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Walter M. Miller, Jr.'s *A Canticle for Leibowitz: A Study of Apocalyptic Cycles, Religion and Science, Religious Ethics and Secular Ethics, Sin and Redemption, and Myth and Preternatural Innocence*

by

Cynthia Anne Miller Smith

Under the Direction of Reiner Smolinski

Abstract

Walter M. Miller, Jr.'s *A Canticle for Leibowitz* is a timeless story about apocalyptic cycles, conflicts and similarities between religion and science, religious ethics and secular ethics, sin and redemption, myth and preternatural innocence. *Canticle* is a very religious story about a monastery dedicated to preserving scientific knowledge from the time before nuclear war which devastated the world and reduced humanity to a pre-technological civilization. The Catholic Church and this monastery are portrayed as a bastion of civilization amidst barbarians and a light of faith amidst atheism. Unfortunately, humanity destroys the Earth once again, but Miller ends with two beacons of hope: a starship headed for the unknown to help humanity begin again and the preternaturally innocent Rachel who portends a future for similarly innocent human beings repopulating the Earth. Thus, faith ultimately triumphs over atheism even in the midst of almost total catastrophe.

INDEX WORDS: Graduate degree, Georgia State University, Walter Miller, *Canticle for Leibowitz*, masters thesis, Catholic, Christian, science fiction, science, religion, preternatural innocence, ethics, saint, monk, abbey, monastery, apocalyptic, nuclear war, catastrophe, Wandering Jew, mutant, Pope, New Rome, sin, redemption, faith, myth.

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SECULAR ETHICS, SIN AND REDEMPTION,AND MYTH AND
PRETERNATURAL INNOCENCE

By

Cynthia Anne Miller Smith

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts

In The College of Arts and Sciences

Georgia State University

2006

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Cynthia Anne Miller Smith
2006

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by

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May 2006

Dedication

I dedicate this thesis to the faithful people of the world in the hope that humanity will not destroy itself but will ultimately triumph both by the grace of God and by the indomitable human spirit.

Acknowledgements

I would like to thank Reiner Smolinski for suggesting to me that I write a thesis on Walter Miller's novel, *A Canticle for Leibowitz*. Without his guidance and support, this thesis would not have been possible.

Victor A. Kramer has been very helpful in reading my thesis and providing illuminating and useful comments and suggestions. He is a Professor Emeritus with deep experience in literature, particularly Catholic stories, and without his valuable suggestions, this thesis would have been much poorer.

Tim Renick has always been a source of inspiration for me, and I will never forget his help and his friendship in this labor of love. Although not an official member of my committee for reasons beyond my control, without his discernment of certain theological issues in the novel, this thesis would have been considerably inferior.

Chris Kocela has provided me with useful insights into the text and was very helpful in suggesting clarification of certain theological issues.

I would also like to thank Father John Garvey for sharing with me information in some personal letters between him and his friend, Walter Miller, and for providing me with valuable insights into Miller's own views towards certain characters like Rachel and Mrs. Grales.

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What was gunpowder? Trivial. What was electricity? Meaningless. This atomic bomb is the Second Coming in wrath.

Winston Churchill

We have discovered the most terrible weapon in the history of the world. It may be the fire of destruction prophesied in the Euphrates Valley era, after Noah and his fabulous ark.

Harry Truman

I am become Death, the shatterer of worlds.

Robert Oppenheimer, nuclear scientist, quoting from the *Bhagavad Gita*, upon seeing the first mushroom cloud over Alamogordo

But fire came down from heaven and consumed them.

Revelation to John 20:9b

Introduction

Walter Miller, the complex personality who produced the classic apocalyptic novel *A Canticle for Leibowitz*, shot himself in January of 1996 following the unexpected death of his wife, Anne (Garvey 7). His death is a tragic loss to the world that brought him forth. His archetypal novel survives him and will continue to influence generations of people whose inner souls have been powerfully affected by his complex novel of epic proportions. It is intellectually and emotionally powerful, full of the vicissitudes of life, and displays in a mythic dimension a timeless story about dangerous times and the fall from innocence as well as the rise to a more experienced yet more disillusioned world. Renowned science fiction critic Brian Aldiss calls *Canticle* “the best of the after-the-bomb novels” (*Trillion Year Spree* 299). Like many novels, *Canticle* attempts to answer some of the basic questions of life: Who are we? Why are we here? Where are we going? What is the purpose of it all? These are questions which most of the world’s religions have attempted to answer, including Miller’s own Catholic Church. For Miller, science can answer questions about how the world works, but only religion can answer questions about why

things are the way they are. Miller's religious answers, given by theistic characters, are contrasted with the answers of secular characters in a way that exemplifies both the faith and ethics of the Church Miller loved.

Walter Miller's *A Canticle for Leibowitz* contains themes of the conflict between religion and science, religious ethics and secular ethics, sin and redemption, myth and preternatural innocence. It is a study of apocalyptic cycles and how they affect the human condition. Miller's novel asserts that science and religion do not conflict unless humans allow this, which some characters do in abundance, while for others, science and religion are wedded together in a natural union coincident with what Miller's narrator perceives to be the will of God. The major conflicts among characters primarily occur when scientists who reject faith violate the morals of the Catholic Church, but clashes also occur among characters who, contrary to Miller's beliefs, incorrectly reject science in the name of God. Apocalyptic cycles are the unnatural result of the division between science and religion, a division which causes much suffering.

The language of this novel, particularly the Latin, colors the story thoroughly and is such a distinctive feature that it impressively suggests a unity both with the past and the future as well as between science and faith. Since Latin was once both the language of the Church and the language of science, the use of the scholar's tongue is no doubt an intentional irony on the part of Miller. The language builds a union between religion and science that is not achieved by the society it depicts because once again it succumbs to the major problem besetting the fracture of science and religious ethics: another nuclear holocaust. While the ending of the story is frightful and depressing, it also serves as a warning with the idea that this need not be our future, since it is a science fiction novel after all.

Miller's novel also explores the differences between religious ethics and secular ethics in that the narrator perceives that ethics without religious roots violates the essence of humanity's relationship with God. For example, scientists without religious ethics are portrayed negatively, though not uncompassionately, while theologians or other characters with a strong sense of religious ethics are portrayed positively. Miller's narrator appears to regard war as an unnecessary evil inflicted upon

humankind by unethical politicians who use secular scientists to further their political goals at the expense of the people they are trying to control.

Miller ultimately explores the causes and effects of sin and redemption in a way that he seems to believe will persuade his readers to think twice about the greatest sins of humanity: war and man's inhumanity to man. Thus, the novel portrays characters who reflect Miller's internal conflicts between a scientific education and religious conversion, leading to a series of ideas about the devastation that can be wrought by war when science is misused and religious ethics ignored, how the human condition seems to be hopeless without faith, and how God brings forth good out of evil in terms of preternatural innocence.

While most science fiction is more entertaining than didactic, more thoughtful science fiction either prepares human beings for the future or warns them against its possible threats. Katherine Anderson writes in her Ph.D. Dissertation, "Christian Concepts and Doctrine in Selected Works of Science Fiction":

The coexistence of "concepts of science fiction and theology" has been celebrated by Theodore Sturgeon, and he provides a fundamental reason for its continuance. "Our strange species has two prime motivating forces: sex, of course, and worship. We do worship. We will worship. We must." Developing the idea of man's propensity to worship, whether it be in accord with orthodox religious systems or directed toward heroes or science itself, he says, "Both forms of religion – the hierarchal, ritualistic structure, and the infinitely more personal theolepsy, have been part of science fiction from the beginning." In a concluding paragraph, [Sturgeon] summarizes:

...religion and science fiction are no strangers to one another, and the willingness of science fiction writers to delve into it, to invent and extrapolate and regroup ideas and concepts in this as in all other areas of human growth and change, delights me and is the source of my true love for the mad breed. (Anderson 11)

Anderson then qualifies:

Obviously, if one is to consider such a subject as Christian concepts and doctrines in science fiction, it must first be admitted that Christian religious concepts have a place in science fiction. While acknowledging the divided opinion toward myth, the definition of science fiction on which this study will be based includes a plausible alternate possibility to this world, understanding that a Christian religious world view is as plausible as an atheistic view. (12)

Serious science fiction stories portray or try to portray both the science and speculative science as well as scientists and other characters as realistically as possible, giving readers an imaginative glimpse into possible or future worlds in which characters live and die while technology marches on. In realistic science fiction like Miller's *Canticle*, characters live and die often by their beliefs, whether their beliefs include faith in God or faith in science or both. Literature that withstands the test of time speaks to every generation in important ways, and Miller's novel speaks to us by causing us to envision a world of both horror and hope where characters develop their beliefs with respect to either faith or science, have their hopes dashed and their dreams shattered in the midst of the inexorable crawl of redeveloping civilization, and ultimately experience death as the quintessential end of every quest for knowledge, whether knowledge of science or knowledge of the divine.

While many authors portray characters as either completely faithful or completely faithless, Miller's characters in general are not so flatly drawn but are depicted as faithful people with doubts about faith as well as dedicated scientists with doubts about the meaning of the science they so highly value. Indeed, in arguments over ethics, Miller portrays both scientists and theists with valid ethical beliefs and leaves to the readers the decision about who is right.

Walter Miller, a complex personality who wrote *A Canticle for Leibowitz* from about 1959–1960, at a time when he was a practicing Catholic, warns humanity that the future is bleak without the marriage of science and faith, so that science is used to better humankind rather than destroy it and the Earth upon which humanity lives. The results of Miller's foray into apocalyptic thought makes *Canticle* outstanding

source material as serious and ethically responsible literature, and the important religious ideas which flow from it.

It should be noted that this is a very personal story for Miller, a former World War II bombardier who was haunted by his own participation in the bombing of an ancient Benedictine monastery at Monte Cassino, Italy, the oldest monastery in the Western world, founded in 529 by St. Benedict himself. Miller's novel was most probably a kind of catharsis for him, an attempt to assuage his feelings of guilt by writing a story that he hoped would prevent such destructions in the future.

Many authors reflect their beliefs in their stories, and Miller certainly embeds his personal theology in the novel in that he is not necessarily a devout Catholic but rather a person with a scientific bent who struggled with faith all his life. Roberson and Battenfeld, who wrote a bio-bibliography of him, provide insight into Miller's own personal character:

Miller did not grow up believing in or practicing an organized religion and, in fact, called himself an atheist in high school. He first came into extended contact with the Catholic Church in Italy during the war and converted to Catholicism in 1947; he was baptized on April 5th, Holy Saturday. Eschewing the concept of cause and effect as "a silly superstition," Miller nonetheless links his conversion with his empathy for the Italian populace during their bombardment. However, he refuses to call this empathy the reason or a motive of his conversion, and he stresses that any connection is after-the-fact speculation.

After his conversion he immersed himself in the Church's traditions and rituals, but appears to have been a practicing Catholic for less than ten years or so. Miller states that "by writing *Leibowitz*, I inevitably maneuvered my head back into the Church. It was an on-again, off-again thing. Finally, I suppose, I tried to define myself in that area by writing *Leibowitz*. So then I went back to the Church for awhile, but it never really took, I guess." Miller says that calling him a devout Catholic, as Norman Spinrad does in his introduction to the 1975 Gregg Press edition of *Canticle*, "is as embarrassing to me as it must be to devout Catholics." While Miller no longer considers himself Catholic, he still considers himself a religious man, though not

in any conventional way. His “Forewarning” in Beyond Armageddon reveals his familiarity with Eastern religious philosophies, including Zen Buddhism and the Tao Te Ching. (Roberson and Battenfeld 2)

The struggle Miller experienced with his faith and scientific education and training is part of what makes his novel interesting and powerful.

A Canticle for Leibowitz is compassionate, angry, full of the joys of life and the pangs of death, passionately devout, humorous, realistic, and highly ethical -- qualities that also describe the author. Serious authors such as C. S. Lewis and Walker Percy have praised the novel's vision of a post-nuclear-holocaust world inhabited by devout Catholics and pagan barbarians, scientists and theologians, dull mutants and feckless sinners, visionaries and traditionalists, pacifists and warriors. Critics also praise the novel for its rich symbols and metaphors, placing it in the category of mainstream fiction on the theory that any story that good cannot possibly be science fiction. Scholars praise the novel for its satire, humor, and apocalyptic vision. Ethicists praise it for its serious discussion of choice and individual responsibility; theologians praise it for its serious depiction of religious life; futurists praise it for its provocative and trendsetting depiction of a postapocalyptic religious culture; historians praise it for its cyclic presentation of history; and no in-depth study of science fiction literature can afford to ignore it. The novel is thus many things to many people, open to many and varied interpretations (Senior 329). But what is it really all about?

