a moral crisis (Scheid 2016) and that the development of a sustainable relationship with the planet requires a moral revolution (Sorondo and Ramanathan 2016). In *Laudato Si'*, Pope Francis writes:

“137. Since everything is closely interrelated, and today’s problems call for a vision capable of taking into account every aspect of the global crisis, I suggest that we now consider some elements of an integral ecology, one which clearly respects its human and social dimensions.”

A theological and ecological reorientation of principles of Catholic social thought focused around the theme of the cosmic common good has been proposed (Scheid 2016). The Pope has described the ecological crisis as a “sign of the ethical, cultural and spiritual crisis of modernity” that requires a “bold cultural revolution” (Scheid 2016).

Since the release of *Laudato Si’*, the transformative potential and the future development of a synergy between science, policy, and religion has been cited as the real innovation of the document (Sorondo and Ramanathan 2016). The definition of integral ecology that the encyclical letter most often references is the version that environmental and economic problems are inseparable (Conley 2015). The Pope is not seeking to answer scientific questions or supplant politics, but is calling for individuals to take responsibility and maintain political pressure for interdisciplinary dialogue in order to allow both science and religion to play a role in the new dialogue he is seeking (O’Neill 2016). Being the first papal encyclical focused on the environment, it is of interest to policy-makers and practitioners for a couple reasons: it provides a unique position from a religious institution with 1.1 billion followers globally and the Pope’s perspective is highly influential within and even beyond the Catholic community (O’Neill 2016). The encyclical may also represent a shift in thinking within the Church, away from anthropocentrism and towards an eco-centrism that sees us all as stewards of the environment (O’Neill 2016). Since the encyclical is such a landmark document, the next section will discuss

papal encyclical authority followed by a brief history of previous encyclicals and their content to display the unique focus of *Laudato Si'*.

2.2 The Catholic Papal Encyclical

This project examines the dissemination of the most recently released encyclical within a specific region. In order to place the stated objectives within an established framework, it is important to understand the authority this type of document exerts over the Catholic community. *Laudato Si'* was a unique occurrence among papal documents and in order to display its unprecedented focus, this section will also compare its contents to that of past encyclical letters.

2.2.1 Encyclical Authority

The papal encyclical takes the form of a letter that is usually addressed to bishops throughout the Catholic Church. These messages are categorized as Catholic Social Teaching and are publicly available for all to read. The information discussed here will be used to directly compare what is expected to happen with a new encyclical letter, to what was observed during field research.

While encyclicals do not lay out new church doctrine they are essentially official statements and are considered authoritative teaching (Masci 2015). Popes can choose to communicate with followers in other ways such as apostolic exhortations, homilies or sermons, however encyclicals carry more weight as they are considered formal documents (Masci 2015). Catholic Social Teaching is a collection of doctrine including works from Catholic councils, popes and synods and its purpose is to bring attention to contemporary social concerns and provide a guideline for response (Donaldson and Belanger 2012). The encyclical letter itself is not considered to be infallible, nor is it thought to be divine in nature, however regardless of how burdensome it is to accept and follow, the laity is expected to 'humbly assent' to the new

teachings (Parisi 2012). The pope's words are to be taken seriously and considered by all members of the Church. The Dogmatic Constitution on the Church [Lumen Gentium], one of the principal documents of the Second Vatican Council, reinforces this concept and states:

“Religious submission of will and of mind must be shown in a special way to the authentic teaching of the Roman Pontiff [pope], even when he is not speaking *ex cathedra* [with the full authority of office]. That is, it must be shown in such a way that his supreme magisterium is acknowledged with reverence, the judgments made by him are sincerely adhered to, according to his manifest mind and will (Pope Paul VI, 1964)”.

The papacy is regarded as the most esteemed pastoral office in the Catholic Church and even within secular society is recognized by many as a position held by a wise spiritual leader whose teachings may not be easily ignored (DiLeo 2015). Pope Francis has the advantage of leading a colossal worldwide organization and his popularity is evidenced by the fact that he has the second most popular twitter feed (Jamieson 2015). When this Pope speaks, people listen (Jamieson 2015).

The recent encyclical, *Laudato Si'*, is perhaps more influential than previous papal literature regarding the environment and potentially extends the pope's authority beyond the Catholic Church (DiLeo 2015). Pope Francis is clearly speaking not only to his following, but to all people of goodwill and the significance of this letter is shown through an increasing amount of evidence displaying that the road to less environmental degradation requires addressing not only environmental issues, but social, political and economic inequality as well (O'Riordan et al. 2015). Many environmental movements have been inspired by documents, religious or not, but the real test will be to see if the influence of the encyclical will grow in dominance or dissipate

with time (O’Riordan et al. 2015). The next section will discuss the contents of *Laudato Si’* compared with previous encyclicals in greater detail.

2.2.2 Historical Encyclical Content

Benedict XIV is credited with the inception of modern encyclical writing and did so to “preserve the Catholic faith and either preserve or restore the discipline of morals” (Schuck 1991). Since his decision to emphasize this new medium in 1740, nearly 300 letters by nineteen popes have resulted in an impressive body of Catholic Social Teaching filled with observations and recommendations concerning human fellowship in society (Schuck 1991). Although Pope Benedict XIV was the first to issue an encyclical, and refer to it as such, almost a third of all encyclicals were written by Leo XIII and commenced what is understood to be the modern body of Catholic Social Teaching (Masci 2015, USCCB 2015). The content of encyclical letters will be discussed chronologically and separated into four sections, ending with a section dedicated to *Laudato Si’* since this project is based upon this specific document.

The Pre-Leonine Period (1740 - 1877)

This period of papal thought is marked by Pope Benedict XIV’s release of *Ubi Primum “On the Duty of Bishops”* (Masci 2015) and includes seventy-seven letters produced by nine different popes (Schuck 1991). While most are addressed to bishops, there are a few exceptions addressed to ‘all the faithful’, missionaries, and heads of religious congregations (Schuck 1991). Popes of this time were mostly interested in morality and worship, and focused on many problems with practices in European social life that can be grouped into five categories: religion, politics, family, economics, and culture (Schuck 1991). While commonly viewed as insignificant, pre-Leonine social teachings play an important role in establishing the content and coherence of encyclical social teachings as a whole (Schuck 1991).

The Leonine Period (1878 - 1958)

The Leonine period delivered 185 encyclical letters written by a total of five popes and can be clustered chronologically as 'pre-war', World War I', and 'World War II' (Schuck 1991). Such a wide breadth of documentation is difficult to summarize, however some of the issues the popes of this period concerned themselves with were participation in politics, civil disobedience, communitarian orientation toward social ethics, Church-state separation, and concepts of social justice and individual property. Recently, the United States Conference of Catholic Bishops (USCCB) issued a discussion guide of *Laudato Si'* intended for use in small groups within parishes in America. This guide includes a 'Social Encyclical Primer' and provides highlights of encyclicals that are considered to be part of the Church's modern body of social teaching. The two earliest encyclicals mentioned in this discussion guide are written by Pope Leo XIII and Pope Pius XI, respectively, and are separated by 40 years, but discuss similar topics such as worker's rights, class conflicts, and critiques of socialism, communism and limitless capitalism (USCCB 2015). Leo XIII, who led the church from 1878 to 1903, wrote an astounding 90 encyclical letters, which as displayed in figure 2.1, is significantly more than the pontiffs to follow (Masci 2015).

Popes and Encyclicals Since Leo XIII

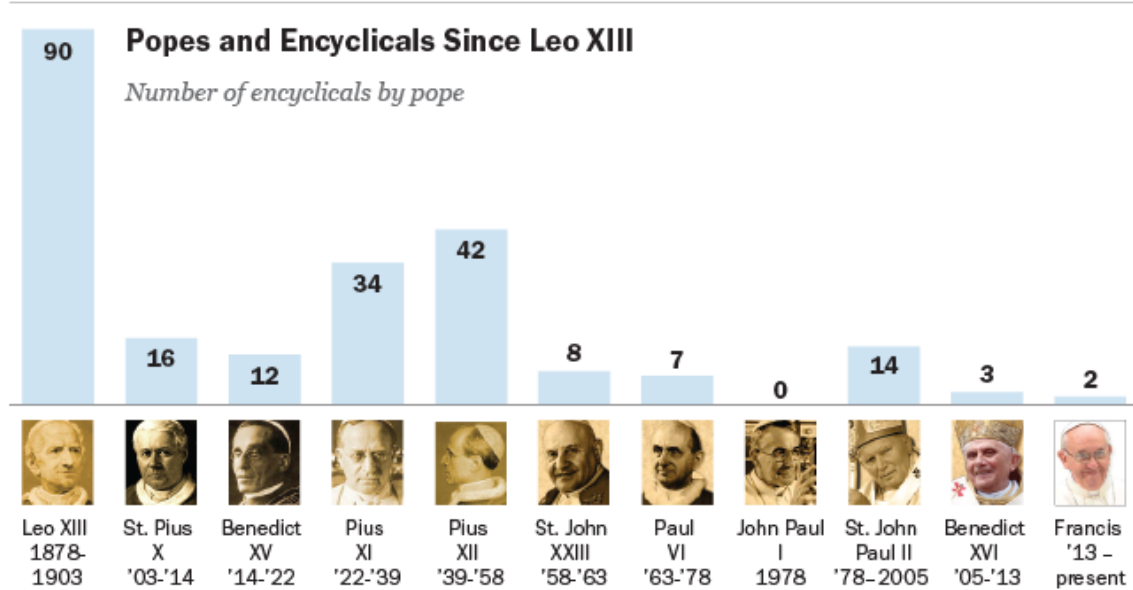


Figure 2.1 Popes and their encyclicals since Leo XIII. Source: Pew Research Center.

In 1950, Pius XII decreed that evolution was not in contention with Catholic faith, so long as human uniqueness was maintained (Peppard 2015). The integration of evolutionary theory into Catholic theology is notable in its own right, and well into the next period John Paul II reinforced and extended this position by noting that scripture can be reinterpreted as knowledge is expanded over time (Peppard 2015.) As in the previous period, general issues discussed were mostly surrounding topics of religion, politics, family, economics, and culture with no distinct mention of environment issues (Schuck 1991).

The Post-Leonine Period (1959 - present)

This section will cover themes in encyclical letters beginning with the papacy of Pope John XXIII through present day with the exception of *Laudato Si'*, which will be discussed separately. The period begins with the completion of the work done by the Second Vatican Council in 1965 and (Tikkanen 2008) compared to the previous period there is a dramatic drop in encyclical output

(Schuck 1991). Most letters are still addressed to bishops, however one letter written by John Paul II, used a more inclusive salutation of 'all men of goodwill' (Schuck 1991).

In 1961 and 1963 Pope John XXIII released two encyclicals calling for world peace and an improvement of social relations and human rights (USCCB 2015). A few years later Pope Paul VI released a letter discussing issues of worker's rights and the state of the economy (USCCB 2015). In an apostolic letter written in 1971, Pope Paul VI briefly spoke out against exploitation of the environment and feared that humanity may become the 'victim of this degradation' and that we may very well be 'creating an environment for tomorrow which may be intolerable' (Drummond 2012, Ellard 2012).

Credit for laying a firmer foundation for environmental concern in Catholic Social Teaching should be given to John Paul II, who from the very first encyclical showed an awareness of its importance (Drummond 2012). Over the course of his papacy, Pope John Paul II released letters discussing a wide range of issues from inequality to economic life, to abortion and euthanasia (USCCB 2015). In his 1988 encyclical, *Sollicitudo Rei Socialis* "*On Social Concern*", Pope John Paul II briefly mentioned ecological issues, but it was not until his message delivered in honor of World Peace Day in 1990 that his concern for the environment became more widely noted (Ellard 2012). John Paul II called on all people of goodwill to change their lifestyles to combat the curses of environmental degradation, poverty and war (Ellard 2012). In his encyclical, *Centesimus Annus*, "Hundredth Year", John Paul II explicitly describes the ecological consequences of improper consumerism, yet in the same document calls for cooperation between different people so that all can 'dominate the earth', thus edging uneasily towards a point of view of human control that had long been criticized (Drummond 2012).

Pope Benedict has been called a 'green pope' and a few of his teachings are suffused with environmental awareness, although some believe his concern does not go far enough (Ellard

2012). Benedict XVI made Vatican City the first carbon neutral sovereign state and installed solar panels at the Vatican and his home (Ellard 2012). He has called on humanity to make appropriate use of Earth's resources while acting with future generations in mind and has highlighted the negative environmental impact of consumerism (Ellard 2012). Pope Benedict XVI wrote a letter in 2005 dedicated to the need for charity within the church and in 2009 published his most significant encyclical, *Caritas in Veritate*, "Charity in Truth", a letter discussing issues including poverty, social instability and care for creation. (Ellard 2012, USCCB 2015). Human self-centeredness, greed and consumerism are pointed to as the root of these social injustices, while a stronger respect for the intrinsic balance of human need and creation is called for (Ellard 2012). In 2007 Benedict XVI delivered a message on the World Day of Peace and cites John Paul II's *Centesimus Annus* in affirming that the ecology of nature exists alongside the ecology of humans, also demanding a social ecology as well (Drummond 2012).

From this overview we can see that environmental issues, although inextricably linked to issues like poverty and human rights, have not yet been a main focus in encyclical letters. The next section will investigate the first encyclical letter of this kind: *Laudato Si'*.

Laudato Si': A Benchmark for Environmental Concern in Catholic Social Teaching

Pope Francis is the first Jesuit pope and has written the first encyclical about ecology which draws heavily upon scientific consensus and calls for a new way of thinking in light of worldwide environmental degradation (Peppard 2015). This encyclical is an occasion to reconsider the many forms of engagement between science and the Catholic Church over time (Peppard 2015). It is also fair to say that this letter represents the most recent and authoritative instance of the relationship between the Church and modern science (Peppard 2015).

Pope Francis' letter continues and develops the work of both Pope John Paul II and Pope Benedict XVI, but also marks a new direction for Catholic Social Teaching on ecology (Peppard 2015, Stephenson 2015, Scheid 2016). *Laudato Si'* strongly rejects anthropocentrism and stresses the need for a deep connection and consideration of nature, a concept absent in previous letters (Scheid 2015). Pope Francis is hardly the first religious leader to bring climate justice front and center; his predecessors John Paul II and Benedict XVI brought some important conversations into the foreground, but it seems like a fair question to ask why it has taken the Catholic Church so long to step up in a serious way (Stephenson 2015). Nevertheless, the fervor and amount of engagement around *Laudato Si'* seems to exceed that of his predecessors (DiLeo 2015). The fact that in 2009 only 33% of Catholics were even aware of official Catholic environmental teachings suggests that the papal office of John Paul II and Benedict XVI alone were insufficient to generate a far-reaching interest in the topic (DiLeo 2015).

The Vatican now accepts scientific consensus on climate change and also accepts that human understanding changes as science advances (Peppard 2015). Therefore the reinterpretation of scripture and the rethinking of concepts of God and human being's roles in the cosmos is implied (Peppard 2015). The reinterpretation of scripture is supported in *Laudato Si'* and even states that biblical interpretations should adapt to scientific consensus (Peppard 2015). Pope Francis specifically disavows any biblical interpretation that generates an attitude of human domination over the world, which seems to be a legitimate response to some of the well-known criticisms of Judeo-Christian traditions (Peppard 2015).

Another stark difference between *Laudato Si'* and other social encyclicals can be seen in the footnotes. Traditionally only official social teachings of other popes are referred to, however Pope Francis' departure from this includes references from national bishops' conferences, U.N. documents and even figures from other religions (Ahern 2015). In the past this was done to

inform the reader of the continuation of a tradition that reflects a specific theology of the papacy which views the pope as the main teacher of Catholic doctrine, thereby defining distinct roles between teacher and student (Ahern 2015). Pope Francis addressed this point specifically and called for the inclusion of those with doctrinal authority in order to better serve the mission of the church (Ahern 2015).

Before *Laudato Si'* was even published it received criticism from sources in and outside of the Catholic Church which bears testimony to its relevance and importance (O'Connell 2015). It reveals the concern among powerful and influential sectors that could be strongly affect, with consequences in social, political and economic fields (O'Connell 2015). In any case, rather than laying down the law the Pope is inviting conversation (Jamieson 2015) and seems to have been more widely engaged than John Paul II or Benedict XVI (DiLeo 2015). More American Catholics had a 'very favorable' opinion of Pope Francis before the release of *Laudato Si'* than they had of either of the previous two office-holders at any time (DiLeo 2105).

John Paul II named Saint Francis the patron saint of ecologists in 1979 and while correlation may not imply causation, the choice of Pope Francis' pontifical name seems appropriate as he has advocated the concept of integral ecology as a combination of theology and science while infusing moral values with pragmatic guidelines (Peppard 2015). "Francis, as he brings a message merging ecology and liberation theology, is the climate-justice pope" (Stephenson 2015).

2.3 Methods of Dissemination of the Church's Social Mission

Before Vatican II (1962-65) the social mission would have been described as twofold:

divinization (the act of sanctifying God's people) which was the work of the hierarchy and clergy and *humanization* (working for the advancement of the world) which was the work of the laity (Curran 2011). However after Vatican II the social mission became singular and can be

described as a mission to struggle for a transformation and justice in the world, with less of a division between the roles of the clergy and the laity (Curran 2011). Three specific developments that contributed to this understanding of the social mission include the emphasis of the Church as a sign of the reign of God, a shift in moral theology away from an approach based almost entirely on natural law, and the development of the understanding of the Church-world relationship (Curran 2011). In general, Catholic theologians and teachers would agree that preaching the Gospel is tightly tied to the social mission of the Church and further emphasizes the difference in pre-Vatican II thought about the active role of the laity in the evangelization of the world (Curran 2011). This has resulted in a greater participation of lay people in many areas of the Church including religious education, pastoral councils, and justice and peace ministries (Curran 2011). The most important work of the Catholic Church's social mission starts with the individual and resonates in all aspects of their life (Curran 2011).

The formation, education, and motivation of all Catholics to work towards the common good in their daily lives is the most important role of the Church's social mission while the most relevant instruments of delivery are through bishops, schools, and parishes (Curran 2011). Traditional approaches to spread social information in the Catholic Church are methods such as catechism, catholic social teachings, or mass - all of which usually require one's presence. Due to advances in broadcast, recording, and digital technologies, religious messages can now be delivered in a myriad of ways, (Wienclaw 2015) and a person's presence is not necessarily needed. In the past, churches often incorporated media into their ministries to better communicate with their congregation, widen their reach, or reach the unchurched (Wienclaw 2015). In this day and age the various media used in ministry allows churches and religious groups to reach a wider audience and even to effect social change (Wienclaw 2015). Radio broadcasting of religious messages was relatively popular in the mid-twentieth century and as technology improved and televisions became a fixture, local churches began purchasing air time

on both radio and television to broadcast sermons or even entire services (Wienclaw 2015). Further advances in technology, leading to the advent of the internet, have allowed information to be more available than ever before.

Bishops have an important teaching role within the Church and in post-Vatican II times have taught the social mission of the church in some significant ways, specifically through sponsorship of the Call to Action Conference in 1976 and two pastoral letters in the 1980's (Curran 2011). During this time a broad interest in the Church's social mission was stimulated, however the bishops did not implement a large number of their own recommendations (Curran 2011). Since then, the bishops have not followed the process of broad public consultation and as a consequence, their statements have had minimal effect on American public life and the life of the Church (Curran 2011). Individual bishops have oversight of their own diocese, therefore they have a responsibility to ensure the social mission of the Church is seen as essential (Curran 2011). This section will provide a brief discussion of some traditional and modern methods of information dissemination.

Catechism

The primary function of all Christian Churches is education (Curran 2011) and Catechism is a fundamental text that contains Christian truths and is organized in a way that will facilitate its understanding (USCCB n.d. c). The Catechism serves a few purposes: to convey a summary of the essential content of Catholic faith and morals, as a point of reference for national and diocesan catechisms, as a positive exposition of Catholic doctrine, and is intended to assist teachers of the catechesis (USCCB n.d. c). The Catechism is intended for all, but first for bishops as teachers of the faith, and through them is addressed to priests, catechists and all others (USCCB n.d. c). The Catechism does not include a methodology for its communication or study of itself by people of different ages and circumstances, but rather is a document that is a

complete and accurate exposition of Catholic doctrine (USCCB n.d. c). However there are guides to help assist with methodology and to incorporate the audience and cultural context in which the Catechism will be taught (USCCB n.d. c). The Catechism presents Catholic doctrine in the context of the Church's history and tradition and makes frequent reference to scripture, writings of the Fathers, the lives and writings of saints, and conciliar, papal and liturgical texts (USCCB n.d. c). The teaching is organized into four main parts and are referred to as pillars on which the Catechism is built (USCCB n.d. c). These four pillars are:

“1) the Creed (what the Church believes), 2) the Sacraments (what the Church celebrates), 3) the Commandments (what the Church lives) and 4) the Our Father (what the Church prays)” (USCCB n.d. c).

Most children begin Catechism at a young age and continue with weekly classes through high school, however this can vary per region. This method of dissemination requires active participation and conveys the history, beliefs, and traditions of the Catholic Church. Pope Benedict XVI stressed the importance of educating the laity about church social doctrine in an official message to Cardinal Peter Kodwo Appiah Turkson, president of the Pontifical Council for Justice and Peace, in 2010 (Pope Benedict XVI 2010). Pope Francis has furthered this thought with an environmental emphasis when he refers to the Catechism and says:

“213. Ecological education can take place in a variety of settings: at school, in families, in the media, in catechesis and elsewhere” (Pope Francis 2015).

Catholic Social Teaching

The crucial role of parishes in the Church's social ministry was first addressed in a document published by the U.S. Bishops in 1993 (Curran 2011). The document names the parish as the central place to carry out the social mission of the Church and puts a heavy emphasis on Catholic Social Teaching, offering a framework for integration at the parish level. Modern Catholic Social Teaching is a body of text made up of papal, conciliar and episcopal documents (USCCB n.d. b). Currently the United States Conference of Catholic Bishops has identified several key themes that are at the core of Catholic social tradition: life and dignity of the human person, call to family, community and participation, rights and responsibilities, option for the poor and vulnerable, rights of workers, solidarity, and care for God's creation (USCCB n.d. b). In 2005 the Church's Pontifical Council for Justice and Peace published the Compendium of the Social Doctrine of the Church, which provides a complete description of principles and values to help explain the teaching (Gutierrez 2012). This document lists common good, the universal destination of goods, subsidiarity, participation and solidarity as five main principles of the social teaching. Comparing the two lists of main themes, it is obvious that the core values are updated to reflect new additions as they arrive.

Despite efforts of Catechism and papal encouragement, it was recognized that the social doctrine was not shared or taught in a consistent way in too many locations, so in 1995 the USCCB established the Task Force on Catholic Social Teaching and Catholic Education (Curran 2011, USCCB n.d. a). This task force brought leaders together to assess and strengthen efforts and develop new directions for the future, and in its overall assessment found that far too many Catholics were not familiar with the basic content of Catholic Social Teaching, nor did many adequately understand that the social teachings are an essential part of the Catholic faith (USCCB n.d. a). When New York Catholic Al Smith ran for president in 1928 and was asked about papal encyclicals, his alleged response was, "What the hell is an encyclical?"

(Curran 2011). A large gap exists between teaching and practice as well as between what people hear in homilies on Sunday and the application of these principles in their daily lives (Rakoczy 2015). Therefore more needs to be done to share the social mission and message of the Church and new initiatives have been encouraged such as an increase in resources and programs starting in elementary and secondary schools, the formation of leadership programs and a stronger focus on Catholic Social Teaching in meetings and publications at the diocese level (USCCB n.d. a). Other efforts include a recommendation for national Catholic organizations to produce guidelines and aids, while calling on Catholic educational material producers to incorporate the principles of Catholic Social Teaching more explicitly and more frequently (USCCB n.d. a).

One reason that perhaps these teachings haven't been put into practice more consistently is the fact that the Church is a diverse global body in which leaders and congregations take different positions in their own shifting political contexts (Rakoczy 2015). For example, some American Catholics were not happy with John Paul II's condemnation of the war on Iraq in 2003, yet in El Salvador in the 1980's and '90's the Church didn't hesitate to affirm the primacy of peaceful resistance (Rakoczy 2015). One extreme view maintains that the Church and its leaders should restrict itself to religious teachings and have no competency to address political, economic, or legal issues (Curran 2011). Regardless, stronger leadership from Catholic bishops is vital in such a large hierarchical institution (Rakoczy 2015). Many Catholics are eager to learn more about their faith and shouldn't need to wait for approval from their pastors to engage in works of peace and social justice and in this case could even help to enlighten others to the Church's social teachings (Rakoczy 2015).

Digital Media Approaches

Pope Francis has a keen understanding of the importance of an online presence in today's world and by his order the Vatican's communications department is undergoing a huge reorganization (Phys.org 2016). The Catholic Church acquired the domain name '.Catholic' in 2013 and in its latest move to upgrade methods of communication, has created a new office charged with promoting its use, which will assure internet users they are dealing with officially sanctioned sites (Phys.org 2016). Although it appears that Pope Francis has more readily embraced modern forms of media and social networking, the Church has had an official stance on the topic for at least 15 years. In 2002 the Pontifical Council for Social Communications published a document entitled "The Church and Internet" that states:

"It is important, too, that people at all levels of the Church use the Internet creatively to meet their responsibilities and help fulfill the Church's mission. Hanging back timidly from fear of technology or for some other reason is not acceptable, in view of the very many positive possibilities of the Internet. "Methods of facilitating communication and dialogue among her own members can strengthen the bonds of unity between them. Immediate access to information makes it possible for [the Church] to deepen her dialogue with the contemporary world..." (Foley 2002).

After describing the Church's opinion, the document also specifically addresses church leaders, pastoral personnel, educators, catechists, and the laity and recommends an increased internet presence thereby encouraging the use of the internet as a tool for communication (Foley 2002).