Canticle as a story is a kind of fictional prophecy or revelation of things to come. Furthermore, it retells in stunning detail the myths of both general human and Catholic cultures in a way that transcends past history according to the beliefs of the characters who both tell the stories and hear them. It is also a reflection of the Cold War politics of 1959 yet with a futuristic twist. It contains a cool, dispassionate depiction of the disregard many scientists have for life as well as a passionate depiction of salvation and deliverance in this present reality. Indeed, Anderson writes, “In Miller’s Canticle, the religious view of Catholicism is fused with the narrative in such a fashion that the explanation and defense of Catholic belief never intrude on the story, but are rather fully a part of it” (21). In other words, Catholicism as a

religion is not by Miller ever defended or refuted per se, although certain characters defend Catholic beliefs as opposed to atheistic beliefs, but the Catholic faith is portrayed as the norm, the basic system that forms the backdrop of the entire novel. It may be important to note that the novel has no Protestant characters because, for Miller, as for many Catholics of his era and later eras, the opposite of Catholic is not Protestant, but rather, the opposite of Catholic is heretic or barbarian.

In this story, the Catholic Church not only represents civilization but *is* civilization, and one of its primary functions is to civilize people both by restoring the barbarians to the true faith away from their barbarian gods and by restoring the knowledge of science which was almost entirely lost in the nuclear holocaust but for the faithful monks of Leibowitz. Miller seems to imply that, were it not for the civilizing influence of the Catholic Church, the rise of civilization from the ashes of the nuclear holocaust would have taken place centuries later than it did or perhaps never. For Miller, the Church represents and in fact *is* both the cause and the result of an adherence to religious values which are both rejected and despised by atheists and barbarians, and Miller draws no moral distinction between the two.

The novel is complex and full of life yet difficult to categorize using standard methods of delineating genres. The best description is that it is an apocalyptic science fiction novel that set the standard for the subgenre of post-nuclear-holocaust novels or other similar stories in which, for whatever reason, human civilization is destroyed and attempts to rise again. The novel is shaped by its themes of apocalyptic cycles and preternatural innocence, and the themes themselves are shaped by humanity's faith in both God and the science that, in the story, destroys the Earth twice. These themes force us to examine critically the understanding that both the characters in the story and the narrator have of both science and theology. The themes, symbols, images, and devices of apocalyptic literature in *Canticle* function differently in a science fiction novel of this type of subgenre than in ordinary or mainstream fiction in that the concept of a future history is not so much prediction or threat or promise as warning; the story warns that, unless humankind learns to shape its future with scientific progress in conjunction with faith, particularly religious ethics, then catastrophe looms on the horizon.

In the cosmology of Miller's novel, the apocalyptic nuclear holocaust is not the end of the world, but, rather, in accordance with apocalyptic cycles in history, is a violent and painful precursor to it. The destruction and rebirth of the world in the Messianic Age or Millennium occurs as one of several episodes in the Earth's apocalyptic cycles. The novel is the story in three parts of one such episode. The theme consists of the view that humans have a dark nature, that people learn little from history because they repeat the same mistakes yet there is hope because people always rebuild, and the Church remains a bulwark against evil and a haven for the faithful. This thesis will provide answers to the question of how the study of apocalyptic literature like *Canticle* exemplifies and increases our understanding of not only Biblical apocalyptic literature (i.e., eschatology) but also of human societies which are ultimately the subject of the critical analysis requisite to comprehension of apocalyptic cycles, characterizations of scientists and theologians, and the emergence of preternatural innocence as a response to nuclear devastation.

In the midst of highly theological thematic content, the novel develops intriguing responses to contentious ethical dilemmas, explores such ethical issues in terms of humanity's relationship to God and the relationship of human beings to one another, and creates a mythic reaction to the sacred tale (Clute and Nicholls 582). The following questions arise: What elements of apocalyptic literature does *Canticle* employ in terms of the novel's literary styles and themes, historical roots, passionate characterizations, and powerful symbols?

More specifically, Frederick Kreuziger's proposal to "sort through the themes, isolate the stylistic devices, penetrate the author's psychological make-up, and carefully delineate the world-view grounding his ... literary enterprise" (Apocalypse and Science Fiction 191) provides a helpful framework for my analysis of Miller's novel. This thesis will explore in greater depth the conflict between science and religion culminating in the dichotomy between the beginning of a new life and the preternatural innocence of one of the novel's enigmatic characters as illustrated in the following citation from Alexis G. Latner's M.A. thesis:

Theonomy in Tillich's sense, then, is not a natural conclusion of science. Science itself does not point to that wholeness of reality in which structure and depth are united.

Yet theonomy can be imagined in science fiction. Miller, in a fragmentary fashion, does so, when a symbol of the grace of God appears in the ruins of civilization on Earth. This symbol of grace, appearing on the scene, transforms the meaning of everything, while the literal event is unchanged. It is the Abbot's faith which receives the revelation of divine grace shining through the awakened second head of Mrs. Grales. The Abbot has not lost any of his education in the sciences and history; as he dies, his educated knowledge simply does not matter. In faith, he accepts Rachel as a sinless being and receives communion from her. (123)

Rachel, the principal character of the novel (although she appears significantly only in the last part of the story), is the initially sleeping second head of an old tomato woman named Mrs. Grales, a mutant in a post-nuclear-holocaust world that had grown accustomed to mutants, and she is central to my investigation because to understand who she is and what she is means to understand what the tale is all about. At the very end of the novel, Rachel "awakens" amidst the nuclear horror around her yet is curiously both spiritually and physically largely unaffected by the destruction and radiation around her.

Rachel is the ultimate union of scientist and theologian: her repetition of what she hears may represent the scientist's exploration of the world while her refusal of baptism may represent the theologian's embrace of a new and lasting theology unfettered by the ignorance of the scientists and theologians who came before her. For Rachel, the whole world is new. She is an adult who takes childish delight in her surroundings even though they are death and destruction. She lacks understanding of what is happening around her, yet she understands the world more profoundly than any other character. Rachel "knows" what we have forgotten.

Finally, Miller's use of mythology in the novel, both the mythology of religion and the mythology of science, breaks new ground in literature, not just science fiction, because he uses mythic symbols and imagery like the apocalypse, the phoenix, the Wandering Jew, the lawgiver, and the rite of passage to discuss important religious, philosophical, and social issues. The misuse of science has tragic

consequences because science, according to Miller's narrator, should be a tool for human improvement rather than a tool for human destruction. Jane Sellman, in her M.A. thesis, suggests that scientists should be "servants" of humanity rather than "dybbuks" or "golems" who bring power to politicians and sorrow to the rest of humanity (2). A recurring theme in the novel is the loss of Eden which Miller exemplifies in the loss of modern civilization into a future dark ages from which human beings struggle to emerge. This emergence or resurrection of civilization takes place against the backdrop of the Catholic Church and its scientific monastery dedicated to a Jewish scientist named Isaac Edward Leibowitz, who converted for the apparent purpose of preserving enough scientific information to help human beings in their struggle to emerge from the darkness (Sellman 5). Sellman explains, "The rediscovery of the past becomes the key to regaining paradise" (5). Nevertheless, a major theme in the novel remains the apocalyptic cycle, the problem of humanity condemning itself to destruction again and again, yet rebuilding again and again. Even the symbol of the religious scientist, Leibowitz himself, loses his status in section three (a "modern" era) as a preserver of sacred science and knowledge and Christian ethics and is still popular only as a patron saint of electricians. As a consequence of the unnatural division yet again of science and religion, the apocalyptic cycle repeats itself.

My tentative conclusions suggest that Miller himself hopes he is wrong and that humanity will not destroy itself over and over. Thus, his novel serves as a warning to each generation that science and technology must be tempered by religion and ethics to insure humanity's survival. Yet, even in the imagined devastation, the novel provides a ray of hope: Rachel who is preternaturally innocent survives and serves as a symbol of a future humanity that combines the best of science and religion. Miller's narrator appears to suggest that preternatural innocence is not simply a thing of the past but is also a thing of a possible future. Unlike some characters who pervert science for the sake of political or other sordid gain, Rachel desires only what is good and gives Communion to the dying abbot as a gesture of selfless love, both hers and Christ's. Perhaps Miller seems to be suggesting that God's power to forgive and to create anew is greater than humanity's power to damn and destroy.

Section 1: Science and Religion and Apocalyptic Cycles of Civilization

Newt Gingrich, the former Speaker of the House of Representatives of the United States Congress from 1995 – 1998, once said he was deeply influenced by Isaac Asimov's *Foundation Trilogy* where Asimov depicts the rise and fall of civilizations. Gingrich realized America as a civilization could fall, too, without constant diligence. Miller's novel is similar in that it depicts the rise and fall of civilization around a small monastery in a desert somewhere in North America. The setting is highly significant in that the monastery survives centuries and centuries of wars and strife but is not destroyed until technological civilization once again reaches its height. No matter how sophisticated we become, the disrupting influence always seems to be humanity's fallen nature, sinful behavior, and tendency to fight wars. Miller does not describe or defend the reasons for the nuclear holocaust that destroys civilization but only portrays its aftermath. He does seem to imply that, if we only used our technology for good instead of for war, humanity might yet survive, but he is pessimistic. In the mythology sections, he does seem to imply that God disapproves of war. Nevertheless, like the author of Ecclesiastes, he believes that war is a thing which has happened in the past and will happen again:

What has been, that will be; what has been done, that will be done. Nothing is new under the sun. Even the thing of which we say, "See, this is new!" has already existed in the ages that preceded us. There is no remembrance of the men of old; nor of those to come will there be any remembrance among those who come after them. (Ecclesiastes 1:9-11)

The monks of Leibowitz, however, try to remember the past and use their knowledge of the past to create a better present and hope for a better future. That their attempt ultimately fails rather spectacularly is ameliorated only by the preternaturally innocent character Rachel and the starship carrying the remnant of

humanity to another world. The flawed theists in the novel are on a quest not only for knowledge but also for redemption as opposed to the unreligious scientists or barbarians who quest only for power as a political endeavor, disdaining the practice of the theists who practice penance and demand humility, embrace the cross, and accept self-assured mortification. Sam Joseph Siciliano, in his *The Fictional Universe in Four Science Fiction Novels*, examines Miller's novel and realizes that, on the new world, like on the old, civilizations may again rise and fall because the apocalyptic cycle continually renews itself, although ultimately all things will come to an end (Siciliano 106–107). Although Miller does not address the ultimate apocalypse, he seems to have it in mind when Dom Zerchi, the last abbot of the abbey of Saint Leibowitz, refuses to baptize Rachel, the preternaturally innocent second head of Mrs. Grales.

Catholicism as a religion and as a culture permeates this novel so thoroughly that it is impossible to understand without some grounding in Catholic theology and cultural beliefs. The novel is also difficult to understand without some grounding in general scientific theory and the historical clash between science and religion. Miller presents the institution to which the members of his faith belong realistically and not satirically or unflatteringly or antagonistically. The Catholic Church is presented in essentially unaltered form with both its faults and virtues. It is presented as sympathetic to the advancement of science as long as that advancement does not result in the destruction of faith.

Indeed, not only is Miller's Church the background of the novel, but its theology forms the core of the ethical debates that take place between various characters. Although Miller's novel does contain some humorous pokes at Catholicism and Catholic culture, his attitude is not mocking or satirical but consists of the expressions of a Catholic writer who deeply admires the Church. Siciliano writes: "His humor resembles the smile of Saint Leibowitz: an almost sad, but bemused grin which acknowledges the sorrow and weakness in human nature. Catholicism, its theology and believers, is an integral part of the novel, providing its most persistent and apparent link with our world" (107). The link that Catholicism provides helps readers keep a better footing in a strange world. It is similar to John Glenn, the astronaut, reading from the Book of Genesis while orbiting the planet Earth: it restored the familiar within the

unfamiliar and provided an anchor to which Glenn and his fellow astronauts and many Americans could relate. In Miller's novel, the Catholic Church provides the Christian hook linking the past to the future. It gives us the ability to maneuver in unfamiliar territory. It is a technique used by many science fiction writers whether they use religion as the link or American or British or any other human culture.

Recent New Historicist Critics seem to suggest that we should examine the text in terms of social, cultural, and historical issues that give the novel its flavor. In the sense of the New Historical approach to literature, while some might argue that we should examine and pick apart *Canticle* with respect to the text itself and not allow ourselves to be distracted by nonliterary cultural elements, the characters in Miller's novel are the product of their social history, cultural mores, and political outlooks, as opposed to autonomous agents of social change. For the New Historicist, exactly what history is is different from its literary nature. Historians are themselves part of historical circumstances and social venues and political attitudes and economic upheavals, and their historical accounts must be understood in this context. In other words, people in general and characters in stories are the product of social and cultural attitudes that are beyond their conscious control, and the same is true for the authors of stories. It should not be left unexamined that Miller wrote his novel in 1959 at the height of the Cold War and fears of nuclear war with a Soviet Union that had already beaten us in the burgeoning space race.

There is no such thing as objective history to the New Historicist; every historical account is colored by cultural and social forces beyond the control of their writers, and the same is true of fiction writers. Because historical accounts are subject to the same scrutiny as works of literature (in fact, it can be argued that historical accounts *are* works of literature), history's relationship to literature must undergo substantial, even radical, revision. For Miller, the mythology depicted in the monastery scene with Thon Taddeo, a brilliant scientist who is an atheist and a dispassionate political pawn broker, and the Poet, a very ethical priest who chastises Taddeo for his lack of morality, forms an important backdrop to the novel as a whole.