Pope Francis is embracing this method of communication which is evidenced by the fact that he is one of the most prominent figures on Twitter, regularly sends out video messages on

YouTube, and recently made his debut on Instagram, acquiring 2.2 million followers within just over two weeks (Phys.org 2016).

2.4 Theoretical Framework

This research has been guided by the assumption that papal encyclicals have authority in the Catholic community. In order to establish a framework with which to assess the dissemination of *Laudato Si*, the research will be evaluated through the lens of a stage-based model, Diffusion of Innovations. Within this document an innovation is defined as the act or process of introducing new ideas or methods, and for the purpose of this study *Laudato Si* is to be considered an innovation.

2.4.1 Diffusion of Innovations

A stage-based model was chosen because rather than viewing change as a continuous process, this type of model proposes that behavioral change occurs in a series of different stages where barriers may vary (Bywood et al. 2008). In particular, Diffusion of Innovations seeks to explain how changes are taken up by a population and offers valuable insights into the process of social change (Robinson 2009). The diffusion of a new idea has four main elements (Bywood et al. 2008) that will be discussed here in detail.

The Innovation

Certain qualities of the innovation itself will determine the rate of adoption or the success of an innovation (Robinson 2009). These qualities are as follow:

- **Relative advantage:** this refers to the degree to which an idea is better than the one it supersedes, which depends on the perceptions and needs of the particular group. The greater the perceived relative advantage, the higher the adoption rate is likely to be.

- Compatibility with existing values and practices: this is the degree to which an innovation is seen as consistent with the values and needs of potential adopters.
- Simplicity and ease of use: this is the degree to which an idea is perceived as difficult to understand and use.
- Trialability: this is the degree to which an innovation can be tested out and an idea that is trialable is less risky to an adopter.
- Observable results: Visible results stimulate peer discussion and can lower uncertainty in a group (Robinson 2009).

Communication channels

The adoption of new products or behaviors depends on the management of risk and uncertainty, since it's usually only the people we trust who can offer credible reassurances (Robinson 2009). Communication is the process by which participants create and share information with each other, and diffusion is a particular type of communication that involves a new idea (Rogers 1983). Communication channels are the means by which information moves from one individual to another (Rogers 1983). Mass media channels are often the fastest and most effective methods to inform potential adopters and include sources like radio, television, and newspapers (Rogers 1983). However interpersonal channels of communication are more effective in persuading individuals to change or adopt a new idea; interpersonal channels involve a face-to-face exchange between two or more people (Rogers 1983).

Another element to consider is that the transfer of ideas occurs most frequently between two individuals who are alike, or homophilous (Rogers 1983). Homophily is the degree to which pairs are similar in certain attributes, such as beliefs, education, social status, etc. (Rogers 1983). More effective communication occurs when two individual are homophilous, however due

to a defined difference of understanding between those that have already adopted and those looking to adopt the innovation, the very nature of diffusion demands there be at least some degree of heterophily between two participants which may cause ineffective communication (Rogers 1983).

Time

The explicit inclusion of time within the Diffusion of Innovations model is one of its strengths (Rogers 1983) and is conceptualized in figure 2.2. This figure describes the process by which an individual moves from their first knowledge of an idea, to forming an opinion of the innovation, to a decision to adopt or reject, to implementation of the idea and finally to confirmation of the decision (Rogers 1983).

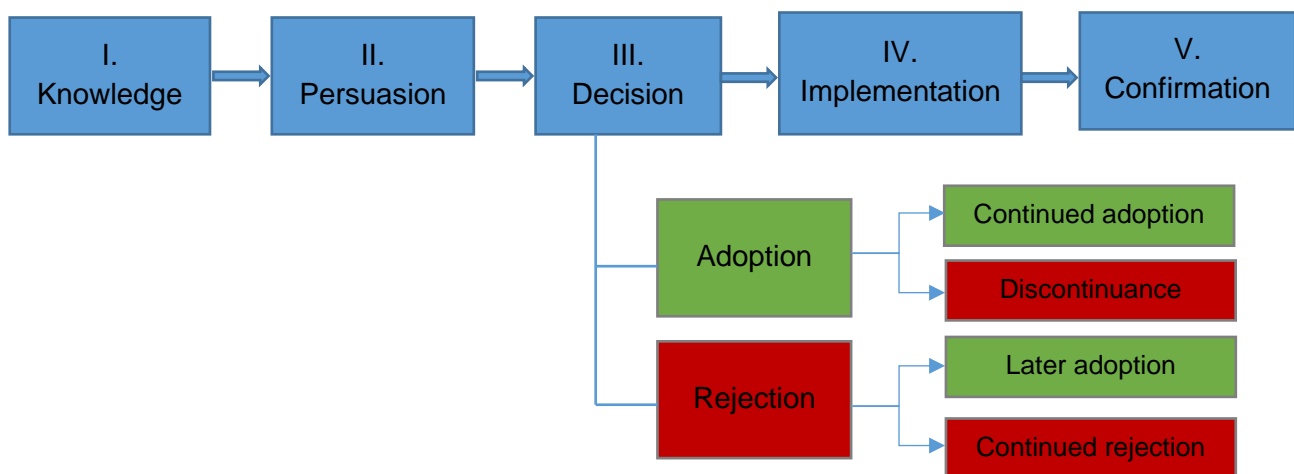


Figure 2.2 Stages in the Innovation-Decision Process. Adapted from Rogers 1983.

The innovation-decision process can lead to either adoption or rejection and such decisions can be reversed at a later point (Rogers 1983). The process involves time, in the sense that the stages usually occur in a time-ordered sequence displayed in figure 2.2, and is an important dimension in the process (Rogers 1983).

Within this theory there is a strong emphasis on the role of 'change agents' and five different categories of adopters based on their innovativeness: innovators, early adopters, early majority, late majority, and laggards (Bywood et al. 2008). Figure 2.3 displays the common breakdown of these categories, known as the Diffusion of Innovations curve. Each group has its own 'personality' and should be approached differently when diffusing information (Robinson 2009).

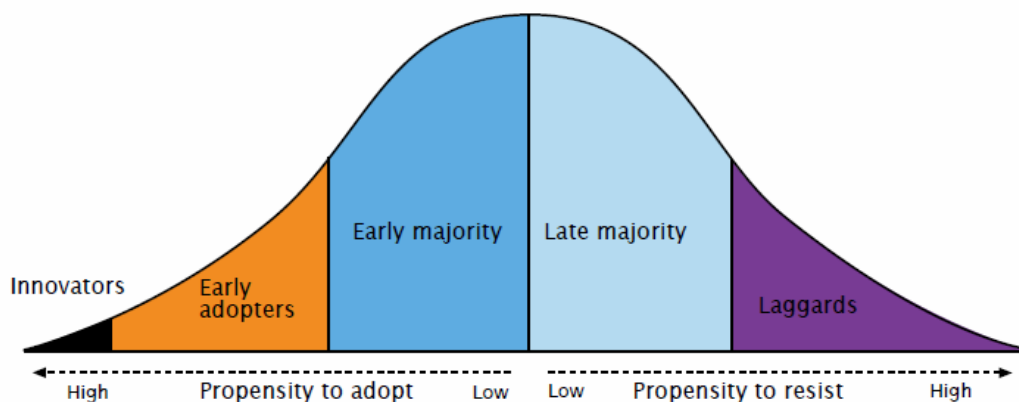


Figure 2.3 The Rogers Diffusion of Innovation curve. Source: Robinson 2009.

Innovators are an exception because they are active information seekers and can cope with larger levels of uncertainty about an innovation (Rogers 1983). Early adopters will join in once the benefits start to become apparent and are an easy audience that don't require too much persuasion (Robinson 2009). Early majorities are pragmatists that are comfortable with moderately progressive ideas, but require solid proof in order to adopt (Robinson 2009).

Conversely, the late majority are conservative pragmatists who are not quick to take risks and are generally uncomfortable with new innovations (Robinson 2009). Laggards hold out until the bitter end and see high risk in adopting a particular product or behavior (Robinson 2009). Knowing what percentage of a specific social system has already taken up the innovation can be an important tool in deciding how to proceed (Robinson 2009).

The social system

A social system is defined as interrelated units (e.g. individuals, groups or organizations) that come together to accomplish a common goal (Rogers 1983). The adoption rate of an innovation can be affected by many factors within a social system, such as how the social structure within a system affects diffusion (hierarchy and rank), established norms within a system, and the opinion of leadership within a social system (Rogers 1983).

The stages described in this process theory are similar to those described in Prochaska and DiClementes's (1986) Trans-theoretical Model (table 2.1), which is generally applied to behavior and lifestyle changes and is the most widely used stage-based model (Bywood et al. 2008).

Table 2.1 A comparison of Diffusion of Innovations and Trans-theoretical Model stages.

Source: Bywood et al. 2008.

| Stages in Rogers' Diffusion of Innovations theory | Prochaska and DiClemente's TTM |
|---|--------------------------------|
| <i>Knowledge stage</i> <ul style="list-style-type: none"> Recall of information Comprehension of messages Knowledge/skill for effective adoption | <i>Pre-contemplation stage</i> |
| <i>Persuasion stage</i> <ul style="list-style-type: none"> Liking innovation Discuss new behaviour with others Accept message about innovation Form positive image of message and innovation Seek support for innovative behaviour from system | <i>Contemplation stage</i> |
| <i>Decision stage</i> <ul style="list-style-type: none"> Intend to seek additional information about innovation Intend to try innovation | <i>Preparation</i> |
| <i>Implementation stage</i> <ul style="list-style-type: none"> Acquire additional information about innovation Use innovation regularly Maintain use of innovation | <i>Action</i> |
| <i>Confirmation</i> <ul style="list-style-type: none"> Recognise benefits of using innovation Integrate innovation into routine practice Promote innovation to others | <i>Maintenance</i> |

The analysis of this research will utilize the diffusion of innovations theory to explain themes and phenomena that occurred. The theory will also be used to determine what stage of dissemination has been reached due to the clergy's efforts.

2.4.2 Laudato Si' as an Innovation

Laudato Si' is a papal teaching document that not only assesses the current state of the environment, but also provides practical applications to encourage change towards a more enlightened and all-inclusive world. Pope Francis calls for a dialogue to inspire new national and local policies, for more transparency in decision-making, for a stronger dialogue between religion and science, for a new lifestyle with less wasteful consumerism, and for increased environmental education (Pope Francis 2015). While some may argue that this social teaching is not a new concept for the church, it is arguable that ecological concern is being highlighted in a way that has not been done before by the Church. The content of this letter differs from that of other historical encyclicals, as previously displayed in this review. In keeping within the framework of the Diffusion of Innovations theory, Laudato Si' itself will be considered an innovation and the congregations will be considered the social systems which include priests and bishops that are to be considered change agents. Therefore the main questions asked by this research are concerned with the level of dissemination and methods used and observed in the field.

2.5 Summary and Research Gap

After reviewing literature regarding the Catholic Church and the environment, the content and authority of papal encyclicals, and methods of communication of the Church, certain themes have presented themselves. Many studies have confirmed a relationship between environmental attitudes and religious belief, however the nature of this relationships has not been agreed upon. Many studies have been conducted to try and identify this relationship, (Shaiko 1987, Eckberg and Blocker 1989, Hand and Van Liere 1984, Greeley 1993, Kanagy and Nelsen 1995, Guth et al. 1995) but perhaps due to differences in variables and methods, no true consensus exists. Since the Catholic Church is a complex and large institution, there is room for more research focused at the congregational level. While most studies have concerned

themselves with the relationship between religion and environmental attitudes as a whole, Djupe and Hunt (2009) found that people actually learn most religious norms and beliefs as a result of their location of worship.

Catholic Social Teaching is an important part of the faith, however it has been discovered that many followers are not aware of its content or breadth and it has even been called the Church's biggest secret (Curran 2011). The Church has encouraged ways to promote this knowledge, but there is a need for more research about the flow of information through such a large organization. Efforts to increase the importance and focus of the Catholic social mission have been documented; a Call to Action by the bishops of the U.S. in the 1970's and the formation of a task force in 1995 by the USCCB, intended to strengthen the efforts of dissemination of the Catholic social mission through Catholic Social Teaching. While some assessments exist (Curran 2011, Killen 2015) that speak of theoretical implementation strategies and efforts, very little, if any, empirical studies exists about the efficacy of information dissemination at the parish level within the Catholic Church. A large amount of research does exist regarding information dissemination within an organization, for instance in a healthcare setting (e.g. Huijg et al 2004, Flay et al 2005, and Sandler 2007). There is less on Church dissemination efforts specifically; however discussions of the efficacy of interventions implemented to increase awareness for early detection of cancer and other chronic diseases and improve the health of certain congregations do exist (e.g. Ammerman 2002 and Holt et al 2014). In one of these studies it was found that passive diffusion techniques such as mailers were generally not effective, but active methods such as media campaigns and educating opinion leaders were more likely to be effective methods of dissemination (Holt et al 2014).

This literature review displays that although there is much good will and innovative efforts in some programs, the messages of Catholic Social Teaching are not integral or explicit enough.

While the Catholic social mission is clear, recent research about how well the mission is disseminated is not prevalent. The gap between research and practice needs to be narrowed and better described at the parish level. As previously mentioned, Djupe and Hunt (2009) emphasized the multifaceted nature of religion and conducted research that highlighted the increased impact of the parish compared to that of doctrine or other external factors. Therefore operating under the assumption that attitudes directly influence behavior, it would be prudent to conduct more research at the ground-level. This project is only beginning to fill this gap by assessing how the teachings of one document have been disseminated through a case study of the Los Angeles Archdiocese. Since dissemination is a process with multiple stages, the implications of this study will provide decision-makers and leaders in the Catholic Church with an outside view assessing what stage has been reached.

3.0 Research Methods

This chapter will describe the research approach chosen, methods of data collection, methods of data analysis, and the limitations of this research.

3.1 Research Design

Method Choice

A mixed methods approach, using both qualitative and quantitative techniques, was employed in order to gain different types of data within a relatively small amount of time. A concurrent nested strategy was adopted since this type of model can easily be used to gather information from different levels within a group or organization using different methods (Creswell 2003).

Figure 3.1 describes the relationship between both methods and how data collection relates to data analysis.

In this study qualitative methods were dominant and intended to discover the achieved or projected level of dissemination of *Laudato Si'* through semi-structured interviews, according to certain members of the clergy. At the same time, quantitative methods were used to survey members of the congregation as a way to compare the responses given by the clergy to the experiences of the laity within their corresponding church. The data was collected in no specific order and results were used together during analysis, with the quantitative data serving as an instrument created to compare against the qualitative findings. This study was focused within the Los Angeles Archdiocese, which includes 5 pastoral regions that are presided over by different auxiliary bishops.

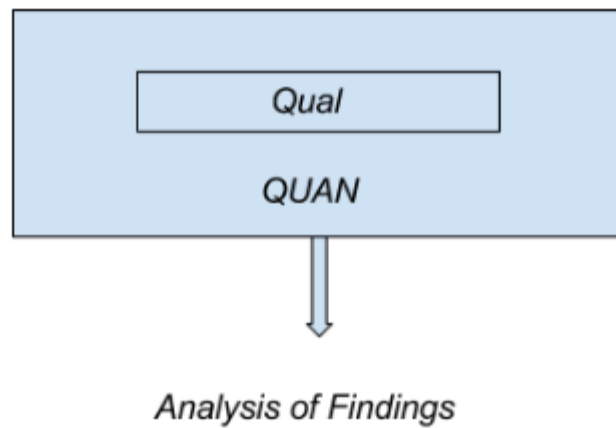


Figure 3.1 Visual Model of the Concurrent Nested Strategy. Source: Creswell 2003.

Qualitative methods

Members of the clergy, namely priests and bishops, were interviewed in order to gain insight into dissemination methods within the archdiocese. An interview guide was created and included questions about whether the clergy believe teachings regarding the environment have changed and how they have chosen to disseminate lessons from the new encyclical letter.

Table 3.1 more thoroughly describes the questions used and the purpose of each question. The interviews were intended to be semi-structured, but in most cases the questions posed were taken directly from the prepared interview guide in order to stay within the agreed upon time. A Catholic theologian from the University of Dayton, Ohio was also interviewed to gain an outside perspective concerning dissemination methods within the Church.

Table 3.1 Main questions used for the semi-structured interview.

| Question(s) | Purpose of Question(s) |
|---|--|
| Tell me about your background. What are your responsibilities as [given title]? | To establish rapport and help the participant become comfortable talking about themselves. To gain background information about the individual. |
| When a new encyclical letter is released, what types of changes can be expected to occur in sermons, catechism, etc.? Is there a protocol you generally follow? | A general question to establish a baseline for how the individual handles a new encyclical letter. |
| How do you present and implement a new Catholic Social Teaching to you parish/region? | To identify how the individual chooses to disseminate information. |
| How have teachings regarding the environment changed since the release of Laudato Si'? | To help determine the level of dissemination of Laudato Si'. |
| What is your opinion regarding the concept of dominion and the environment in Catholic scripture? | To gain insight into their opinion about the use of resources. |
| Pope Francis addressed this encyclical to all people. Why do you think he did that? | To approach the idea that Pope Francis may appeal to a wider audience beyond the Catholic community. |
| What contributions does the Catholic perspective bring to the environmental movement? | To identify what contributions the individual may regard as uniquely Catholic. |
| What efforts regarding the environment are happening in your local community/region that individuals, families, and Catholic communities can participate in? | To see how aware the individual is of tangential efforts within and outside of the church that are aligned with the concepts discussed in Laudato Si'. |

Quantitative methods

A survey was generated using a Microsoft template intended for members of the laity to measure their awareness of the encyclical letter itself, along with their awareness of relevant topics discussed within the letter. This method was chosen to reach a larger number of participants in a limited amount of time. The data was never intended to generalize across a population due to the lower priority and probability of a small sample size.

Goals of the survey were explicitly written out before creation so as to guide the question development process. Questions on the survey included items such as: if people had heard of the letter, or if they had been instructed by their church to make lifestyle changes like conserving water, using public transport, etc. This was compared to what their corresponding priest revealed during the interview. Table 3.2 displays the questions as they were written, possible responses, and a discussion of why they were chosen to be included on the survey.

Table 3.2 Survey questions answered by parishioners.

| Question(s) | Possible Responses | Purpose of Question(s) |
|---|---|---|
| 1. Which church do you belong to? 2. In an average month how often do you attend your church? | 1. Open-ended 2. 0-1 times, 1-2 times, 3-4 times, more than 4 times. | To determine how exposed the participant may or may not be to potential changes. |
| 3. In an average month how much of your free time do you spend in nature? | 3. Not much (< 6 hours), Some (6 - 12 hours), A lot (> 12 hours). | To assume if a person may or may not be more environmentally inclined. |
| 4. Do you feel that it is your responsibility to take care of the Earth? | 4. Yes, No, Not sure. | To try and determine where the individual stands regarding the concept of dominion. |
| 5. Have you heard of the encyclical letter, Laudato Si', which discusses the environment? 5a. If yes, did you hear of the encyclical letter, Laudato Si', through your church? | 5. Yes, No, Not sure. 5a. Yes, No, Not sure. | To determine if the parishioner is aware of Laudato Si' and if they were made aware of it by their church or not. |
| 6. Have you read the encyclical letter, Laudato Si'? | 6. Yes, No, Not sure. | To learn if they have read the encyclical letter. |
| 7. Are you involved in any environmental advocacy groups or programs? 7a. If yes, about how long have you been active in the group or program? | 7. Yes, No, Not sure. 7a. Less than 1 year, More than 1 year. | To determine their inclination towards the environment. If the parishioner has read Laudato Si', this question would be used to determine if the possibility exists that they had been influenced into action. |
| 8. Has your church encouraged you to make lifestyle changes such as reducing water consumption, conserving energy, using public transport, etc.? 8a. If yes, in what way has your church encouraged you to make changes? | 8. Yes, No, Not sure 8a. In sermons (during mass), Church events (outside of mass), Church website/email, Church newsletter, Catechism, Other: _____ | To discover if environmental issues are discussed through the church and to determine the ways that these messages have been disseminated within a specific parish. Also used to compare with information given by priests in interviews. |

3.2 Sample Selection

This study was limited to the Los Angeles Archdiocese, which includes 287 parishes in 8,762 square miles, and is divided into 5 pastoral regions as shown in Figure 3.2 (ADLA 2016). In 2013 of the 11.8 million people living in Los Angeles, 4.2 million identified as Catholic, which makes the Archdiocese of Los Angeles the largest in the United States. (Cheney 2015, ADLA 2016). Email correspondence was initiated with the Archbishop Jose Gomez, who presides over the entire archdiocese, and all 5 auxiliary bishops who each preside over a different pastoral region. These high ranking clergymen were considered a priority during the selection of the overall sample. An information sheet was generated and given to any party contacted so as to introduce a more complete scope of the research. See: Appendix 1 for details.



Figure 3.2 Map of the Pastoral Regions of the Los Angeles Archdiocese. Adapted from ADLA 2016.

The study of individual churches was limited to the San Pedro Pastoral Region (SPPR), which is made up of 67 parishes, due to a familiarity with the general area. My hometown of San Pedro, California lies within this archdiocese, which is why I chose to conduct my research there. The churches were chosen based on proximity and more importantly, on availability and willingness of the priest to discuss the encyclical letter. Friends and family of Catholic faith were also contacted hoping to open a connection to a specific parish. Otherwise, the selection process consisted of a phone call or an email to schedule an interview if they were interested. If an interview was successfully scheduled, approval to survey members of their congregation would then be requested. If both a discussion and permission to survey were granted, an appropriate mass time would be chosen to approach random parishioners as they left mass. In hopes of increasing the response rate, it was verified that masses attended were given in English since many are held in Spanish in the region.

3.3 Methods and Problems of Data Collection

The field research period in Los Angeles, California occurred from May 13 to May 31, 2016. Qualitative and quantitative methods and issues of data collection will be discussed separately in this section although all data was collected concurrently.

3.3.1 Qualitative Methods

In order to determine the level of implementation within a specific parish or region, semi-structured interviews were conducted with members of the Catholic clergy. The questions were designed to elicit responses about efforts made and changes seen, if any, after the release of *Laudato Si'*. Phone calls and emails to parishes within the San Pedro Pastoral Region were the main methods of contact when attempting to schedule time for an interview with a priest.

Contact with bishops was more easily initiated through email correspondence than with priests. Before arriving to begin the research, two interviews were scheduled with bishops from the San Fernando and Our Lady of the Angels Pastoral Regions. The bishops of the San Pedro, San Gabriel and Santa Barbara Pastoral Regions were all unavailable to interview for various reasons. All interviews were recorded using an application on a smart-phone, but before any recording began the participant was asked to sign a 'Consent to Participate' form. This form also acquainted them with their rights as a participant and allowed their name to be used in this document when necessary. Each interview lasted between 15 to 55 minutes and the participant was allowed to speak freely while also being guided to help keep the conversation relevant to this study.

On the local level, the biggest challenge with data collection was initiating contact with priests in the San Pedro Pastoral Region. If a priest was unavailable when an initial or follow-up phone call was made, I was transferred to voicemail or asked to leave a name and number. In those cases the call was almost never returned. The best case scenario was a direct phone call with a priest in which the project could be explained and a meeting could be promptly arranged. The archbishop and all auxiliary bishops either participated or respectfully declined, but always responded to any inquiry. Interviews were conducted in-person with bishops from the San Fernando and Our Lady of the Angels Pastoral Regions as well as with three priests from the San Pedro Pastoral Region (figure 3.3). A fourth priest in the San Pedro Region preferred to limit our correspondence to email.

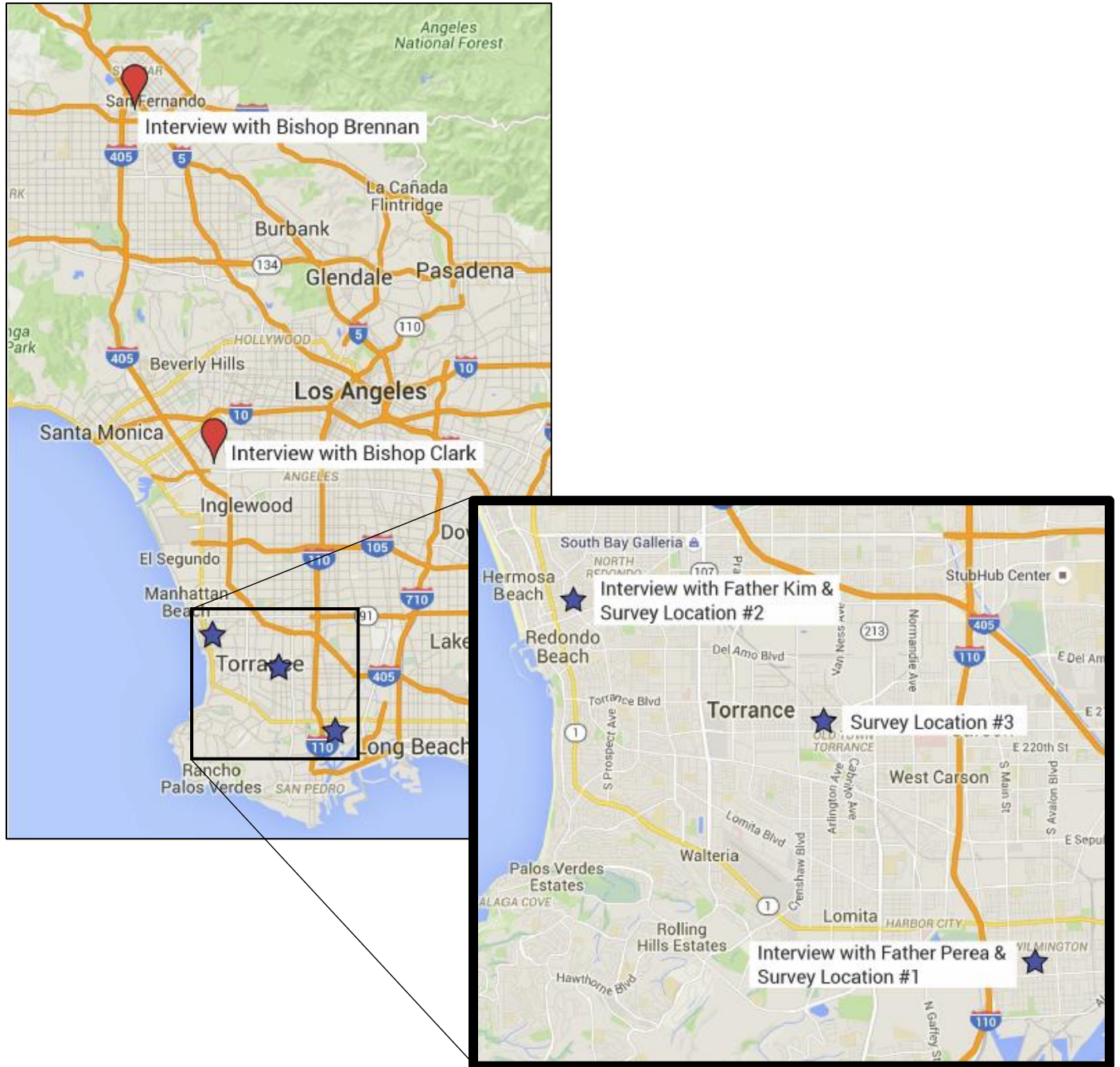


Figure 3.3. Map of Interview and Survey Locations in Los Angeles, CA. Source: Google Maps.