The New Critic would treat this history and the author's historical circumstances as less important to the literary text, and the knowledge that critics have of their own history is no longer considered a valid

approach to the literary work inasmuch as even the critic's views are colored by social milieu. New Historicists have attempted to blur the traditional distinction between history and literature in favor of a kind of network linking the two. I think Miller would agree that any culture's mythology has a profound impact on how people view themselves both as individuals and as members of society and products of culture. Certainly, Miller's Catholic characters behave in ways consistent with Catholic culture even while his non-Catholic characters, often scientists, behave in ways consistent with the scientific culture of 1959 America.

Miller appears to look at human culture in different ways in terms of progressive theory or apocalyptic cyclic theory. Such a progressive view sees human beings as striving ever upward towards a better and better future whereas the apocalyptic cyclic theory sees human beings engaging in behaviors that often result in the continual fall and rise of civilization. Like Arthur C. Clarke, the scientist and science fiction writer, many authors adopt this view, though it is more popular in the Golden Age of science fiction than today. Miller adopts the cyclic view, and the whole notion of original sin plays an important role in the cyclic nature of human civilization.

Science is not seen as always causing progress but as often causing regression followed by progress and then regression again, etc. For Miller, the cultural aspect which is not cyclic is Catholic theology, and it is this theology that forms the anchor allowing science to bring to fruition new civilizations nevertheless fraught with the same problems of sinful human nature and war that has besotted every age through which humanity has ever traveled. Siciliano notes that original sin is a "nonprogressive" idea and writes:

In theological terms *Leibowitz* shows the operation of original sin in both the individual and human history. For Miller, original sin is manifest not as a blot on the soul, but as an outlook, an overbearing pride in man's self-sufficiency, his ability to create Eden on Earth through technology and knowledge. (Original sin seems uncomfortably close to the Clarkean view.) Accompanying this attitude is

a blindness, psychological and moral, the failure to acknowledge the evil side of man, the failure to accept responsibility for our human misdeeds. Thon Taddeo typifies this outlook at its worst and its attendant evils. We find the strongest opposing force in the abbots Dom Paulo and Dom Zerchi; they understand the weakness of human nature and stress moral responsibility. (108)

Again, for Miller, it is the Catholic faithful, wedded to Catholic morality, and scientists, also wedded to Catholic morality, who make the best of human beings. However, in the cosmology of his novel, some theologians are opposed to scientific progress just as some scientists are opposed to religious responsibility. It is the lack of religious faith and moral responsibility on the part of scientists that results in immoral behavior like assisted suicide and nuclear war destroying civilization yet again (both involve the death of the innocent before their time and perhaps the guilty as well, although nuclear war is on a much larger scale). Thon Taddeo, rather than helping society, is one of the seeds of its future destruction because he is motivated by power and not by faith. Wilson writes:

Unfortunately, the Thon's refusal to accept responsibility for his own actions causes an error in his handling of the abbey's scientific material. The Thon approaches the abbey's stored knowledge with caution, attempting to verify all information before using it. His efforts in this area extend to measuring the "concave depressions worn in the floor [of the abbey's doorways]...looking for ways of determining dates" that are readily available in the abbey's records. Despite this caution, his need to escape accepting responsibility for his actions allows him to believe that a work of science fiction (Karel Capek's R.U.R.) is history. Thon Taddeo's interpretation of this work of fiction provides apparent proof of his hypothesis that humanity in the thirty-second century is not descended from humanity before the Flame Deluge. This easy shirking of responsibility shows clearly that devotion only to knowledge will not, as the Thon maintains, create a world ruled by "Truth." His one-sided devotion will, in fact, allow knowledge to be used to damage the very society he believes he is creating. (57)

Wilson is right on the mark because true knowledge of the past is an essential ingredient in the development and preservation of culture in any society. Miller then presents unreligious scientists like Thon Taddeo as practically the primary cause of humanity's failure to create a peaceful world where people can thrive and progress beyond barbarism, clawing and scratching their way back to a technological civilization. If the purpose of technological progress is to improve the lot of human beings, as Miller seems to suggest, then by the unreligious scientists' refusal to encourage spiritual progress, Miller presents a world in which the ethical is subsumed by the practical to the detriment of species survival.

Furthermore, Miller makes use of humor with sympathetic characters in his use of religious language mixed with scientific language to emphasize the absurdity of incorrect memory serving a future filled with destruction and chaos. For example, Brother Francis prays a litany with very mixed language:

A spiritu fornicationis,

Domine, Libera nos.

From the lightning and the tempest,

O Lord, deliver us.

From the scourge of the earthquake,

O Lord, deliver us.

From plague, famine, and war,

O Lord, deliver us.

This prayer is all very conventional so far, but Miller shocks our minds into a higher awareness with a prayer that clearly places us in a very strange time and location:

From the place of ground zero,

O Lord, deliver us.

From the rain of the cobalt,

O Lord, deliver us.

From the rain of the strontium,

O Lord, deliver us.
 From the fall of the cesium,
 O Lord, deliver us.
 From the curse of the Fallout,
 O Lord, deliver us.
 From the begetting of monsters,
 O Lord, deliver us.
 From the curse of the Misborn,
 O Lord, deliver us.
 A morte perpetua,
 Domine, libera nos.
 Peccatores,
 Te rogamus, audi nos.
 That thou wouldst spare us,
 We beseech thee, hear us.
 That thou wouldst pardon us,
 We beseech thee, hear us.
 That thou wouldst bring us truly to penance,
 Te rogamus, audi nos. (16–17)

Ironically, Brother Francis does not fully understand the scientific terminology as we do, and this misunderstanding adds to the shocking nature of the prayer that tells us we are in a world not our own but which may one day be. Later, the myth of the Flame Deluge, told in the language of the King James Bible, paints the culture in which we find ourselves in the novel with broad tense strokes (Siciliano 116). We look upon this strange admixture of scientific and theological terminology with either humor or horror in the same way that an ancient Greek might look upon our feeble attempts to understand the

fragments of Anaximander, sometimes drawing whole books out of snippets that no one really understands anymore.

Although Miller makes use of humor, in the end, the world Miller paints is not very funny but a horror fraught with the dangers of ignorance and barbarism and the devilry of the misborn (Siciliano 118). The monastery of Leibowitz is like a fort in hostile territory—one which survives until the very end.

Miller brings out the irony of science and war. Since the dawn of time, scientists have often been pawns of the military. Miller understands this well. He portrays Thon Taddeo very unsympathetically yet realistically. Siciliano writes:

Yet, the Thon is cold, proud, and worse still, disdainful of humanity. While the monsignor, “surprised at his own sudden anger,” sees in an ugly peasant “the image of Christ,” Thon Taddeo sees mere scum. The scientist cannot accept the degradation of man, the incongruity between the present and the splendid past; he prefers to believe the men of the past who “invented machines that flew, who traveled to the moon, harnessed the forces of nature,” did not really exist. He makes the dangerous error of equating technological achievement with wisdom. “How can a great and wise civilization have destroyed itself so completely?” Apollo’s answer must reflect Miller’s attitude: “by being materially great and materially wise, and nothing else.” The abbot and the Thon will fight a similar battle. (123)

Why must the scientist and the theologian always fight? Miller seems to think it is because their worldviews are so different. He seems to decry science without theology as much as he decries theology without science. His scientists and theologians often talk right past each other, resembling the Zax creatures of Dr. Seuss: When a North-going Zax met a South-going Zax, each refused to step an inch to the East or an inch to the West to let the other pass, so they stood there obstinately while a civilization was built around them. In politics, one must give a little and take a little to reach reasonable compromises, but some scientists refuse to compromise with theology just as some theologians refuse to compromise with science. When scientists stop believing in good and evil but only in their own theories,

it is a recipe for disaster. Likewise, when theologians stop believing in scientific progress, it is a prescription for calamity. For Miller, when science and theology meet, true progress is made, both scientific and spiritual.

Miller's novel points to the view that, when people of this world attempt to build civilization on science alone, it is formula for social upheaval leading to war and cultural meltdown. Such people see the light of knowledge as the key to the future without discerning that the light they see may be a nuclear flash. Knowledge without wisdom is as disastrous for humanity as science without theology and theology without science, as either without morality, and as original sin without compassion. Only fools fail to see the good in human beings, just as only fools fail to see the evil in them, as Miller's carefully drawn characters exemplify. Our capacity for good and evil is part of the complexity of human nature and also part of the complexity of Miller's novel. Thon Taddeo is not wholly evil nor is Dom Paulo, the abbey's abbot during Taddeo's visit, wholly good. Each has his faults and virtues. Miller's point is that the divorce between scientist and theologian can only spell catastrophe. Miller seems to argue in his persona as narrator that faith is as much a burden to the believer as science is a burden to the scientist because each reflects the burden of original sin. Miller has Dom Paulo wrestle with himself over this burden as he wrestles with his friend, Benjamin Eleazar, the immensely old Wandering Jew. In their conversation, Dom Paulo's faith is both compared and contrasted with old Benjamin's faith in a way that illustrates the poignancy and the importance of belief in the face of catastrophe, whether personal or universal:

It crushed the spine, this burden. It was too much for any man to bear, save Christ alone.

To be cursed for a faith was burden enough. To bear the curses was possible, but then – to accept the illogic behind the curses, the illogic which called one to task not only for himself but also for every member of his race or faith, for their actions as well as one's own? To accept that too? – as Benjamin was trying to do?

...

The priest shrugged. "You would call it the burden of being chosen. I would call it the burden of Original Guilt. In either case, the implied responsibility is the same, although we might

tell different versions of it, and disagree violently in words about what we mean *in* words by something that isn't really meant in words at all – since it's something that's meant in the dead silence of a heart.” (172–173)

This conversation between the abbot and the Wandering Jew illustrates Miller's propensity to draw the stability of faith out of the well of doubt. One argument is between two devout people of different yet similar beliefs. The later argument between Benjamin and Thon Taddeo, with the Poet's intervention, serves to develop Miller's theme of contesting faith and science for the purpose of descrying meaning both in the debate and its lack of satisfactory resolution. To see and exemplify the union of scientist and theologian, science and faith, technology with moral responsibility, is to embrace the joy and the burden of being chosen, the sadness of the condemnation of human beings as a result of original sin, and the joy of redemption.

Thon Taddeo unfortunately depicts a sinful scientist detached from religious faith and its moral compass. He is a willing pawn of political warriors who will use him to conquer whomever they want to conquer for whatever reason they feel like conquering. He is the beginning of the end for civilization which will, in part three of the novel, be destroyed once again by immoral scientists who do the bidding of the military to their own detriment. Siciliano writes: “Miller through Benjamin condemns the scientists who work for the global rulers, ‘the children of the world,’ without considering the consequences. Benjamin and Dom Paulo have hopes the Thon will be a kind of messiah or saviour. Both will be disappointed” (130). The gulf between the two men cannot or will not be breached because the Thon is too wrapped up in delusions of grandeur to see the simple monastery for the ark of faith and the ark of science that it is. He sees only ignorant monks slavishly copying manuscripts and engineering schematics which they do not understand, yet it is Thon Taddeo who is ignorant of religious morality and will hasten the second nuclear holocaust to occur more than six hundred years after his lifetime. It is Brother Kornhoer whose mechanical abilities bring forth electric light for the first time in twelve centuries who stands in marked contrast to Thon Taddeo; they are both scientists yet one embraces faith and the other does not. If the Kornhoers of the world had developed greater power, the second nuclear

holocaust might have been avoided. However, the scientist-theologians of the planet did not then and never will desire that kind of power but only the kind of spiritual power that is contained within the human heart, waiting inside everyone only to be discovered. Brother Kornhoer is such a scientist-theologian whose brilliance only causes the Thon to wonder “what a man like that is doing cooped up in a monastery” (199). Brother Joshua is another whose own intellectual prowess will enable him to serve humanity well on whatever world the people of the starship wind up inhabiting. Both of these men accept responsibly the power that is given them and indicate the intent to use it wisely for the benefit of society and not for personal gain.

Another conflict with the Thon is between the Poet and Taddeo. The Poet removes his glass eye when something displeases him and restores it when he wants to see better, as if the glass eye is his conscience. The Poet distrusts Thon Taddeo and says so openly, deriding him and his lack of responsibility and lack of moral vision. The Poet leaves the glass eye with Thon Taddeo, perhaps in the vain hope that it will give the Thon moral vision; it does not. The Poet’s vision is superior but cannot be handed over like tradition. The scientist who lacks moral vision is like a blind man who cannot see color; he may think he can see, but he is still morally blind.

Miller’s narrator appears to believe that civilization will rise and fall due to our own fallen nature. In fact, civilizations will continue to rise and fall until the end of time, the ultimate apocalypse. Is there any way to stop the cycle? Miller neither confirms nor denies this, despite his pessimistic ending, because if the cycle is fruitlessly inevitable, then why write a novel intending to instruct us not to let civilization follow the path of destruction? For Miller, there is hope. It *is* possible for scientists and theologians to provide unique visions of a morally responsible science and theology. Scientific theology and theological science must develop or humanity is doomed to a morass of death and destruction.