3.3.2 Quantitative Methods

The survey was administered to a congregation and was used as a way to see if any changes were being perceived. After permission was granted, the survey was distributed at three parish locations within the San Pedro Pastoral Region (figure 3.3). Mass times were chosen and an arrival of approximately 15 minutes before the end of the mass was planned for. Standing near an exit in the direction of a parking lot in order to address parishioners as they were leaving was the most effective way of canvassing for support. Then attendees were approached and asked to spare a few minutes to assist with research regarding churchgoers and the environment.

Six clipboards were prepared with single blank copies of the survey while carrying a handful of pens. Difficulties administering the survey this way effectively were noted and addressed. This may have decreased the response rate initially, but was improved by placing many blank copies on the clipboard at the beginning and then removing them as they were filled in. After the first attempt, it was noted that it would be difficult to engage more than a few people at a time standing in one location, especially because multiple exits from the church exist. Then help of a family member was enlisted, which successfully increased the response rate at two locations. Most parishioners were willing to participate, and in some cases after completing the survey would strike up a casual conversation mostly related to the environment.

Gaining permission to administer the survey was not problematic, but the biggest challenge was initially contacting priests for permission to approach their congregation. If contacted, a copy of the survey would be emailed or discussed in person to ensure the content was acceptable.

3.4 Analysis of Data

The concurrent nested strategy dictates that the data be transformed and combined during the analysis phase (Creswell 2003). Qualitative data was recorded using a smart phone and then transcribed using a microphone and a voice-typing tool. The transcribed data was spot checked for accuracy and then printed and coded by hand in order to discover existing themes and concepts in the data. Six interviews were coded this way and then were entered into a database to assess their frequency. Once all themes were presented, they were categorized and discussed in the findings and analysis section. The level of dissemination by the efforts of the clergy was determined and all data gathered was compared to the theoretical framework discussed in chapter two. Interview data with Professor Miller was used to supplement the data collected from the clergy.

For ease of referral, all participants consulted during the data gathering process are summarized in the following table:

Table 3.3 Summary of Interviewees' Information.

| Interviewee | Region/Parish | Office/Parish Location | Referred to in this chapter as |
|-------------------|--|--|--------------------------------|
| Edward Clark | Bishop of the Our Lady of Angels Pastoral Region | 5835 W. Slauson Avenue Culver City, CA 90230 | Bishop Clark |
| Joseph Brennan | Bishop of the San Fernando Pastoral Region | 15101 San Fernando Mission Blvd, Mission Hills, CA 91345 | Bishop Brennan |
| Michael Perea | Priest at Saints Peter & Paul Catholic Church | 515 West Opp Street Wilmington, CA 90744 Survey Location # 1 | Father Perea |
| Joe Kim | Priest at Our Lady Guadalupe Catholic Church | 440 Massey Street Hermosa Beach, CA 90254 Survey Location # 2 | Father Kim |
| Charles Carpenter | Visiting Priest | N/A | Father Carpenter |
| Hùng Tran* | Priest at Nativity Catholic Church | 1447 Engracia Ave Torrance, CA 90501 Survey Location # 3 | Father Tran |
| Vincent Miller | Professor at University of Dayton, Ohio | N/A | Professor Miller |

* Participated through email correspondence only.

A copy of the questionnaire was used as a codebook to display how the data would be represented by numerical values. Then data collected during the field research period was

coded accordingly and entered into an Excel database. Before the data was manipulated and because the sample size was relatively small, every survey was checked to ensure the data was properly transferred. Once a database was generated, the data was evaluated using frequency tables to generate percent values of responses for each question. This statistical data was aggregated and compared to the themes discovered using qualitative data to link responses of the clergy and the congregation.

3.5 Limitations and Demarcations of Research

Due to the project's limited time and because this region was so large, this research was intentionally restricted to the Los Angeles Archdiocese and narrowed even further for parish-level interviews and surveys to the San Pedro Pastoral Region. This research was constrained by the eagerness and availability of respondents, since answers to the research questions require participation from a specific community. The survey administered does not intend to isolate the effects of the church because a number of external sources such as media and personal lifestyle exist, which may also influence a respondent. Instead it seeks to explore the perception of the laity regarding dissemination efforts of the clergy.

3.6 Ethical Considerations

All respondents were made aware of the voluntary nature of their participation. In all interview cases written informed consent was received. When surveying in-person, consent was verbal and was assumed by their actual participation.

4.0 Research Findings and Analysis

4.1 Introduction

This chapter will present and discuss the findings from the case study of the Los Angeles Archdiocese (ADLA). As stated in Chapter 1, the aim of the research was to evaluate how the Catholic Church has disseminated the encyclical letter, *Laudato Si'*, through a case study of the ADLA. The subsequent objectives were to determine if teachings related to the environment have changed since its release, to gauge the level of awareness of the letter, and to determine and assess what actions have been taken to disseminate messages of the encyclical letter. The theoretical framework guiding this research considers dissemination as a stage-based process and also operates under the assumption that a papal encyclical letter has authority and must be disseminated within the Church.

Interviews with bishops were scheduled prior to the field research period, however scheduling of interviews with priests were not initiated until the first week of field research. During this time approximately 30 of the 67 parishes within the region were contacted, starting with locations closest to home (San Pedro, CA) and working outward. In one instance a priest who returned the phone call explicitly said he had not read *Laudato Si'* and thus declined to participate. Similarly, a bishop that had originally agreed to an interview later revealed that he had not read *Laudato Si'* and consequently was no longer comfortable participating in the project.

4.2 Dissemination

4.2.1 Interview Results – General Encyclical Protocol

After establishing rapport by asking about their background and current responsibilities, each participant was asked a similar set of questions, some of which requested explicit information about methods of dissemination. Inquiries about the existence of a 'protocol' after an encyclical

is released, along with any changes that should generally be expected, were utilized in order to establish a baseline understanding of the process. Bishop Brennan and Father Kim responded by listing a series of actions they both felt should be taken as soon as an encyclical letter is published, despite their different statuses. Both listed securing and reading the letter as the first step and then mentioned a period of reflection. Father Kim continued by saying he would take guidance from other levels into consideration and finally assess the needs of his parish before deciding how to invite them to understand and appreciate the teaching. Being of a higher rank, Bishop Brennan said that his next step would be to ensure that all priests under his care have read and understood the document and that they would eventually incorporate its messages into their teachings as well.

Bishop Clark redirected the question and said that it really depends on the letter itself and whether or not it specifically calls for any particular action such as an administrative or policy change. Bishop Clark continued by saying that encyclical letters are instructional and that it is up to the individual diocese and parishes to adopt as they see fit. Then he pointed out that he believes they are only now in the beginning stages of exploring and discussing the document. “Some have already jumped in and are studying the document themselves, while others may be waiting to see what the diocese may say, or even the National Conference of Bishops.” The encyclical is described by Bishop Clark as “the Holy Father’s opinion on various issues”, and he said it is only binding in the sense that it “cannot be ignored”. Father Carpenter and Perea’s responses were comparable in that they both mentioned that the letter must be paid attention to, should not be contradicted, and that the most noticeable change you might see would be the preaching of it in mass. Contrarily, Father Tran responded to this question by saying the document is an official statement by the Pope regarding social issues and that it will not cause any changes in mass or the Catechism.

4.2.2 Interview Results – Dissemination Methods Used for Laudato Si'

After allowing each participant to establish what they consider to be the appropriate general responses to the release of a new encyclical, the next part of the conversation was focused on specific dissemination methods used in their region. Both Bishop Clark and Bishop Brennan mentioned digital communication as their preferred way to correspond with their regions. When the letter was released the Archbishop issued a statement circulated to all parishes and then Bishop Clark forwarded the message through email to all parishes within his region. However since he believes that it is too soon to see any sort of implementation, Bishop Clark mentioned that he hopes to see more discussion concerning the letter during scheduled monthly meetings with leaders and administrators in his region. Bishop Clark also brought up the controversial nature of the document, perhaps as a justification for why it hasn't already been addressed at one of these meetings.

Bishop Brennan began by saying the first thing he wants to do is to remind people of the letter now that a year has passed since its release. Next, Bishop Brennan mentioned his intention to survey all parishes in his region within the next year through email while asking questions like: "What have you said about Laudato Si' in the last year?", "Have you had any workshops about taking care of the environment?", "Have you had local clean-up days, perhaps participating with non-Catholic efforts in the area?". Lastly, Bishop Brennan mentioned the importance of incorporating these messages into primary and secondary schools because he believes an effective way to reach adults is through their children.

Answers given by the priests varied greatly; Father Kim more or less deflected the question and responded by saying that Laudato Si' is a social teaching that has always been present. He continued by bringing up an interesting point - that everyone will experience the document in a different way based on their way of living or their standard of life. Father Kim's parish is located

in Hermosa Beach which is a relatively affluent town. He mentioned that his congregation already cares very much about the environment, but maybe for more superficial reasons. Father Kim said he wants his parishioners to consider how they can locate environmentalism in their spiritual life, for example by recognizing that the choices you make may have effects across the world, or by acknowledging a global community living on a shared planet. Father Kim mentioned that he must challenge them in more subtle ways so as not to offend or demean their current efforts.

On the other hand, Father Carpenter was very direct and said that he would mainly try to help people understand the document by potentially incorporating concepts into his homilies without straying too far from its main biblical focus. Father Tran said *Laudato Si'* is not aimed for parishes to directly implement, but is rather a call for expert knowledge and research. Father Perea did not mention specific dissemination methods used. At one point during our conversation he mentioned one might hear more about the more recent apostolic exhortation, "The Joy of Love", even though it has a lesser rank, possibly due to the controversial nature of *Laudato Si'*.

Professor Miller agreed with Father Perea and said that one may hear more about the "The Joy of Love" because it is more directly related to their daily work with families and couples. During our discussion Professor Miller was asked about typical methods of dissemination of a social teaching on a diocesan level. He first mentioned the bishop and his common means of communication within his diocese. Professor Miller said the bishop may speak of the letter once, perhaps in a series, or maybe never at all. He said some bishops will actively encourage priests to preach on it and that some diocese have even begun official programs to try and make their own energy use more ethical. Professor Miller also mentioned updating text books and religious education, and also reinforced a point brought up by Bishop Clark about how action depends on the encyclical letter itself.

All participants from the clergy agreed that rather than having altered teachings about the environment, they believe that this document has increased awareness, urgency and consciousness surrounding environmental issues and stewardship of creation.

4.2.3 Survey Results

The survey was not intended to generalize across the population, but was meant only to be compared with results from the interview. In an effort to compare the responses of priests to the interpretations of their corresponding laity, a survey (Appendix 2) was administered at three locations (figure 4.1) which included 61 participants total.

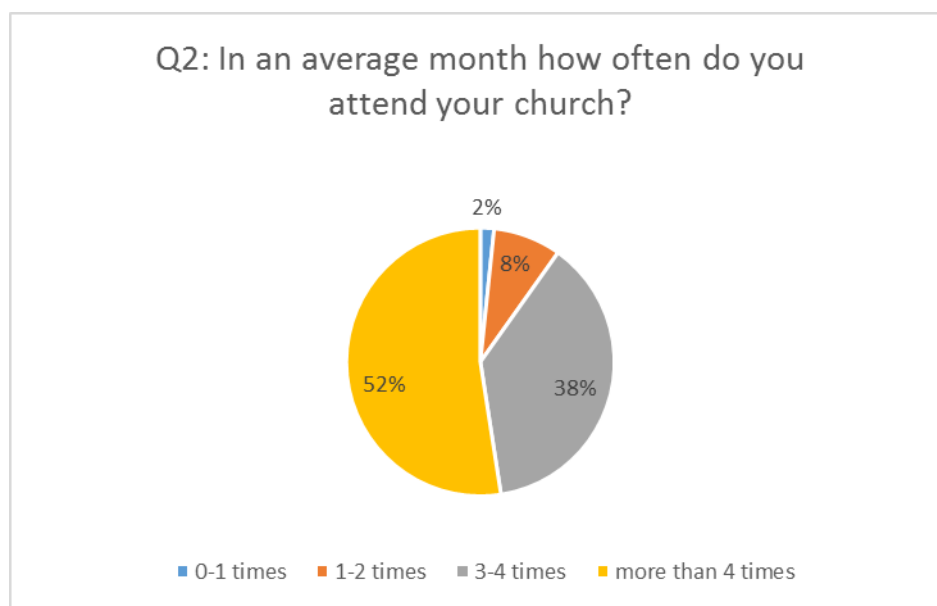


Figure 4.2. Percentage of Participants' Average Monthly Church Attendance.

Displayed in figure 4.2, it should be noted that 90% of survey participants reported an average church attendance of at least 3 times per month, with the majority attending more than 4 times per month. This question was used to ensure that the sample of people responding were adequately exposed to any potential dissemination efforts.

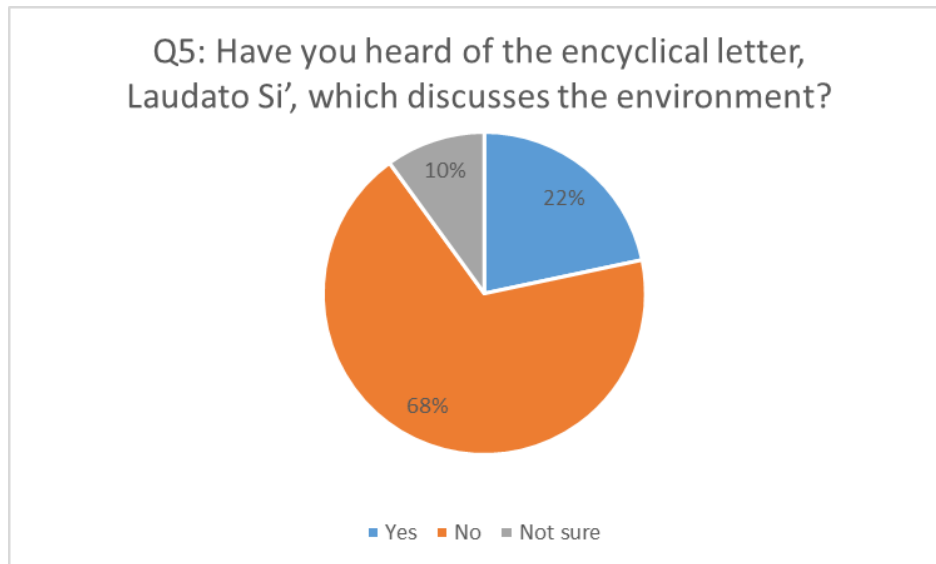


Figure 4.3 Percentage of Participants that have Heard of Laudato Si'.

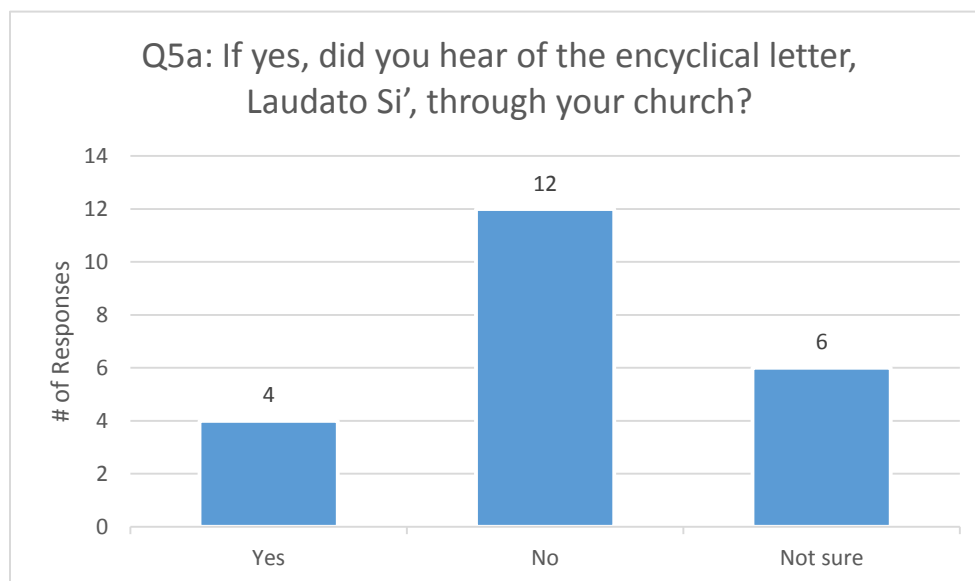


Figure 4.4 Number of Participants that have heard of Laudato Si' through their church.

As shown in figures 4.3 and 4.4, 22% of parishioners surveyed reported an awareness of the encyclical letter, with only 4 individuals giving credit of this awareness to their church.

Considering the results of the preceding question, the fact that only 7% of surveyed participants had read the encyclical letter is not surprising (figure 4.5).

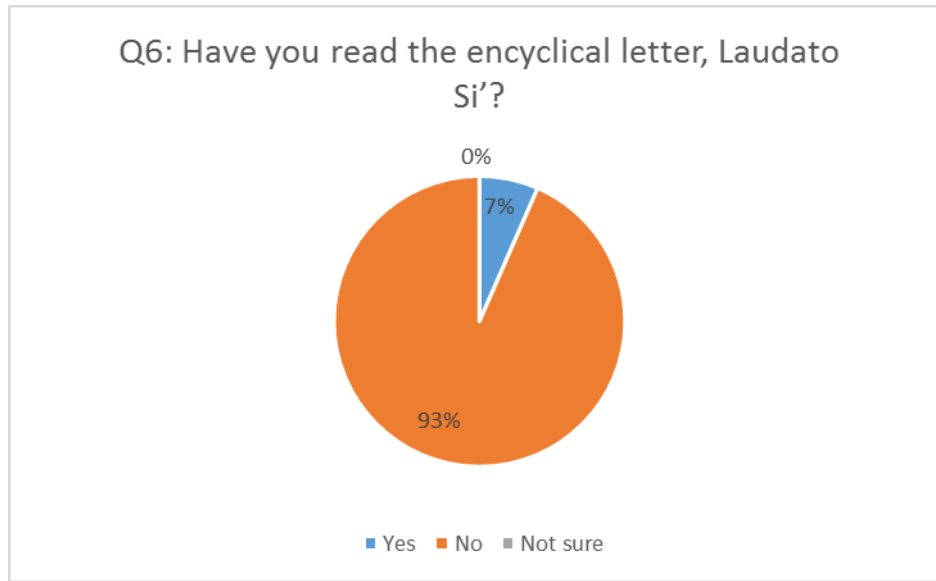


Figure 4.5 Percentage of Participants that have Read Laudato Si'.

The next questions inquired if members of the surveyed churches were active in an environmental advocacy group with a follow-up question asking “if yes, for how long?” (figure 4.6 and 4.7). These questions were formulated so that if a large number of participants had read Laudato Si', then their responses could be used to posit whether or not the letter had caused an increase in environmental activism since its release. It should be noted that even though only a small number of respondents had read the encyclical letter, 5 of the 14 participants involved in environmental advocacy had joined within the last year.

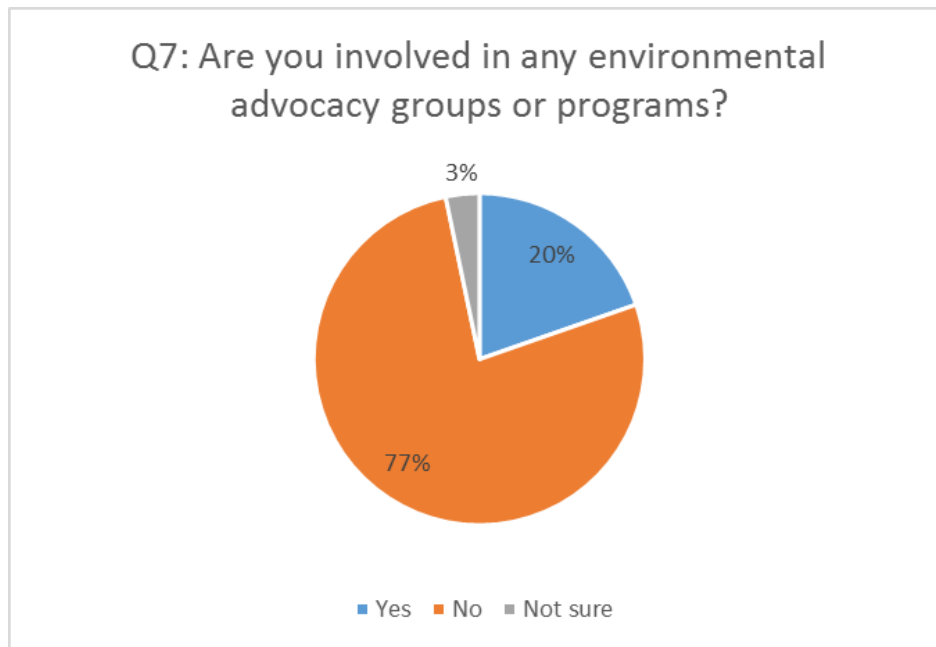


Figure 4.6 Percentage of Participants Involved in Environmental Advocacy.

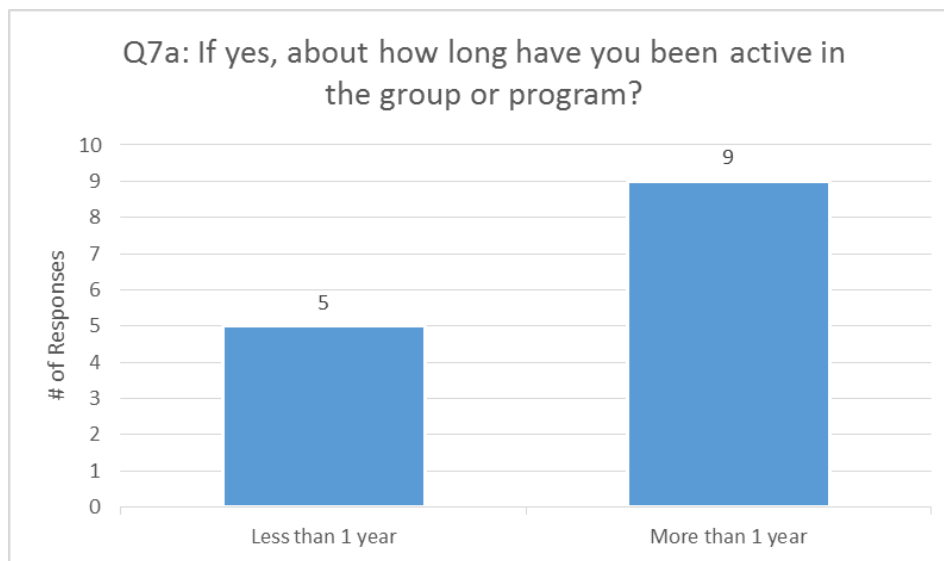


Figure 4.7 Length of Involvement with an Environmental Advocacy Group or Program.

The last question in the survey asked parishioners if they have been encouraged by their church to make environmental lifestyle changes and if they had, through what channels. In figure 4.8 it is displayed that 59% of surveyed churchgoers reported they were encouraged to make these changes. Figure 4.9 shows that the most common methods used were sermons, church events and their church newsletter.

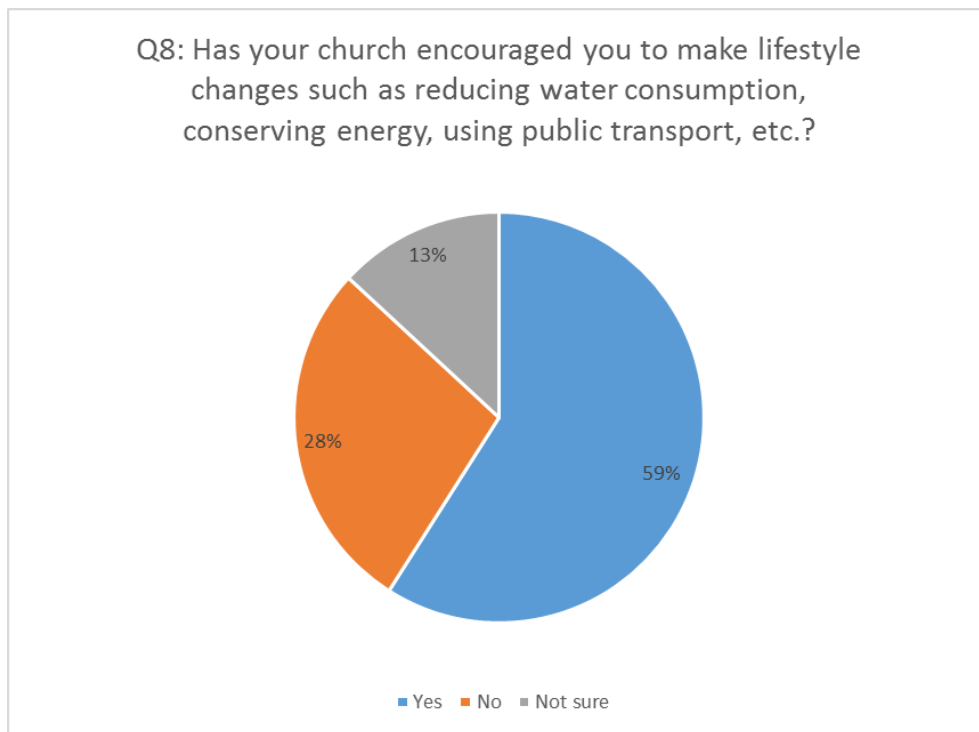


Figure 4.8 Percentage of Participants Encouraged to Make Lifestyle Changes at their Churches.