Wilson concludes her chapter on *A Canticle for Leibowitz* with the following observation:

Throughout the novel, the monks offer a paradigm for the integration of science and religion. We are offered analogues of our own society, doomed to destruction unless science, characterized by exchange of cultural artifacts, can be successfully

integrated with religion, characterized by the acceptance of responsibility. The pessimistic quality of the novel's conclusion, in which humanity is once again destroyed by self-inflicted holocaust, is tempered by the image of the monks carrying their burden of memorabilia and responsibility to the stars. There they will continue to perform their essential function as society's conscience, making the necessary integration of science and religion, as long as humanity itself can survive. (64)

Human beings always want, as did Eve and Adam, to "become as gods, knowing good and evil," and Miller's narrator seems to believe that humans have gotten our wish. However, we will know neither "infinite power nor infinite wisdom," as the serpent lied, but only sorrow at how little we know and how what little we know is used for evil. However, knowledge is a kind of power which can be used for good or evil, and the monks in the starship seem determined to bring about a greater good out of the evil of the Earth's final conflagration.

As a result of my analysis of the text, I argue in this thesis that the major theme of *A Canticle for Leibowitz* centers around the debate between science and religion, and nuclear holocaust as the direct result of the lack of dialog between the two. Religion needs science to understand how to improve the world physically, and science needs religion to make sense of the universe and how to improve it spiritually. According to my analysis, the very breakdown in communication between scientists and theologians is destructive and can lead to annihilation. Science and religion may be construed as different reflections of the same source, and it is distortions in those reflections that lead to chaos and misery. Robert Dean Knapp, in his Doctor of Ministry Dissertation, "The Literature of Change: An Approach to the Fourth Gospel Through Current Science Fiction," writes: "Was the original temptation of Genesis 3 anything other than the lure of knowledge? Here knowledge again leads to the fall" (46). The abbey of Leibowitz is not only a light of faith but a light of science, and the destruction of the abbey at the end of the novel reflects the complete failure of humanity to live up to its ideal of a committed positive

relationship between science and religion. When God commanded human beings to subdue the Earth, he did not mean for humanity to destroy it—a message with which the monks of Leibowitz abbey would heartily concur.

Miller's novel seems to suggest that human beings are more valuable than the machines and cities they create; machines should serve humanity, not the other way around, and, by the same token, should not destroy the humanity they serve along with the planet on which they live. For Miller, Christians have a charge to take care of the Earth as well as to take care of humanity, both physically and spiritually. The failure of the Church to prevent the disaster wrought not simply by science but by flawed human nature results in a moral message against the misuse of power. Miller apparently tries to convey that people should not let this kind of cataclysm happen because it is the responsibility of human beings to see to it that humanity progresses not only technologically but spiritually. Alexis G. Latner discusses the importance of wedding technological progress with ethics:

Technology without wisdom, autonomous reason divorced from its proper depth, has again brought progress to an ignominious end state. Technological progress is real, but divorced from spirituality it has brought the history of human civilization on earth to the point of catastrophe – again. (116)

Moreover, Latner adds, “What it [the novel] reveals with crystal clarity, however, is that the ultimate end of technology—the consequence of pure technology, pursued at all costs, cut off from the wellsprings of the worship of God—is the disastrous destruction of the meaning of progress” (117). The knowledge that failure is an option gives human beings cause to prevent the kind of nuclear holocausts described in the story. The narrative is, for Miller, a testimony from someone attempting to see the future for the purpose of changing it. The ending of Miller's novel is a kind of public dream of the unobtainable, the unreachable, the untouchable, yet filled with the promise of the possible. The starship passengers reach for the stars while Rachel reaches for and attains a kind of spiritual perfection. Humanity seems unable to attain peace, but, in the end, Rachel survives and so do the monks and people of the starship. The world may have fallen, but humanity survives in two ways, one scientific and the other spiritual, and both go

their separate ways. J. Norman King writes, “Consequently, science fiction, at least in principle, is a peculiarly apt form of literature to speak both of and to our contemporary experience. It is, therefore, of considerable utility to theology in providing insight into the self-understanding of modern man” (cited in Knapp 7). Miller’s desire and hope for humanity are revelatory of his own humanity. His novel contains both social commentary and theological speculation, leading his readers to gain insight into both current society and the future of humanity.

As much as his theology and personal sense of religious ethics, the style of Walter Miller’s novel reflects his own personality in that it is awash with verbal wit, repartee, vivid figures of speech, a gentle mastery of the glory of Church Latin, and verbally painted landscapes peppered with not only people but a variety of God’s creatures, particularly vultures who throughout the novel “lovingly feed their young.” Miller demonstrates amazingly skillful parody of not only human institutions and beliefs but also literary criticism itself with a virtual fireworks of stylistic verbal gymnastics and a delectable overflowing cup of ambrosia of linguistic feats of the imagination. Moreover, Miller’s novel reflects the intensity of the dispute between science and religion because of its depiction of a monastery, a beacon of light, in the midst of a dark and chaotic future Earth. These verbal feasts, demonstrating an exquisite command of language, aid in the development of characters who are, like the author, types of the faithful scientist, that is, ordinary people struggling with issues of faith and ethics, and the struggle exemplifies the twin themes of apocalyptic cycles and the return to the preternatural or prelapsarian innocence of the Garden of Eden. All these serve to unify *A Canticle for Leibowitz* into the coherent whole of a Catholic novel displaying considerable depth and insight into the human condition. Thus, the way the characterizations contribute to the thematic content is the major force unifying the story as a whole. In essence, the novel is a joy to read, not only because of its unique style, carefully drawn realistic characters, and painted landscape, but also because of the sheer ecstasy the readers experience in simply tasting the delectable wit and delightful language of a master storyteller.

Wilson suggests that many authors of Catholic science fiction tales use Catholic priests as protagonists in their stories, so that these writers seem interested in addressing the conflicting belief

systems of scientific and theological knowledge, rather than promoting one belief system at the expense of the other. By examining the internal conflicts of characters concerned with both belief systems, these writers are able to transcend the limits of the science fiction genre to produce works of lasting value (i). Rather than try to determine what the author is trying to say with all of his symbols and imagery, we should try to determine what Miller hopes his readers will experience as a result of participating in the novel's symbols and imagery carefully drawn in a style of wordplay uniquely his own.

Miller creates a comparison between science and faith in which the two appear to be in a constant juggling act. The abbey of Leibowitz preserves scientific knowledge from before the Flame Deluge (the expression referring to nuclear war that destroyed much of Earth), even though the monks do not understand the vast majority of what they are copying. In *The New Awareness*, Warrick and Greenberg write, "In this future world almost everything is reversed from what we might expect. In actual history, for the last two hundred years science and religion have been at each other's throats; in contrast, in Brother Francis's world the Church has become the protector of the remains of science, and the electronics engineer, Leibowitz, becomes elevated to sainthood" (125). Miller decries the absence of religion from science, demonstrating in the story that one cannot survive without the other if humanity is to progress towards a better future.

Because people attempt to develop science and scientific knowledge without a strong sense of religious ethics, the world, according to Miller's novel, falls once again into war and nuclear annihilation:

Listen, are we helpless? Are we doomed to do it again and again and again? Have we no choice but to play the Phoenix in an unending sequence of rise and fall? Assyria, Babylon, Egypt, Greece, Carthage, Rome, the Empires of Charlemagne and the Turk. Ground to dust and plowed with salt. Spain, France, Britain, America – burned into the oblivion of the centuries. And again and again and again.

Are we doomed to it, Lord, chained to the pendulum of our own mad clockwork, helpless to halt its swing? (245)

Moreover, Miller adds to this pessimistic attitude,

Maniacs! The world's been in a *habitual* state of crisis for fifty years. *Fifty?* What am I saying? It's been in a habitual state of crisis since the beginning – but for half a century now, almost unbearable. And *why*, for the love of God? What is the fundamental irritant, the essence of the tension? Political philosophies? Economics? Population pressure? Disparity of culture and creed? Ask a dozen experts, get a dozen answers. Now Lucifer again. Is the species congenitally insane, Brother? If we're born mad, where's the hope of Heaven? Through Faith alone? Or isn't there any? God forgive me, I don't mean that." (240)

Miller's story displays a logical development for future history, scientific accuracy, viewpoints of both supporters and detractors of Church teachings and discipline, skillful narration spanning many centuries, and a very realistic depiction of ethics in action performed by passionate characters. Katherine Anderson writes that science in the novel frequently serves evil rather than good and behaves irresponsibly (50). For example, when Thon Taddeo, a brilliant but atheist scientist, serves Hannegan, an evil warlord, Miller causes his readers to fear for the safety of the monks of the abbey and the Memorabilia. Discussing this episode, Anderson writes,

Miller implies that expedience rather than justice governs the actions of science, and that to serve Hannegan is to serve evil.

Throughout the centuries religion appreciates science. With Leibowitz and the Church working together in the first section, science and religion are unified; the Church preserves and maintains science, but science does not reciprocate. The budding physicist Thon Taddeo exploits the abbey, contributes to the inhumanity of his political patron, and fails to see science as benefiting from the achieved mission of the abbey. Miller indicates a discrepancy between science with, and science without, the value system of the Church. (51)

In choosing to serve evil rather than good, Thon Taddeo sets science on the road to once again destroying civilization, an act the monks of Leibowitz desperately want to avoid but not at the expense of destroying

knowledge of science. Science without Christian ethics, for Miller, results in the kind of catastrophic world depicted in his novel.

Einstein wrote in 1940 an essay entitled “Science and Religion” in which he told a conference of 500 people “on Science, Philosophy, and Religion” at the New York Union Theological Seminary that he could not “conceive of a genuine scientist without that profound faith. The situation may be expressed by an image: Science without religion is lame, religion without science is blind” (1). Miller’s novel seems to emphasize the idea that science and religion, despite the protests of many to the contrary, have much to say to one another. It is the very lack of communication between science and religion that leads to the ultimate consequence of destruction via nuclear war in his epic tale. When scientists in his story look for truth, beauty, and goodness in their quest to understand the universe, his characters see far beyond the ordinary. Similarly, when theologians in the story look for truth, beauty, and goodness in their quest to understand both the universe and the God who created it, his characters discover the extraordinary.

Because Miller himself is a scientist with strong religious beliefs, when scientists in his story see a godless universe, his story suggests that they fail to see the divine spark that gives the universe meaning. When theologians in his tale see a universe devoid of physical laws and other knowledge derived from science, they are blind because they fail to appreciate both the complexity and the beauty of the physical universe which is God’s creation. Foolish scientists, such as Thon Taddeo and Doctor Cors, are the ones who fail to develop their spiritual nature so that they can see the divine in the creation and sustenance of the universe. Foolish theologians, such as Brother Armbruster and Monsignor Apollo, are the ones who fail to grasp that the creator fashioned physical laws that human minds must try to grasp, for humans who fail to develop their God-given curiosity are the ones who would be happier as clams. Theologians who run away from the implications of quantum theory are little different from scientists who run away from the implications of intelligent design theory. The twenty-first century, Miller appears to tell us in his novel, may be the time for science and religion to embrace and marry if humans are to see any kind of future at all. For Miller, it is the divorce between science and religion which causes the final conflagration in his story.

The novel is largely the story of the timeless clash between science and religion, and the author makes a major effort to describe how healing the rift between the two could be a force for good, but pessimistically describes how humanity is bound to repeat the errors of the past. It is the story of a battle between good and evil. Theologians and scientists alike, who honor human beings and behave according to religious ethics as taught by the Catholic Church, and those who despise religious ethics for the sake of a godless science serving self-appointed denizens bent on the attainment of political power, cause the destruction of the very Earth science is supposed to preserve and enhance. However, it destroys the very humanity it sought to serve, and science and religion battle one another when their cooperation, according to the story, would result in a better tomorrow. This battle has gone on throughout human history and, Miller's narrator seems to say, will culminate in utter destruction without the restraining hand of religious ethics to transcend the manifestation of horror in nuclear war.

For Miller, science is meant to be developed to benefit human beings and not to destroy them for the sake of one person or country attaining political power. The ethics which Miller believes the Catholic Church teaches despises war and destruction and embraces peace and the construction of civilization. Just as the Exodus story is not a conflict between Moses and Pharaoh but rather a conflict between the gods of Egypt and the God of Israel, so *Canticle* can be construed as not so much a tale of the conflict between scientists and theologians as a conflict between the angry manmade gods of nuclear bombs and war and the God of the myth of the Flame Deluge (184–87) who decries the horrors wrought by his children against his children. The difference between the manmade gods of nuclear war and the God of the Flame Deluge is that the artificial gods wreak destruction and leave dismay in their wake whereas the God of the Flame Deluge detests these false gods whom his children worship in error and attempts to help human beings by killing the “prince” who was responsible for the nuclear holocaust. In the story of Noah, whose family survived the original Deluge, the antediluvian people were destroyed by God for their wickedness, whereas in the Flame Deluge wicked people destroyed themselves to the great consternation of God. Mark Anthony Carter writes,

Although the biblical story is a religious allegory, in which good survives and evil is purged, in it we see one germ of the modern science fiction doomsday theme. The significance is that there is a small group of people who have knowledge of the coming disaster. Also, these people alone have the technology necessary to survive. These two things represent vital aspects of the modern doomsday theme in science fiction. The deific warning of impending doom that Noah receives is akin to our various modern electronic early warning systems. The ark that Noah builds is a precursor of the modern science fiction survival craft: the spaceship (4).

In Miller's novel, the good survive along with the evil, and the good perish along with the evil. This inversion is significant because, in many "realist" stories (such as Stephen Crane's "The Open Boat"), there seems to be no moral or theological rhyme or reason why some people live and some people die. Contrary to the realists, that some live and some die without any apparent logical or theistic reason, Miller suggests that everything happens for a reason, although he is true to the Biblical injunction of Jesus, "But I say to you, love your enemies, and pray for those who persecute you, that you may be children of your heavenly Father, for he makes his sun rise on the bad and the good, and causes rain to fall on the just and the unjust" (Matthew 5:44-45). For Miller, the ultimate fate of everyone is death, but his characters turn destruction into a fighting chance for some human beings to live so that humanity will survive. Miller does not concentrate on the idea of an afterlife, focusing instead on "this present darkness" (Ephesians 6:12), but he is conscious of it in that his Catholic characters believe the teachings of the Church. However, as Jesus said in his parable, "The servants went out into the streets and gathered all they found, bad and good alike, and the hall was filled with guests" (Matthew 22:10). Nevertheless, the novel is more concerned with spiritual salvation in the here and now than with the resurrection to eternal life. Miller speaks in the spirit of Ecclesiasticus/Sira 11:14: "Good and evil, life and death, poverty and riches, are from the LORD." Devout characters like Francis accept this; it is only atheists like Taddeo and barbarians like Hongan Os who expect anything else; and the Wandering Jew keeps waiting.

Miller also constructs a parallel between the setting of the Abbey of Saint Leibowitz, an oasis in the midst of a war-ravaged land, and the Garden of Eden. Also, mythologically, the story of Leibowitz

abbey is in some ways an echo of the story of Biblical Eden, a garden in the middle of the world, an oasis in the midst of a desert where humanity began again to rise above our evil nature and find goodness designed by God to be discovered by the discerning heart. Regarding myth, William Irwin Thompson, in *Darkness and Scattered Light*, writes, “Myth has been kicked out the front door but has sneaked in through an open window in the back in the disguise of science fiction” (cited in Knapp 24). The eden of the devout monks is frequently disturbed by rumors of war, but the abbey always survives until the very end when it is destroyed, ironically, by the very nuclear bombs its preservation of scientific knowledge caused to be created once again.

Canticle is about people who live and die in a fallen world beset with the common problems of humanity in a catastrophic environment. The novel is interesting in that the characters in the story are either Catholic or atheist or barbarian (or both). In other words, there are no Protestants in his world, and the Catholic Church is the only civilizing influence in otherwise barbarian cultures. The characters either discuss and disseminate or decry Catholic theology and science while expressing a dark nature capable of redemption. The portrayal of such Catholic, atheist, and barbarian characters is exquisite and among the most excellent in all of literature. This portrayal, one that ignores other denominations, goes hand in hand with the Catholic view that the opposite of Catholic is not Protestant; the opposite of Catholic is heretic. In the novel, as in the middle ages, the Catholic Church is the only civilizing force around, and those who reject Catholic ethics in favor of secular ethics, like Dr. Cors, are portrayed as misguided, even while portrayed sympathetically. The dark (i.e., sinful) nature of the characters is lit with the light of Christ, the dark nature of the era is lit with the light of knowledge, and the dark pages of the text are lit with the light of hope, that of rebirth and renewal of civilization.

The characterizations of the individuals who people the novel contribute greatly to its thematic content of despair and hope, sin and redemption, as well as to its theological insight and scientific progress, descent of apocalyptic destruction and ascent of civilization in conjunction with the ascent of the human spirit, and the supersession of the profane by the holy. Examples include scenes such as when Dom Zerchi preserves life even while allowing intense suffering of the innocent, when the artificial light

temporarily replaces the crucifix but is subsequently replaced by the crucifix again, and when various characters experience martyrdom.

Knapp writes that, while Jesus preferred blindness of the eyes to spiritual blindness, Dom Paulo prefers the soft light of candles representing spiritual light to the harsh electric light symbolizing the harsh knowledge wrought by scientific discovery (50). Just as the Poet claims to see better with his artificial eyeball, so people of faith in the novel behold the knowledge gleaned from science and scientific discovery better than those who do not truly see by failing to comprehend the true gift of knowledge given by God and waiting only to be discovered by means of faithful insight. Just as the disciples did not recognize the risen Jesus until the Lord broke bread and their eyes were opened, so John the Baptist did not recognize Jesus as the Messiah until he baptized him in the river Jordan. The eyes of characters like Thon Taddeo are spiritually closed because there is none so blind as the one who chooses not to see. Sellman contrasts Joshua, the biologist monk who will captain the starship, with Taddeo, the atheist scientist, “Like Saint Leibowitz, Joshua is a man who has come to the love of God through the love of knowledge. He is an affront to Thon Taddeo who could not comprehend that one could come to faith through scholarship” (10). True sight is a goal for which many characters strive but few attain in the novel until just before their deaths such as Dom Zerchi recognizing preternatural innocence in Rachel and dying as happily as Simeon who recognized Jesus in the Temple requesting that God now let his servant depart in peace. Nevertheless, in the attempt to fight death, characters such as Brother Francis and the Poet and Dom Zerchi recall other mythic heroes battling death like Gilgamesh and Beowulf. These stories stand in stark contrast to the figure of Benjamin, the Wandering Jew who cannot die.

In attempting to save what is of value to them, many characters in Miller’s novel embrace death in a portrayal of death that is neither sentimentalized nor trivialized. While scientists are often in the business of trying to save lives, the Church is usually in the business of trying to save souls, although Doctor Cors paradoxically believes that he is in the business of preventing suffering even to the point of assisting suicide for the terminally ill. In the novel, it is the Church that tries to save lives for the purpose of living as long as God wants them to live, whether it means living well or living the last moments of life

in pain and suffering amidst the horrors of war and Cain's primal sin. Amidst death and destruction, Dom Zerchi searches desperately for the light of dawn but sees only the light of Lucifer, the code name for the nuclear bomb that kills him. However, he does find a kind of renewal and rebirth in his discovery of Rachel and her preternatural innocence. Can humanity survive? In the Eden myth and the tale of Cain and Abel, humanity, though fallen, survives. In the *Canticle* myth, there is no hope for a new Eden, but perhaps there is for the humans who have escaped the planet and its destruction or for the possible future descendants of Rachel. They hold destiny in their hands, something God or perhaps fate has given them.

Miller makes an imaginative leap into a future world which is a very strong possibility and is a curious blend of the ordinary and the strange. The characters are very ordinary and yet set in a strange future beset with all the problems associated with nuclear catastrophe. As a science fiction writer, Miller has radical ideas of what it means to be human in a world filled with mutants, the result of science gone astray. While many characters in the novel think that mutants are not human and should be killed, the Catholic Church in the story declares that mutants are human and forbids their wanton slaughter. Thus, the mutants, whom Miller chooses to call the Pope's Children because of the papal edict, flourish while causing the death of future saints like Brother Francis Gerard of Utah.

For many authors, the values and beliefs of the writer are often reflected in the principles and tenets of many of their characters or the writer's narrator. The author's conflicts become his characters' conflicts, and their resolutions are marked favorably or unfavorably according to the author's conscience. Unlike many authors, Miller's characters are neither two-dimensional heroes fighting for truth, justice, and the American Way, nor are they two-dimensional evil characters who only seek to destroy good. Neither are they wholly theologians or wholly scientists but mixtures of the two struggling to make sense of a chaotic world. Hence, Miller's novel is more realistic than the "space operas" that are often so popular with the public in that his characters often struggle with their own beliefs as opposed to flat characters who respond to the idealized world of good and evil. Some of his characters are scientists who reject theology while other characters are theologians who reject science. Miller understands that some people wholly embrace one or the other, but most people lack certainty either way. Robert Dean Knapp

suggests that Miller's in-depth characterizations display unusual insight into the roles of faith and science in a setting where both are essential to the survival of the human species:

Survivors of an atomic holocaust of many centuries earlier struggle back from their medieval age of the church's role, then to a renaissance which puts the question of whether man will serve science or science man, and finally to a modern age when once again death hangs overhead. Miller riotously uses his fictional future to examine our own past and the choices before us today. Creation and apocalypse are reenacted; the role of faith in the face of an uncaring science comes to the front. Written during the start of the atomic arms race in the fifties, Miller fills his entertaining story with serious questions: will we learn from history? His future world does not. Will we survive our taste of the fruit of knowledge? The questions are open; Miller ends with a theological speculation of heaven and earth passing, a new heaven and new earth. (30)

Thus, for Miller, science and theology are two-way mirrors looking into an alternate reality, that of a future post-nuclear-holocaust society, which ultimately survives only spiritually in the person of Rachel, though concretely in the starship with monks and other survivors shaking the dust off their sandals against the Earth.

In his novel, Miller uses both scientists and theologians, sometimes both in the same character, to address the problem of evil, the value of free choice of the will, ethical dilemmas, and how the progress of technology affects people in both negative and positive ways. The barren sterility of the Earth following each nuclear holocaust in the story parallels the empty spirituality of the scientists who reject theology as well as of the rigid theologians who cannot or will not understand the ethics of the science they oppose.

A challenge in the novel is to understand its language, and not just the Latin but the language of faith as well as the language of science. To understand the language is to understand the culture it is trying to convey to the reader. The language of science and the language of the Catholic Church are juxtaposed, sometimes appearing contradictory and sometimes appearing to reflect an uneasy alliance between two very different ways of looking at the world. Characters in the novel experience various crises that are religious, political, spiritual, and personal, and the protagonists attempt to resolve the crises

by falling back on their faith with an eye towards the practical. These crises of life and death, light and darkness, or realism and divine vision, serve to allow the author through his narrator to extrapolate a theology coupled with scientific principles so that each crisis is embraced on its own merits and resolved yet in ways not necessarily satisfactory either to the reader or the characters themselves.

Part of the power of Miller's novel is that his resolutions are not necessarily neat and clean, because the characters struggle with ideas and problems that have neither simple solutions nor elegant continuity with the past (expectations and resolutions can be disjunctive). Several characters have their hopes dashed, such as Brother Francis whose desire to retrieve his carefully reproduced engineering schematic ends in failure when the Pope's Children make him a martyr. The Poet's desire to see justice prevail also ends in his own death. The myth of the Flame Deluge itself demonstrates an attempt to find continuity with the past, but it too fails to give characters in the story a true picture of history. Moreover, Dom Zerchi's zeal for life culminates in the kind of death he was defending in opposition to assisted suicide. Thus, characters such as these have their expectations resolved in a way that they neither expect nor necessarily desire even when their wishes are conducive to appropriate moral behavior as defined by the Church. Finally, how does apocalyptic literature focus on the relationship between the past and the future? In Miller's novel, the very human portrayal of his characters ties the current reader with the future he is depicting in a way that allows the reader to identify with the characters, particularly the faithful characters, in a positive way. Wilson implies that part of the potency of the novel is the internal struggle of faithful characters with not only science but scientists who espouse views which challenge what they regard as true religious beliefs:

Yet I would argue that the most interesting science-fiction stories concerning the man of faith focus not on the inherent and inevitable conflict between science and religion, but on the individual's often failed attempts to reconcile the two. These works, concerned not merely with the ideological conflict but with the effect of such a conflict on realistically drawn characters, transcend the generic, and sometimes anti-literary aspect of science fiction. By examining the use of Catholic clergymen as focal characters in several of these works, I hope to explore the

relationships and conflicts between science and religion through the internal struggles of the characters themselves. (11–2)

The characters in Miller's novel both represent and espouse ideologies struggling to be heard in a chaotic world filled with scientists and Catholics as well as barbarians and civilized people who desire to live in that world without intense suffering or being crushed and killed by the forces of either science or faith. Miller's narrator seems to suggest that juggling science and faith is a work of art to which some people are more adept than others.

One question is whether the characters who advocate science are villains or heroes and whether the characters who advocate religion are insightful or blind. Does the decision of scientists like Thon Taddeo to pursue science at the expense of theology make him morally superior to those who merely acquiesce to theology without studying the implications? Does the compassion of a scientist like Doctor Cors who wants to eliminate suffering make him morally superior to the theologian, Dom Zerchi, who sees suffering as redemptive and suicide as taking the easy way out? It seems that Miller says no to both these questions.