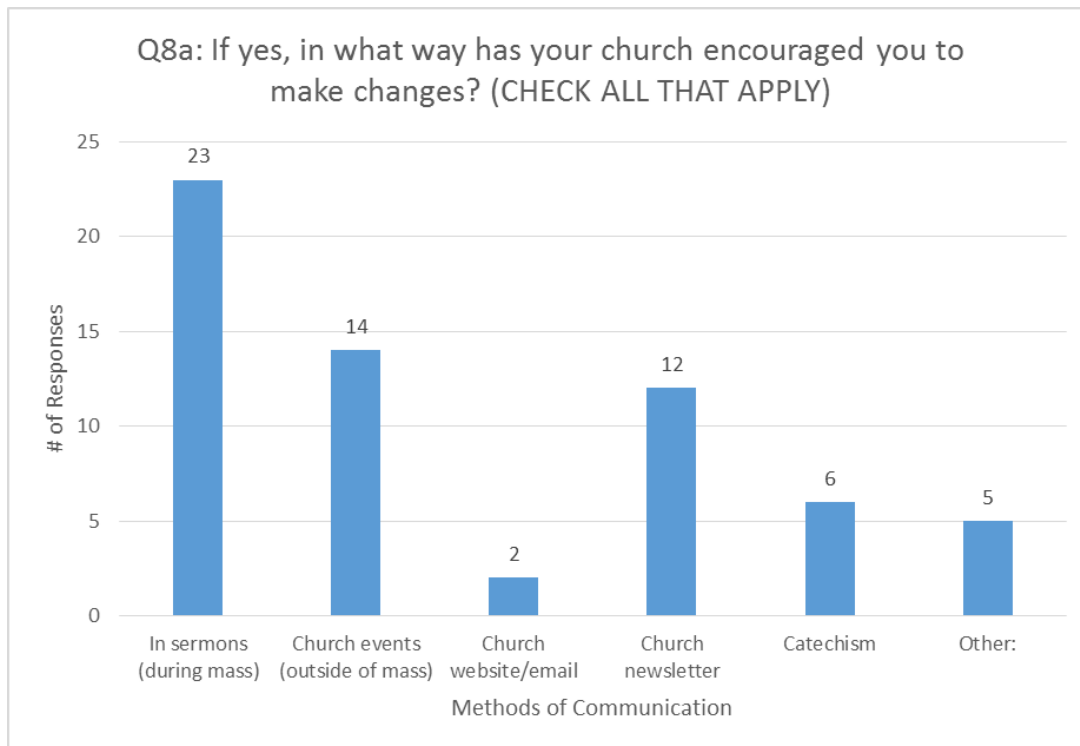


Figure 4.9 Methods of Dissemination Used to Encourage Lifestyle Changes.

An interesting interaction occurred while administering the survey. An older woman agreed to take the survey if I read the questions to her. When we reached the question about involvement with environmental advocacy groups, she responded with a strong 'no' followed by an explanation. In her opinion, most green groups hold anti-Catholic sentiments about issues like abortion or the death penalty and she fervently spoke against all of them. Another older gentleman revealed that he had worked as an operator at a local refinery and felt that over the years, he had seen a big improvement in environmental measures to protect the earth and the employee's health as well. After taking the survey, one parishioner proceeded to purchase a copy of *Laudato Si'* in the parish gift shop and waved it at me with a big smile as he left the church. Thanks to this exchange, it was unintentionally discovered that hard copies of *Laudato Si'* were available for purchase in the church gift shop of one location. However this method of dissemination was not highlighted in my discussion with the presiding pastor at that location. All of these experiences showed a genuine concern for environmental issues and a sincere curiosity within the laity.

4.3 Discussion of Findings

4.3.1 Discussion of *Laudato Si'* as an Innovation

An innovation is defined here as the act or process of introducing a new idea or method to a specific social system. The rate of adoption, or success of any innovation, is determined by four elements that were discussed earlier. The innovation itself is the first element by which to judge the rate of diffusion. For this research *Laudato Si'* was considered an innovation; **five major criteria** of an innovation were previously presented and will now be used to justify the argument that *Laudato Si'* is an overall ineffective innovation, but may mark a shift in thinking within a large organization.

The encyclical letter does have a strong **relative advantage** in all locations for various reasons. Relative advantage is described as the degree to which a social system sees an innovation as better than its predecessor, based on the needs and perceptions of that group. All locations surveyed showed similar results when asked if they had been encouraged to make environmentally-inclined lifestyle changes. The results of the survey confirmed what was discovered during interviews; although there was not a strong emphasis on the document itself, the kinds of issues and concerns surrounding it are being discussed in the church setting more frequently. 59% of surveyed parishioners had been encouraged to make lifestyle changes (figure 4.8) by their church through several different communication methods shown in figure 4.9 (sermons, church events, etc.). The fact that more parishioners were being exposed to more ecological concerns gave them a higher chance of adopting the innovation. When interviewing Father Kim he mentioned that his congregation is already very environmentally-inclined and it was inferred that he is still deciding how to challenge his parishioners on a deeper level. This congregation in particular would be more open to the adoption of ideas within *Laudato Si'* compared to a group who has not given it much thought.

The next criterion is **compatibility** which refers to the degree to which a group finds the beliefs and values of an innovation in line with their current beliefs and values. Although some participants say the document is debatable, a few were quick to point out that the teaching is not new in the sense that it has always existed in the Church. Bishop Clark referred to both the Old and New Testament and said that certain scriptures address the environment directly and clearly state our responsibility for God's creation. He said 'not abusing the environment' is an age old teaching that key figures throughout history have advocated. Bishop Brennan also referred to scripture regarding the environment, but in a different way - he talked about an attitude within the Christian-Catholic culture that existed previously which assumed it was okay to do whatever we wanted with the earth due to misinterpretations of scripture. He said we used

our inheritance of the earth as free license. Bishop Brennan believed that especially in the wake of *Laudato Si'*, this mindset cannot be adopted while also claiming to be a faithful Catholic; he stated that this is a 'big change'.

Father Kim agreed with Bishop Clark when he said that ecological teachings have always existed and are merely being highlighted by the Holy Father. All of these exchanges point to a high compatibility which usually leads to a higher adoption rate. However most interviewed participants alluded to the politically-charged quality of the document and emphasized the importance of carefully choosing how to state your opinion in regards to the environment. This is arguably part of the reason the document has not been disseminated further.

Simplicity and ease of use is the next criterion assessed and in the case of *Laudato Si'*, it has come up short. The encyclical letter was described by one participant as a lengthy document and also described by a few others as difficult to read. Father Perea added that many priests might not be talking about this document because it was harder to read than the more recent apostolic exhortation about marriage. The document's verbosity might have caused fewer leaders to become very familiar with it. This combined with the controversial nature of the document, could also contribute to a lack of dissemination. One possibility is that the messages of *Laudato Si'* were conveyed to congregations without proper referencing. Perhaps the document is being simplified as the innovation itself is being adapted for the needs of each congregation, which would make the ease of use less relevant since it has been modified. This may account for the discrepancy between the number of people who have heard of the letter and the number of people being encouraged to make lifestyle changes.

Trialability is defined as the degree to which an innovation can be tried out in order to convey less risk to adopters. Since *Laudato Si'* does not describe specific changes that must be implemented, this criterion does not promote a higher adoption rate. The suggestions that are

offered in the encyclical could surely be implemented and measured, however there is no requirement to do so. The verbosity of the document could also be a factor in making it more difficult to determine what aspects could be experimented with in order to recruit more adopters.

Observable results is the last criterion with which to judge an innovation. Since the document does not call for specific changes to be made, observable results are harder to identify in this case. Participants who strongly emphasized the controversial nature of the document may see that characteristic as a personal barrier preventing advancement into the implementation stage of dissemination. Bishop Clark mentioned that some of the issues discussed in the letter are ‘a bit controversial’ and explains what he means by posing the question “Does global warming really exist or is it a phase in the cyclical nature of the earth?”. In the letter, Pope Francis endorses global warming and Bishop Clark sees this as a potential source for dispute. Bishop Clark continued by framing the issue in a precautionary manner and explained that Pope Francis’ message says that there would be a lack of stewardship if no efforts were made at all. Even if observable results could be measured from *Laudato Si’*, late-majority adopters and laggards would still discredit the results.

The letter is not very strong as an innovation due to a lack of prescribed changes, but it has still arguably caused a spike in environmental awareness and discussion. While evaluating the innovation, one objective of the research was fulfilled:

- *To determine whether and how teachings or proceedings related to the environment have changed within the Catholic Church since the release of Laudato Si’.*

Distinct changes in teachings as a result of *Laudato Si’* were not discovered. Most participants reported that the teachings in *Laudato Si’* are not new, which would support the claim that teachings have not changed. All participants believe this document has increased awareness, urgency and consciousness surrounding environmental issues and stewardship of creation. This

study does not consider the influence of external factors therefore this objective cannot be fully addressed. As a lifelong resident of Los Angeles, California it is my opinion that the county is very environmentally-concerned. For a few years now California has been in a state of emergency concerning its water supply. To my knowledge the county has occasionally offered incentives to prevent people from using water to grow grass. They have also sanctioned those who waste water outright. Plastic bags have been banned in many cities, which is another example of governmental influence that may impact everyday life and spur conversations the Church.

Considering the history of the Catholic Church and the environment, both John Paul II and Benedict XVI have been credited with bringing ecological concerns into the conversation. This has possibly influenced the act of encouragement occurring in parishes as reported by the surveyed laity. The survey and interview sites unintentionally represented very different socio-economic statuses, which didn't appear to impact dissemination strategies of the priests, or the responses of the laity. Even the affluent area surveyed, in which the priest described his congregation as environmentally concerned, was no more aware of the document than their less affluent counterparts.

4.3.2 Communication Channels as Adoption Rate Factors

People in a social system are exposed to a new innovation through communication channels. The interviewed clergy mainly used email and face-to-face communication channels. Part of this was validated with the survey results which reported church sermons, church events, and church newsletters as the main channels through which the laity had been encouraged to make environmental lifestyle changes (figure 4.9). The survey also revealed that more people were encouraged in Catechism than through their church website or email. Although Pope Francis

himself has developed a significant online presence, individual parishes are choosing more traditional forms of communication such as word of mouth or newsletter.

During the research period it was revealed that a neighboring archdiocese held a workshop held by the Catholic Relief Services about the contents of *Laudato Si'* and specific solutions to some of its issues. This information was obtained from a woman that teaches Catechism in her region and attended the conference by request of her Archbishop. This seminar appeared to be a suitable method of dissemination and although it was not discovered within the designated research area, similar efforts may exist. For events like this workshop to be initiated and well-attended, leaders in the Church need to agree that the topic is important and relevant.

While evaluating the channels used by the Los Angeles Archdiocese to disseminate *Laudato Si'* the following objective was evaluated:

- *To determine and assess what actions have been taken, or will be taken, by the clergy to disseminate the encyclical letter.*

Specific actions taken by leadership to disseminate *Laudato Si'* were not obvious. Bishop Brennan spent a considerable amount of time talking about future plans to follow-up and survey his region, but did not mention any efforts to disseminate the letter in the first place. He posed hypothetical survey questions which indicated a true understanding of the document; he also displayed the spirit of the document when he discussed the idea of joining secular environmental efforts. Bishop Brennan also mentioned potentially utilizing workshops to diffuse information.

Bishop Clark used email as a way to alert parishes of *Laudato Si'*. He also spoke of the possibility of future meetings used to discuss environmental issues once the document has been more fully comprehended. Since Bishop Clark is the main leader of his region, it could be

argued that he already has the authority to initiate such a conversation. Perhaps due to its controversial nature, Bishop Clark has not made disseminating *Laudato Si'* a priority yet.