The symbolism of images of Saint Leibowitz in the form of a wooden statue with an enigmatic smile and as a defender of the faith in the cause of the preservation of science cause the reader to experience the work of art as a representation of the scientific ideal in terms of the sainthood of a tireless worker for the cause of truth, whether that truth is theological or scientific or, most truly, a combination of both. Isaac Leibowitz represents everything that a human being should and could be -- a scientist, a theologian, a believer, a skeptic, a founder of scientific and theological institutions, and a worker of miracles -- miracles of preserving truth and the indomitability of the human spirit. Again, Sellman writes:

Paulo's reference to the Simplification is not the only reminder of the past; in his private office is a statue of Saint Leibowitz. It is the same wryly smiling statue that Brother Francis's friend, Brother Fingo, was working on as a special project. There is some consternation over the strange smile of the statue and an oblique implication that the image resembles Old Benjamin. (8)

To illustrate her point, Sellman quotes from the novel:

Dom Paulo often marveled that the wooden Leibowitz had also proved resistant to several centuries of his predecessors – marveled, because of the saint’s most peculiar smile. That little grin will ruin you someday, he warned the image....That smile – Who do I know that grins that way?...Someday, another grim dog will sit in this chair. *Cave canem*. He’ll replace you with a plaster Leibowitz....Then you’ll be eaten by termites down in the storage room. To survive the Church’s slow sifting of the arts, you have to have a surface that can please a simpleton; and yet you need a depth beneath that surface to please a discerning sage. (153–54)

Sellman continues,

In the third section, Paulo’s prophecy about the statue comes to pass. The statue does find a home with the Abbott, Dom Zerchi, who appreciates its wry smile. His affection for the carving identifies him with and reminds the reader of Abbot Paulo. “He [Zerchi] had paused in his pacing to glance up at the face of the image. The image was old, very old. Some earlier ruler of the abbey had sent it down to a basement storeroom to stand in dust and gloom while a dry-rot etched the wood, eating away the spring grain and leaving the summer grain so the face seemed deeply lined. The saint wore a slightly satiric smile. Zerchi had rescued it from oblivion because of the smile.” (8)

The irony of the enigmatic smile on the statue is not lost on the abbots, who color the story with their own virtues and foibles. Perhaps the saint, with his statue, has a secret that is shared only with the elect of his order. Perhaps Leibowitz, an ordinary scientist who merely wanted to preserve for future generations the Memorabilia of the generation before the Flame Deluge, knows with his smile what everyone else must disguise. Wilson suggests that Saint Leibowitz receives too little attention from critics because the Jewish scientist turned Christian monk is really the glue that holds the novel together:

Yet as Peter is to the Christian church, so Leibowitz is the rock upon which the monastic order, and novel, is built. Both the title, and the main setting, at the Abbey of St. Leibowitz, focus continual attention on this individual, as does the first section of the novel, concerned as it is with the process of his canonization. It is not, therefore, simply coincidental that in this focal character are conjoined these three apparently disparate elements: the integration embodied by Leibowitz is essential in order to maintain simultaneously the two types of exchange described by Walker as necessary for the preservation of society. (43–4)

Thus, for Miller, the figure of Saint Leibowitz creates a bond between scientist and theologian. Miller asserts in the third section of the novel that Leibowitz is now honored primarily as the patron saint of electricians. That scientists from simple electricians to builders of nuclear bombs and spaceships honor Leibowitz may account for the “enigmatic smile” on the face of his statue. In many science fiction stories, the idea is as much the hero as the major character or characters, and Miller’s idea-hero is the importance of wedding science and theology. Because the glue that holds the novel together is the repetitious appearance of the Leibowitz statue, it seems clear that Miller intends his readers to associate Saint Leibowitz himself with the ideal character who is both a person of faith and a person of science. While Miller does not equate science and religion, he implies that the person who embraces both achieves a kind of enlightenment.

Section 2: Religious and Secular Ethics

A Canticle for Leibowitz constructs an annihilation as the result of nuclear war along with the imagined stability of the Catholic Church. Against the somewhat ironic backdrop of a Catholic Church surviving amidst the chaos of a nuclear holocaust, Miller seems to suggest that, regardless of how many times human beings destroy themselves and their cultures, of how many gods they worship, of how many dangers they face, the future is consistently tied to the past in the present. In his novel, the monastery of Leibowitz forms a foothold connecting the past with the future. In the process, Miller creates a comparison between science and faith in which the two appear to be in a constant juggling act. The abbey of Leibowitz preserves scientific knowledge from before the Flame Deluge, even though the monks do not understand the vast majority of what they are copying. When one accepts either science or religion with no attempt to reconcile the two in a constructive way, the end result is typically tragic. When scientists and theologians engage in battle for the heart and soul of human beings, no one wins, but when they engage in dialogue, the fruits are enormous.

The major differences between religious ethics and secular ethics lies in the teleological ramifications entailing the embrace of one or the other. In Miller's story, secular ethics involves the depiction or characterization of individuals who seek scientific knowledge for the sake of power and political gain, as with Taddeo, or the alleviation of human suffering at the expense of maintaining the sacred quality of life, as with Doctor Cors. By contrast, in his story, religious ethics involves displaying the actions of characters who not only seek knowledge for the betterment of humanity but also desire for righteousness to prevail even in the face of losing power or political gain, as well as the importance of respecting life even in the face of intense suffering. Miller appears to believe that religious ethics must triumph for humanity to continue to exist because, without it, human life is not sacred. For Miller, if

human life is not treated as sacred, but the living human body is treated as merely a flash of light in between two periods of utter darkness, then there is no point to life.

The barren sterility of the Earth following each nuclear holocaust parallels the empty spirituality of the scientists who reject theology as well as of the rigid theologians who cannot or will not understand the ethics of the science they oppose. In his novel, Miller uses both scientists and theologians, sometimes both in the same character, to address the problem of evil, the value of free volition, ethical dilemmas, and the negative impact of technology even while it improves humanity's lot physically and spiritually. Though no longer naturally good, humanity is not intrinsically evil either. We inherited original sin.

For Miller, ethics ultimately derives from religious belief, and without a strong sense of ethics, human beings in the story ultimately fail to progress either scientifically or spiritually. Miller's novel contains the stories of an ultimate breakdown between science and religious ethics. Humans must use and improve their conscience, Miller appears to say, or it grows feeble. Similarly, humans must use and improve their sense of religious ethics or it grows torpid.

On the theory that characters themselves may serve as symbols, the figures Thon Taddeo and Doctor Cors serve to symbolize the unnatural division of science from theological ethics, whereas the figures of Brother Kornhoer, Abbot Zerchi, and Saint Leibowitz himself serve to symbolize the natural union of science with religious ethics. It seems clear that Miller portrays Thon Taddeo and Doctor Cors in an unfavorable light while supporting the positions of Brother Kornhoer, Saint Leibowitz, and Abbot Zerchi as members of the faithful who support the progress of science while decrying the horrors of the kinds of war that science brings about. For example, Thon Taddeo is portrayed unsympathetically as an atheist scientist who completely lacks respect for both religious belief and practice, whereas Brother Kornhoer is portrayed sympathetically as one who embraces faith with respect for science. When discussing Brother Kornhoer's invention of an electric lamp, the Thon says contemptuously,

“No, no, not the lamp. The lamp's simple enough, once you get over the shock of seeing it really work. It *should* work. It would work on paper, assuming various undeterminables and guessing at some unavailable data. But the clean impetuous leap from the vague hypothesis to a working

model –“ The Thon coughed nervously. “It’s Kornhoer himself I don’t understand. That gadget –“ he wagged a forefinger at the dynamo “ – is a standing broad-jump across about twenty years of preliminary experimentation, starting with an understanding of the principles. Kornhoer just dispensed with the preliminaries. You believe in miraculous interventions? I don’t, but there you have a *real* case of it. Wagon wheels!” He laughed. “What could he do if he had a machine shop? I can’t understand what a man like that is doing cooped up in a monastery.” (199)

Generally, the faithful characters who embrace science accept responsibility for their actions whereas unfaithful characters who embrace science do not accept responsibility for their behavior any more than the barbarians in the novel who kill for sport. Critic Patricia Wilson contrasts Miller’s implied acceptance of science and religious responsibility with Jeanne Walker’s similar view of the necessity of social sustenance:

[Jeanne M.] Walker... presents scientific knowledge (in such cultural artifacts as the memorabilia) and acceptance of responsibility (still essentially a religious concern) as two connected methods of sustaining society.

The degree to which an individual or a group of characters promotes or preserves society is decided by the degree to which they involve themselves in these two methods of exchange. The Simpleton mobs cause the dissolution of the social structure by refusing to accept responsibility for their own actions when they attempt to destroy the knowledge that they feel caused the Flame Deluge. Benjamin, the Jew, accepts responsibility associated with suffering but rejects exchange through cultural artifacts by isolating himself from such exchange. As a result he neither strengthens nor weakens the social fabric. The scientists involve themselves with exchange through cultural artifacts, examining the ancient writings of the memorabilia eagerly, but refuse to accept the responsibility for their actions. Their participation results initially in the growth of society but finally in its destruction. (41–2)

Thus, for Wilson, the monks of the abbey are necessary for the continuation of human civilization and cultural heritage. The monks make the preservation of knowledge, particularly scientific knowledge but

also religious and ethical knowledge, their personal responsibility, and accept suffering to further their cause as engaging in *imitatio Christi* (Wilson 42).

Similarly, the debate between Abbot Zerchi and Doctor Cors as well as other symbolic characters reflects a serious attempt at dealing with conflicts between formal religion and formal science, religious ethics and secular ethics. As symbols, Zerchi represents the religious ethicist who follows the teachings of Christ and the Church and defends the sacral quality of life as being of paramount importance, whereas Doctor Cors represents the secular ethicist who follows the secular ethics learned no doubt in medical school that regards suffering as a condition worse than death. Interestingly, Miller portrays both positions sympathetically but comes down squarely on the side of the religious ethics as taught by the bishops of his Church, which he regards as having greater authority than the secular ethics taught by doctors in a medical school.

Miller develops culture clashes such as pagan versus Catholic, science versus theology, faith versus unbelief. For example, the clash between Hongan Os and Thon Taddeo, neither of whom believe in the God of the monks of Leibowitz, demonstrates scientific sophistication versus barbarian backwardness. Likewise, the clash between Thon Taddeo and the monks demonstrates theological and scientific naïveté versus theological and scientific sophistication. So, too, the clash between Dom Zerchi and Doctor Cors demonstrates compassionate theology versus compassionate science—an intense clash of beliefs which is not easily or cleanly resolved, although ultimately the Catholic Church theoretically wins the debate. Nevertheless, as Sellman writes about Zerchi preparing for the nuclear horror about to occur,

He [Zerchi] just cannot believe that after the horror of the last war humanity would be willing to risk total annihilation again. ‘My sons, they cannot do it again. Only a race of madmen could do it again ---’ ... Zerchi stops speaking when he sees someone in the dining hall smiling. It is Benjamin and he is smiling because he knows from past experience that man will fall again. Humanity has learned nothing from the past except the necessity of making plans to deal with the inevitable. (29).

Zerchi, like the abbots before him, experiences Benjamin, the Wandering Jew, as a riddle wrapped in an enigma, yet Carter seems to suggest that the Wandering Jew is the very conscience of the novel:

The haunting figure in this novel is Lazarus. On one hand he is an optimistic symbol of the continuance of man through this apparently predestined cycle of the birth and self destruction of humanity. But on the other, he is the reminder of mankind's repeated folly leading him to destruction. (59)

What neither Paulo nor Zerchi understand, Benjamin/Lazarus and Rachel will, perhaps because one has seen it all before and the other has seen nothing, is that everyone else has only the questionable histories to rely upon for knowledge, while the Wandering Jew remembers the sordid distant past and Rachel is the future of a new race of human beings who will "know" the past and the future connected to the present in a mysterious way known only to Miller's God. For the people of the starship, the cycles may not end until the end of time itself and the return of Christ, whereas Rachel and her future children will experience the New Jerusalem on Earth, holding infinity in their hands and eternity in an ever-present now.

Similarly, Miller is addressing in a literarily self-conscious way whether scientific knowledge used in a manner consistent with merely secular ethics is a thing of evil in and of itself because of the tendency of human beings to use scientific knowledge to destroy rather than to create. Wilson writes:

By showing how the Order of Leibowitz is associated with scientific concerns as well as religious ones Walker avoids reducing the novel to a simple confrontation between science and religion. Miller's monks possess both knowledge and the sense of responsibility to use it properly. Because they are the only group of characters in the novel capable of integrating these two elements, they must serve as society's conscience in their attempt to preserve it. (42)

Many critics, like Walker Percy, regard Leibowitz the Jew/monk/scientist as a figure represented by different three different types of characters in the novel: the Wandering Jew, the monks, and Thon Taddeo. In other words, if humanity combined the best qualities of these three types of characters—that is, the faith of the Wandering Jew, the dedication of the monks, and the brilliance of the scientist—the people of Earth would flourish by using technology for the betterment of society rather than its

destruction (Wilson 43). That no one character exemplifies all three characteristics is Miller's way of saying that such a combination may not be possible except in a supernatural character like Rachel.

The parallel quest for scientific truth and theological truth often clash on the way to fulfillment, and the bruised egos of their proponents survive to fight another day. Nevertheless, Miller uses humor to convey the idea that theology is not the enemy of science: In the monastery, Thon Taddeo tells the monks that he does not wish to offend them by telling them scientific principles that may conflict with their theology. When the puzzled monks ask what he is talking about, he says that another theologian (in the novel) maintained that the rainbow could not have existed before the Flood for spurious reasons, and all the monks, who are much more sophisticated than even Thon Taddeo himself, erupt into laughter. This scene apparently represents Miller's understanding of the Catholic Church at its best: unafraid of science and amused at feckless scientists who think that the Church is opposed to scientific knowledge and technological advancement when it is the very Church itself that has preserved scientific knowledge to enable humanity to rise from the ashes of its own foolishness.

The characterization of Francis as a feckless sinner who becomes a saint is another example of Miller presenting what he seems to believe is a portrayal of Catholicism and its ethical system at its best. Francis has an innocent nature whose dark side is tame at best. His devotion to Leibowitz is touching and reflects the Catholic belief that all devotion is given to the glory of God. His martyrdom demonstrates the theological irony of the Pope's policy coming back to bite the hand that fed it. Nevertheless, by insisting on the sanctity of life, Miller represents his vision of the Catholic ethical way, contrasted with the unethical and uncivilized behavior of the mutants as well as the later unethical behavior of not only the barbarians who threaten the monastery but also the scientists like Thon Taddeo and Doctor Cors who attempt to subvert its commitment to demanding religious ethical behavior of its members and all people. The language used to justify sparing the Pope's Children from certain death illuminates the theme of the novel and the characterization of people in the story: Miller would probably agree that God alone gives life, and only God has the authority to take it away, although characters in his story often misuse their free will to disobey the Church. The attempt to preserve life in the midst of overwhelming death and

destruction is of crucial thematic importance. The difference between science and religion is not just over whether to preserve life but over the quality of the life preserved.

As mentioned earlier, the Catholic Church teaches that all life is sacred, and suffering is redemptive, whereas for many scientists, including Doctor Cors, suffering is the enemy and sometimes deliberately causing death is a good because it is a release from suffering. For Miller, it is this attitude that mortals, and not God alone, have the authority to take away life that is what causes war. Critic Sellman seems to confirm this argument. She implies that Miller's vision of the ideal society is one in which secular laws are morally coincident with religious laws, but society as constructed in Miller's novel is far from ideal. She goes on to explain that the belief of Doctor Cors, that euthanasia is an acceptable alternative to a lingering and painful death, has deleterious effects for any society, and people like Dom Zerchi, the abbot who argues against the killing of those suffering from the terminal illness of radiation sickness, spend their lives working to instill Church ethics in an increasingly secular world. For Zerchi, when society loses its moral compass, the results are harmful in often subtle and unexpected ways. When people embrace the scientific and the practical at the expense of the more difficult choice to embrace the myths and ethics of Christ and the Church, then society experiences a moral disequilibrium, a loss of the sense of self-worth that comes from righteous behavior (cf. Sellman 29–31).

The meeting point between barbarism and civilization begins where respect for life and for fellow mankind intersects. War is not simply a breakdown in communication between nations, between science and religion, but between respect for life and the desire to destroy life for whatever reason. Miller seems to argue that to ignore the sacredness of life is to privilege life as a mere material or biological phenomenon.

In the second section of the novel, "Fiat Lux," Miller brings out clearly the dispute between theologian and scientist as well as the distinction between the sacred and the secular. Hannegan, a corrupt politician trying to unite a number of city-states into one larger nation, desires to get his hands on the documents of science (*Memorabilia*) preserved by the monks of Leibowitz. The eternal conflict between

the sacred and the profane, Sellman argues, is exemplified in the dispute over the proper use of the Memorabilia:

Abbot Paulo and Thon Taddeo Pfardentrott come to verbal blows over the issue of who should have dominion over the wisdom of the past and how that wisdom should be put to use. The outcome of the argument may well determine humanity's ability or lack of ability to obstruct the heady progress toward another holocaust. Paulo's view is that moral law must govern the pursuit of knowledge; Christian love is the only force capable of stopping the perversion of scientific inquiry. (8)

It seems clear, then, that the secular characters in the novel lack the moral weight required of those who seek to help humanity not simply become civilized again but be worthy of the gift of civilization. The primary sin of Thon Taddeo is not, therefore, his desire for knowledge or his politics but rather his proverbial Laodiceanism.

Moreover, Brother Kornhoer has a running battle with Brother Armbruster over Kornhoer's invention: Armbruster is furious that the crucifix in the library has been removed to make room for the artificial light mechanism. The symbol of Christian faith is being subsumed by the symbol of hell because the artificial light symbolizes that Satan masquerades as the angel of light. These symbols illustrate the conflict between the Poet and Thon Taddeo; the former tries to instruct him in morality; the latter, however, thinks that the monks are fools and do not deserve to preside over the precious knowledge. Eventually, the Poet will die a martyr's death while Taddeo succumbs to the gods of his own devising: Power and Mammon.

The choices made by various characters in the story reflect the practice of social institutions, which put down evil and the kind of individuality that approves of self-empowerment at the expense of social justice and survival. These institutions attempt to eradicate ethically inappropriate behavior resulting from the lust for power. Yet these same institutions, because they are products of fallen, sinful human beings, simultaneously attempt to eradicate good and the kind of individuality that promotes self-empowerment for the betterment of society. They ultimately fail because society's leaders are consumed

by their thirst for power and mammon. To escape from the institutional machinery is to embrace the knowledge of both science and faith that God would have us use for the improvement of humanity, whether scientific knowledge or spiritual knowledge. The Apostle Paul might say that in slavery to Christ people find true freedom, but people choose slavery to machines rather than using machines as slaves to humanity, a practice that, for Miller, twice results in nuclear holocaust. The violence of warfare in human society is only part of a larger, insidious pattern that both scientists and theologians attempt to defray but in different ways. Miller's message appears to be that, if seekers of the knowledge of both science and religion worked together, then the pattern of violence might begin to unravel, leaving both progress and peace as well as a strong ethical system in its wake. When people are seen mainly as objects rather than as children of God, then violence becomes a means to a disastrous end. Miller's characters do exemplify this inexcusable demise. Brother Francis Gerard of Utah and the Poet, both of whom have more faith and courage and a stronger sense of morality than either realized, succumb to violence just like Francis whose naïve love and respect for his enemies proves his undoing:

The monk crossed himself and began telling his rosary beads while his eyes remained intent on the distant thing in the heat shimmer.

While he had been waiting there for the robber, a debate had been in progress, higher on the side of the hill. The debate had been conducted in whispered monosyllables, and had lasted for nearly an hour. Now the debate was ended. Two-Hoods had conceded to One-Hood. Together, the Pope's children stole quietly from behind their brush table and crept down the side of the hill.

They advanced to within ten yards of Francis before a pebble rattled. The monk was murmuring the third Ave of the Fourth Glorious Mystery of the rosary when he happened to look around.

The arrow hit him squarely between the eyes.

“Eat! Eat! Eat!” the Pope's child cried. (116)

In Martin Luther King's *Letter from Birmingham Jail*, he writes that he came upon a woman demonstrator tired from the day's long march, and, when he asked her how she was, she replied "with ungrammatical profundity, 'My feets is tired, but my soul is rested.'" Like King, Miller understands that one does not need a degree in religious ethics to be a person of honor and deep personal integrity who knows the difference between right and wrong. Francis is a monk whose faith in God is justified even when his faith in the honesty and integrity of the Pope's children fails him. So, too, the Poet-priest; although his faith in God remains unshaken, his trust in the soldiers precipitates his demise, perhaps precisely because he absolves the evil soldier just before consigning him to the dustbin of history. For Miller, Francis and the Poet typify the faithful among Catholics because they love mercy, do justice, and show humility before God (cf. Micah 6:8).

Section 3: Sin and Redemption in a Fallen World and Rachel

The theme dominating the latter part of *Canticle* is preternatural innocence: Miller portrays Rachel, the second head growing initially out of the body of Mrs. Grales, as a preternaturally innocent human being in the same way that the Virgin Mary is the Immaculate Conception. Indeed, Miller has Rachel describe herself in the dream of Joshua, a brother at the monastery, as “the Immaculate Conception.” Rachel’s innocence both portends a positive future and decries a sordid past. The innocent Rachel reflects a positive hope for the dying culture burning in nuclear fire around her. The old tomato woman, Mrs. Grales, represents despair for the once vibrant culture of Earth, while the innocence of Rachel paradoxically may be intended to engender despair for the tragedy of the people on Earth left behind by the departing starship. The innocence of Rachel is a symbol of the innocence of the people on the starship leaving Earth in the hope of a better life on a world not racked by apocalyptic cycles that plagued the planet of their birth. Miller seems to believe, in Rachel, that it is possible for humans to rise above the human condition into a New Jerusalem of love and peace. The novel’s ending, according to some critics, is a cynical description of people infected with original sin who will continue the practice of their ancestors from time immemorial. However, unlike James Blish’s prelapsarian innocence (cf. below), the preternatural innocence of Rachel does not cause or ultimately result in evil, from Miller’s perspective, although he may be deliberately leaving the question unanswered. Rachel’s innocence, given by the stamp of God, is both a declaration of hope for the future and a fresh start from an ignominious beginning, since she was born in the midst of nuclear fire. Although a censure of the death of billions, one may see the end of the story as a vigorous affirmation of life.

Rachel, according to Miller’s novel, is preternaturally innocent, representing the progress of God and not of human beings. In other words, human beings cannot make themselves better because of their inherited predisposition to commit sins, but God makes human beings better by his grace and the gift of

preternatural innocence to Rachel. Miller's purpose in creating the Rachel character may be to demonstrate that, while it may be impossible for human beings to change themselves, God can change the human heart. That Rachel is a product of the power and grace of God is indicated by the novel's assertion that Mrs. Grales was not born with the Rachel head whom Mrs. Grales wishes to be baptized to the consternation of priests both monastic like Dom Zerchi and secular. Dom Zerchi questions Brother Joshua:

“How many souls has an old lady with an extra head – a head that ‘just grew’? Things like that cause ulcers in high places, my son. Now, what was it you noticed? Why were you staring at her and trying to pinch my arm off like that?”

The monk was slow to answer. “It smiled at me,” he said at last.

“What smiled?”

“Her extra, uh – Rachel. She smiled. I thought she was going to wake up.”

(274–275)

Joshua's view of Rachel smiling at him and his later vision of Rachel speaking to him are crucial to our understanding of this central character as a living being, a living soul. Significantly, the reader can comprehend this character only after Joshua's vision. Rachel is really a new immaculate conception of a preternaturally innocent soul. Her status causes us to recognize her as God's progression from the simple but devout Mrs. Grales to the theologically sophisticated but mentally blank Rachel. For Joshua's vision, Rachel appears to progress gradually from an inferior to a superior development for the human race, a refinement not genetic but spiritual.

Since the Immaculate Conception of the Blessed Virgin Mary is important to how Miller conceives of Rachel's nature, a brief explanation may be in order. The word “preternatural” comes from the Medieval Latin *praeternaturalis* from the Latin *praeter naturam* meaning literally “beyond nature” or “above nature” or “contrary to nature” (author's translation). Because *natura* means literally “birth,” Miller could be playing on words in Latin so that he may mean that Rachel is “contrary to birth” (she was not “born” per se but “grew” on the body of Mrs. Grales) or perhaps “contrary to the order of the world.”

As such, she may represent a new beginning that is a complete turnaround from the natural state of human beings as inheritors of original sin. As is well known, Mary, as the Immaculate Conception, definitionally was preserved from the stain of original sin through the merits of her son Jesus Christ. Original sin is the predisposition of human beings to commit sins inherited, theoretically, from the original disobedience of Adam and Eve. Original sin renders the soul an enemy of God, a servant of the devil, and destined for the fires of hell. The punishments for original sin include not only banishment from the Garden of Eden for Adam and Eve and all their descendents, but also include God's curse of the human soul, divorced from the privileges of eternal life (spiritual death), and subject to divine judgment. Original sin makes us subject to the law of concupiscence (inappropriate desire), suffering, and bodily death because the sin of Adam and Eve (disobedience of God's commandment) entailed God's punishment in which they not only lost the right to dwell in the Garden of Eden but also lost both sanctifying grace and the rewards which were the prelapsarian gifts of God but would later become the preternatural gifts of God for themselves and all of their descendents. According to Catholic doctrine, God has implanted in human beings souls, which furnish the seeds of resurrected bodies of eternal life itself. For Miller, prelapsarian innocence is not the same thing as preternatural innocence because one is the innocence of human beings (Adam and Eve) before the fall and the other is the innocence of human beings (Mary and Rachel) after the work of Christ.

What do these mysteries have to do with Rachel's character in Miller's *Canticle*? What will spring from her loins? Miller does not say, and we can only guess. Rachel, born amidst the complete destruction of humanity and Earth, is the ultimate conjunction of science and theology: preternatural innocence created in the midst of total cataclysm. While we might think that the starship represents the best hope for humanity, Miller seems to suggest that our real hope lies in Rachel. But who is Rachel? Is she God's gift of mysterious hope and unfathomable goodness? Until we understand these central questions, readers cannot comprehend Miller's novel or his message. Unfortunately, understanding the character of Rachel may be difficult at best because she is something other than what readers might expect from a human being. Even though Miller delineates her as the new Mary, the new Eve, the new

phoenix rising from the ashes, Rachel paradoxically is the misborn reborn. Initially, as the sleeping head on the shoulder of Mrs. Grales, Rachel is eloquent in her silence, and, after she awakens, she is unique in her dignity in a way similar to the silent eloquence and unique dignity of the Crucifix in the sanctuary where she awakens. Rachel is mystically complex and yet disarmingly simple in her natural curiosity and deeply abiding honor and preternatural sense of morality. Perhaps the Poet could reveal her identity, but Miller had long since expunged this character from the plot. Mary Shelley in *The Last Man* may serve as a tool to unlocking Rachel's mysterious character. Writing about the cross, Shelley speculates that

It belonged to an order of reality higher than "brute nature", an order to which at one time the spirit of man was able to aspire. Its full meaning then was too deep and universal to be expressed physically in anything but a very simple and abrupt hieroglyph. It symbolized all the real values of Christendom – chivalry towards the weak, the dignity of womanhood, the broad stone of honour, the beauty of holiness, and the splendour of that justice whose eyes are unbandaged, and whose sword is laid before the mercy-seat of God. It symbolized not worldly success, or the petty triumphs of materialistic science, but a supernatural victory accomplished, even in defeat, by "the broken heart and the unbroken word."