Although most locations are probably relative homophilous, which generally increases adoption, most of the priests that were interviewed did not mention specific dissemination strategies in relation to *Laudato Si'*. Father Perea mentioned that he doesn't think I would encounter too many priests talking about *Laudato Si'* because it uses language that sounds political. He quoted the use of buzz words like 'sustainability' and 'climate change' as the biggest issues since those words can mean a lot of things. "Individuals are afraid to stir up controversy", says Father Perea as he points out that Pope Benedict also spoke about the environment, but "for some reason it didn't hit a nerve". One possible reason that Pope Francis is receiving so much media attention is because of his distinguished online presence, which now more than ever, is a vital communication tool. Later in the conversation Father Perea brought up how historically the Church has never supported Socialism or Communism and that a lot of green language comes from those institutions. Father Perea said, "[Pope Francis] is seen by some as a loose cannon" but quickly defended him when he added that he believed that Francis is a pragmatist whose primary focus is the marginalized and poor segments of society.

It appears that many issues surrounding environmental activism are still being mixed and linked with a certain political ideology. As discussed in chapter two, people form their religious opinions in a similar fashion as their political opinions and they are likely to take cues from leaders in their communities which showcases the importance of adoption by the social leaders. One study even found that environmental activism usually involves collective political action displaying the interconnected nature of the fields (Sherkat and Ellison 2007). Because of this, parishioners may not be exposed to opposing political views, some of which may involve environmental concerns.

4.3.3 Time as an Adoption Rate Factor

Time is involved in the diffusion of a new innovation in a couple of different ways: the innovation-decision process and the innovativeness of those in the social system (categories of adopters). While assessing this aspect of dissemination, it became clear that main aim of the research was effectively addressed here as well.

- *Evaluate how the Catholic Church is disseminating Laudato Si' with a case study of the Los Angeles Archdiocese.*

Laudato Si' is not currently well-disseminated in the Los Angeles Archdiocese, but has great potential for implementation in the region. Based on the stages presented in the innovation-decision process, all interviewed participants appeared to be in the earlier stages of dissemination, some further along than others. Stage one is termed 'the knowledge stage', which includes comprehension of the message and recollection of information. This stage essentially represents awareness of the innovation, which all participants displayed. However, it should be noted that more than one person within the region declined to participate based on their unfamiliarity with the topic, immediately placing them outside of stage one.

Stage two is called 'the persuasion stage' which is where a positive image of the message has been accepted and new behavior is discussed with others. Most participants in this study have advanced to this stage which is to some extent evidenced by the absence of an outright denial of the importance of ecological concerns. This could be skewed because those willing to participate have already formulated an opinion and have likely accepted the messages of the letter.

Bishop Brennan and Father Kim are the only participants that have arguably advanced to 'the decision step' (stage three) in the stage-based model of dissemination, which is the stage where

the innovation is either adopted or rejected. Although they did not speak explicitly about a full adoption of the ideas, they chose not to mention the controversial nature of the document which could be interpreted as a sign of adoption. They have both accepted the positive image of the innovation and spoke of intentions to broaden the understanding of those in their spiritual care. Therefore they would be considered as early adopters, since they can obviously see the benefits and do not appear to need much persuasion.

4.3.4 Social System as an Adoption Rate Factor

The last main element evaluated in the diffusion of *Laudato Si'* is the social system in which the innovation is being disseminated. Opinions of leaders and norms within a specific community are two important factors in the adoption rate of an innovation. One concept that all interviewed participants agreed upon was equating the meaning of the word dominion to stewardship, some even before they were asked. Bishop Clark remarked that the underlying principles of scripture dictate that we are stewards, not masters, of creation and that we have a responsibility to creation and future generations. "Do not abuse it", he said. Similarly Bishop Brennan said, "Have dominion over the Earth, over the fishes and the sea but it is dominion, not domination". Bishop Brennan believed that God gave us intellect not to improve on nature, but to use nature and manipulate it in a good sense.

Father Perea described us as being "God's gardeners" when he referred to one of his favorite books, which implied that we are meant to treat the earth like our garden. He talked about different approaches to the subject: don't touch it, don't harvest it, preserve it, or in contrast, exploit it, cut it, slash it, burn it, do whatever you need. Father Perea thought Pope Francis was somewhere in the middle of these extremes and described it as "don't leave it as it is but make sure to replace what you take." When asked about dominion, Father Carpenter replied, "In other

words - stewardship". He continued by using a similar analogy about how the earth is a garden that we are entrusted with.

Father Kim had a different perspective and said that since God is good, and all is made in his image and likeness, then all is good. He continued, "God doesn't create junk or trash. He gave us the power to care for, but with that comes the power to destroy." Father Kim said, "dominion is not where you consume something and that's all"; he said, "it is about recognizing the dignity and the bond that we have with the world."

Regardless of the examples used, all participants equated the term dominion to a sense of responsibility, as if the fate of the earth is in our hands. Since this concept is so closely related to environmental concern, this displays that there is a great potential for a stronger emphasis on Laudato Si' and its teachings. This social unit (Los Angeles Archdiocese) is very aware of the responsibility to the earth, further evidenced by the survey results. One question asked survey participants: "Do you feel that it is your responsibility to take care of the Earth?" In hindsight the question was a bit loaded, but nonetheless 97% answered 'Yes', with the remaining 3% choosing 'Not sure'. This shows that a large portion of the surveyed laity would agree with Pope Francis and do believe that they are liable for the well-being of the earth. Evaluation of the social system element also shed light on the following objective:

- *To gauge the level of awareness of the letter on a parish-level.*

The level of awareness of Laudato Si' among the laity within this region showed 22% of surveyed parishioners reporting awareness of the letter and only 4 of the 61 people surveyed having heard of the letter through their church. At first this number seemed low, however Catholic theologian Professor Miller, considers this response to be extremely high. Professor Miller believes that since fewer participants recall hearing about it through their church, it is a testament to the great power of today's media channels.

The papal encyclical has authority within the Catholic community and as discussed in chapter two, should not be ignored or contradicted by leaders of the Church. Encyclical authority is dubious in the sense that the letter only has to be acknowledged and not necessarily agreed with. Bishops and priests have many responsibilities; teaching is considered one of their main obligations therefore it is their job to encourage awareness and provoke discussion. In certain interviews some participants highlighted the fact that encyclicals are just the Pope's opinion, which could imply that they have a different opinion. Bishop Clark said that an encyclical is largely instructional and should be adopted as each parish or region sees fit. What one person sees fit could vary greatly from the next. Conceivably a priest could fundamentally disagree with the letter and choose to spend less time communicating certain messages, which was also confirmed by Professor Miller. Professor Miller added that the clergy has an enormous amount of discretion regarding how they discuss a new encyclical letter.

5.0 Conclusion

This research reveals that *Laudato Si'* has not been well-implemented in the Los Angeles Archdiocese, but rather is still in earlier stages of dissemination. Awareness among the surveyed laity is still spreading and while certain environmental concepts are present at the parish level, it is unclear as to what the actual cause for environmental concern is. Los Angeles County has been focused on environmental issues for several years therefore political influences should also be considered. Most leaders interviewed have not taken an active role in disseminating the letter itself. The most enthusiastic participant spoke more of follow-up measures rather than efforts to disseminate the letter initially.

When researching Catholic Social Teaching, a certain pride emanates from this exquisite body of social instruction. Thus it comes as quite a surprise that the newest addition is not more of a celebrated event. Perhaps this is due to its controversial nature or because the document represents a change in thinking for the Church; *Laudato Si'* has strayed from some traditions, for example, by not only citing other papal encyclicals.

Since this encyclical letter did not give clear directives, clergy positioned lower in the hierarchy may require more guidance or secondary legislation before they undertake major changes.

During this research it became evident that clergy will respond differently based on many factors, therefore if the Church really wants this and other messages to percolate through more effectively, then it will have to build or utilize existing supportive infrastructure, like the USCCB.

It is the recommendation of this study that each diocese be tasked with developing a more effective and measurable dissemination strategy in order to reach a wider audience and to further the mission of the Catholic Church, which now includes explicit ecological considerations. Strategies may include identifying early adopters as leaders charged with encouraging adoption within a social system, or conversely identifying laggards and determining

why they are rejecting the innovation. This could guide the creation of a new innovation, one that is targeted to encourage laggards to adopt. Whatever route is chosen requires strong leadership and since clergy are given a large amount of discretion in regards to encyclical letters, the challenge is significant.

Pope Francis has certainly developed a strong following on the internet, but some research shows that the laity are more influenced at the parish level. This displays the significance of proper dissemination methods from the top all the way down. A stronger emphasis for a more ecologically-centered lifestyle could potentially influence millions since the Catholic Church is a dominant force around the world. For example, if children are taught to live in a more sustainable manner at church, then future generations will grow up with a different mindset rather than having to readjust their entire lifestyle.

The Catholic Church is a far-reaching institution with great influence, it is important to study and improve dissemination methods within such a large organization. One future study could include an expansion of the survey in order to generalize across a population. Another study could follow specific parishes over time to gain perspective into the evolution of their environmental concern during and after the implementation of a dissemination strategy. Another possible study could compare environmental attitudes across different denominations in the wake of this environmentally focused encyclical letter.

This letter has shifted the official thinking of the church and while the papal encyclical is not infallible, it is a document that carries a significant weight. All participants reported increased awareness and a higher sense of urgency in terms of environmental concern. While the document and its messages are still being understood and examined, related issues are more frequently deliberated. For now Pope Francis' influence is more of a swell, rather than a wave, of change.

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Appendices

Appendix 1 Project Information Sheet Issued to Potential Interview Participants

Information Sheet

A research project studying current environmental attitudes within the Catholic community in the wake of 'Laudato Si'

Environmental Science and Policy at Central European University, Budapest, Hungary

Introduction

I would like to invite you to participate in my project, which is focused on current environmental attitudes within the Catholic Church and parochial schools. I am interested in your perspective regarding the environment and what role your religious institution plays in this view.

Why am I doing the project?

I hope to discover and provide useful data to Catholic educators and would like to determine the extent of application of the encyclical 'Laudato Si'. I was born and raised in the Greater Los Angeles area therefore have decided to conduct my research close to home.

What will you have to do if you agree to take part?

- If you are interested we will arrange a time to meet that is convenient for you and in your parish or office (if that is appropriate).
- I will conduct a single interview which is expected to last approximately 30 minutes, but no longer than one hour.
- The interview would need to take place from May 12 – June 1, as this is the time frame that I have devoted to field research.
- Once I have completed the study I will produce a summary of findings which will be available to you if interested.

How much of your time will it involve?

One interview lasting no more than one hour.

Will your participation in the project remain confidential?

If you agree to take part in the study, your name will be recorded but will not be disclosed to other parties. Your responses to the questions will be used for the purpose of this project only. Audio recordings will not take place without your knowledge or consent. Rest assured that if you take part in this project you will remain anonymous if desired.

What are the benefits of participation?

You may find this project interesting and enjoy answering questions about the environment. If time allows, any questions you have could be incorporated into the research and possibly answered once the study is completed.

Contact:

If you are interested in helping me expand literature devoted to Catholic environmental education and can be available between May 12 and June 1, 2016, please do not hesitate to

contact me at **natashapd87@gmail.com** or **dipietro_natasha@student.ceu.edu**. Feel free to pass my information on to anyone within the Church who may also be inclined to participate.

Researcher:

Natasha Bolas, Central European University (dipietro_natasha@student.ceu.edu)

Supervisor:

Alan Watt, Professor at Central European University

Appendix 2 Graduate Research Survey Issued to Survey Participants at Parishes



Graduate research survey about religion and the environment

This research will explore the relationship between churchgoers and the environment and is part of my master's research project. Please indicate your personal opinion to the following questions by checking the answer that most closely describes your viewpoint. All information collected will be kept confidential and anonymous. This survey should take about 5 minutes to complete and should be returned to whomever it was received from. Please contact Natasha Bolas (natashapd87@gmail.com) for more information or any questions regarding this survey.

1. Which church do you belong to? _____

2. In an average month how often do you attend your church?

- ☐ 0 – 1 times ☐ 1 – 2 times ☐ 3 – 4 times ☐ More than 4 times

3. In an average month how much of your free time do you spend in nature?

- ☐ Not much (< 6 hours) ☐ Some (6 – 12 hours) ☐ A lot (> 12 hours)

4. Do you feel that it is your responsibility to take care of the Earth?

- ☐ Yes ☐ No ☐ Not sure

5. Have you heard of the encyclical letter, *Laudato Si'*, which discusses the environment?

- ☐ Yes ☐ No ☐ Not sure

5a. If yes, did you hear of the encyclical letter, *Laudato Si'*, through your church?

- ☐ Yes ☐ No ☐ Not sure

6. Have you read the encyclical letter, *Laudato Si'*?

- ☐ Yes ☐ No ☐ Not sure

7. Are you involved in any environmental advocacy groups or programs?

- ☐ Yes ☐ No ☐ Not sure

7a. If yes, about how long have you been active in the group or program?

- ☐ Less than 1 year ☐ More than 1 year

8. Has your church encouraged you to make lifestyle changes such as reducing water consumption, conserving energy, using public transport, etc.?

- ☐ Yes ☐ No ☐ Not sure

8a. If yes, in what way has your church encouraged you to make changes? (CHECK ALL THAT APPLY)

- ☐ In sermons (during mass) ☐ Church events (outside of mass) ☐ Church website/email
☐ Church newsletter ☐ Catechism ☐ Other: _____