In the neo-paganism of recent generations, all these things had gone....utterly out of fashion...(79)

If Shelley's explanation is relevant here, then Rachel lives in our hearts and in our dreams, whispering to us as she did to Joshua, "I am the Immaculate Conception." We may understand Rachel about as well as we do the Virgin Mary and her sinless Son, which is to say, not very well at all. Miller suggests that we can only trust in God's providence while implying that vigorous diligence is required by those who do so. For example, when Dom Paulo meets Thon Taddeo for the first time, he is disquieted by the Thon's icy demeanor:

For a moment his glance locked with the scholar's. He felt the warmth quickly fade. Those icy eyes – cold and searching gray. Skeptical, hungry, and proud. They studied him as one might study a lifeless curio.

That this moment might be as a bridge across a gulf of twelve centuries, Paulo had fervently prayed—prayed too that through him the last martyred scientist of that earlier age would clasp hands with tomorrow. There was indeed a gulf; that much was plain. The abbot felt suddenly that he belonged not to this age at all, that he had been left stranded somewhere on a sandbar in Time's river, and that there wasn't really ever a bridge at all. (183)

The monastery is like a bridge between not only different times but different worlds, and religion is the focal point which links the past with the future in a quest to continue human civilization as long as time (or providence) will allow.

In a similar vein, Rachel and Mrs. Grales, the old tomato woman, are the center around which the novel revolves. Mrs. Grales is an interesting character because she represents the simplicity of the Church and the heart of the faithful, but Rachel is fascinating as a portent of the future and is, in some sense, a kind of supernatural phenomenon. Initially, Mrs. Grales, whose name echoes the Holy Grail, and Rachel, whose name may be an allusion to Jacob's beloved wife, seem one and the same because Rachel is "asleep" and appears to be unconscious even of life itself. For this reason, the priest, Dom Zerchi, refuses to baptize her, not believing she is a human being. Later, when he realizes that she is a human being, he still does not baptize her, but for a different reason: it is because she is preternaturally innocent and has no need of baptism for the remission of sins, as Miller indicates in the last two paragraphs of the novel: Rachel is everything human beings were ever meant to be but were denied because of original sin. When Dom Zerchi is able to fathom this miracle, he is ready to die just like the old man Simeon in the New Testament who is allowed to see the "salvation" of God (cf. Luke 2:30), the Christ child, before his death. For Miller, this is not an apotheosis in the sense of a deification of Rachel but rather a quintessence (literally a "fifth element," which, according to ancient medieval alchemists and theologians, permeates nature and is the stuff of which the heavenly bodies like stars and planets are made) in the sense of the most representative example of innocence, aside from Christ himself, in its purest form. Miller describes Zerchi's realization as a kind of epiphany in the dual sense of a manifestation of a supernatural being (that is, preternatural) and a recognition of the essential nature of Rachel. For the

abbot, this recognition gives him the gift of a vision of mystical reality in its true form, and in the revealing scene Miller describes his illuminating discovery thus:

The image of those cool green eyes lingered with him as long as life. He did not ask *why* God would choose to raise up a creature of primal innocence from the shoulder of Mrs. Grales, or why God gave to it the preternatural gifts of Eden – those gifts which Man had been trying to seize by brute force again from Heaven since first he lost them. He had seen primal innocence in those eyes, and a promise of resurrection. One glimpse had been a bounty, and he wept in gratitude. Afterwards he lay with his face in the wet dirt and waited.

Nothing else ever came – nothing that he saw, or felt, or heard. (336)

If one regards them as a unit, the characters of Mrs. Grales and Rachel are one of the Pope's children, a biological sport, an aberration both physically and theologically. The dual-headed being is called one of the Pope's children because, even though a mutant, the result of centuries of exposure to the nuclear waste of a devastated planet, the Pope had decreed that mutants are indeed human beings and should not be killed. Even her name, "Grales," calls to mind "the Holy Grail" of legend, the cup from which Jesus and his disciples drank at the Last Supper, indicating that the old tomato woman is not necessarily what she seems to be but, like Rachel, is an important theological mystery (Siciliano 149).

While all the other characters in the novel are portrayed as flawed human beings, neither wholly good by nature nor wholly evil, as are all children of Adam and Eve except the Blessed Virgin Mary, Jesus Christ, and Rachel, Miller portrays Rachel as different because she lacks knowledge even though she is full of wisdom. Thus, it seems that the idea of knowledge is extremely important as a kind of focus for the novel even while Rachel represents a blank slate, a being who in the complete absence of knowledge soaks up new knowledge like a sponge to foster the future of humanity. However, Rachel lacks concupiscence. Mark Anthony Carter suggests that Rachel is both the end of the cycle portrayed in Miller's novel as well as the beginning of a new one:

At the end we encounter Rachel – the additional head growing from the shoulder of Mrs. Grales. It sleeps for years while Mrs. Grales lives but comes alive when in a state of wide-eyed

innocence. She awakens – is born – during a nuclear attack. Miller himself suggests the coming of a new Eden, a world peopled by Rachels, a simpler world which perhaps marks the end of the cycle. (59)

It is said that those who fail to study the past are doomed to repeat it. However, Rachel, as a kind of idea of preternatural innocence, will not or cannot repeat the mistakes resulting in the carnage surrounding her because she is God's fresh start for human beings who may begin to create again with the power of goodness and the science of curiosity. Adam and Eve could sin because they had prelapsarian innocence, whereas the Blessed Virgin Mary and Rachel are prevented from committing sins because they have preternatural innocence granted them as a gift of grace. This does not mean Mary and Rachel lack free will; it is just that the will of each is supernaturally infused with grace enabling them to act in ways that are perfectly conformed to the will of God. In other words, they neither sin nor experience concupiscence, not because their wills are suppressed but because they are given the power to know the will of God and to know that the will of God is always right so that they always behave rightly. The preternaturally innocent Rachel and her descendents will still need grace so that they may aspire to even higher virtues.

While many science fiction critics assert that stories with metaphysical elements are more properly classified as science fantasy or simply fantasy despite the clear science fiction elements, Patricia A. Wilson quotes Darko Suvin, the well-known science fiction critic and author of many books, who argues that "that some of his favourite works of science fiction contain elements of religious metaphysics: for example, 'the resolution of A Canticle for Leibowitz with the character of Mrs. Grales.' That a relatively recent critic such as Suvin still prefers to classify science fiction containing supernatural or miraculous events as science fantasy, or simply fantasy, rather than science fiction implies that positivism is not dead" (4). While I am not a positivist, I think that there is something to be said for suggesting that many novels like Miller's provoke many original thoughts based on the author's own experiences and reading. Miller is no exception to this rule as he writes elsewhere that he wrote *Canticle* as a response to

his bombing of a monastery and, as a reader of Jung, saw Mrs. Grales and Rachel as Jungian figures (Father Garvey, a personal friend of Walter Miller's, in a personal email to me, 5-23-2005).

As mentioned earlier, Joshua, a brother, at one point remarks to the abbot that Rachel's head, still "sleeping" at this point, once smiled at him, leaving him deeply disturbed. The abbot does not believe him, thinking the brother simply mistaken, but the abbot is also deeply troubled and perplexed. When Joshua has a dream that a surgeon is planning to surgically extirpate the Rachel-head, his response is very Catholic:

And the Rachel face opened its eyes and tried to speak to Joshua, but he could hear her only faintly, and understand her not at all. "Accurate am I the exception," she seemed to be saying, "I commensurate the deception. Am." He could make nothing of it, but he tried to reach through to save her. There seemed to be a rubbery wall of glass in the way. He paused and tried to read her lips. I am the, I am the – "I am the Immaculate Conception," came the dream whisper. (257)

The vision of Joshua is later confirmed as giving what Miller's narrator regards as true information about the actual nature of Rachel because, at the end of the novel, Zerchi sees "preternatural innocence" in her eyes. Miller seems keenly aware of the common belief that God speaks to people in dreams, as Sira writes in Ecclesiasticus 34:3: "What is seen in dreams is to reality what the reflection of a face is to the face itself." Earlier, Dom Zerchi is aware of the theological problem presented by Rachel. He asks an interesting and important question of Joshua after meeting Mrs. Grales: "How many souls has an old lady with an extra head – a head that 'just grew'? Things like that cause ulcers in high places, my son" (252–253). Is the soul of Rachel distinct from the soul of Mrs. Grales? Miller, by his presentation, seems to think so. Yet the soul of Rachel is even more theologically significant than its status as an independent being: Rachel's soul is pure and undefiled and is born amidst one of the greatest sins ever committed by human beings: nuclear war and all its horror. Rachel is the newborn Blessed Virgin. Miller may have conceived of her as either hope for humanity or the last gasp of a frustrated God who grants supernatural healing in unexpected ways and at unexpected times including the healing of the body of Rachel, damaged by broken glass.

The dream Joshua experienced is actually happening as the bombs drop—Lucifer indeed has fallen, succeeding in destroying God’s creation yet again and perhaps for the final time. Rachel can only repeat what she hears because she is like a newborn babe, without learning yet absorbing everything around her. Dom Zerchi realizes that Rachel has miraculous powers beyond his ken. When he removes glass from her arm, she experiences no pain, and it heals almost instantly. Also, when Zerchi attempts to baptize her, Rachel somehow realizes that this is wrong: “Her smile froze and vanished. No! her whole countenance seemed to shout” (310). Dom Zerchi realizes that something strange is happening and asks himself: “Who, then, was Rachel? And what?” (310). Then Rachel instinctively gives Dom Zerchi viaticum. Only she could do this so innocently. Rachel somehow sensed the Real Presence as only someone wholly without sin could do. She felt its power and respected it. In the same way that God gave knowledge to Adam and Eve, God gave knowledge to Rachel (Siciliano 154). She has a natural knowledge that gives her extraordinary ability to heal. So, Dom Zerchi attempts to teach her the Magnificat, but he stops before he tells her the part about “from this day forward all generations will call me blessed” because he is unsure that there will be any more generations to bless. The future of human beings on Earth may therefore be bleak as a result of the nuclear war or full of the promise that Rachel gives to Dom Zerchi by her acts of love and generosity. Siciliano suggests that, while human beings are finished on Earth, there is hope for a new species sprung from Rachel:

But at this same moment God brings forth a new creature, perhaps a new species, born without the fatal flaws of man, a creature who seems inherently good. Human history ends with the beginning of something new and wonderful, far superior to man. So, *A Canticle for Leibowitz* concludes on two notes, one overwhelmingly positive, and one overwhelmingly negative. (155)

Seen negatively, the novel’s ending presages the utter destruction of the Earth, but there are actually two positive notes: one is Rachel and the other is the ship sent to the stars. However, Rachel does not accompany the people on the starship but remains on Earth to begin anew as only a preternaturally innocent human being can on a planet devastated with nuclear radiation. Perhaps Rachel could only be born amidst destruction and catastrophe. Like the Phoenix rising from the ashes, the new can only be

born fresh and without sin amidst utter chaos. Just as redemption came through the ugliness and pain on the Cross, so preternatural innocence is reintroduced to Earth through the ugliness and pain of a second nuclear war. Perhaps, like the Poet, only the poet in all of us can really understand Miller's point. Will the cycle repeat again? Perhaps amidst the stars but not on Earth. Carter suggests that, because Joshua and the people of the Church leave in a spaceship for the stars, the cycle, like the Rapture, will probably repeat again on another world or worlds. Joshua and company leave to begin life anew on a wild frontier. Joshua is "the link with the past" for the human race and represents "the promise for the future" (Carter 62). Carter makes the interesting speculation that Joshua also represents a curse in that he may well be the origin of humanity repeating the apocalyptic cycle again.

I argue that Rachel represents the opposite of a curse, a blessing, because she is the beginning of a new dawn for humanity. Thus, because Earth is now home to both carnage and preternatural innocence, both corruption (of the world) and incorruptibility (of Rachel) must coexist on the planet. We cannot understand the nature of preternatural innocence except in the midst of the most extreme fallen guilt: just like the Cross and the Resurrection. In other words, in the case of Jesus, sinful human beings had to put to death a sinless man in order to bring about the destruction of death, according to Catholic teachings. Once again, Rachel represents a new way of looking at ethics because she will make a fresh start so that human beings can behave ethically by nature instead of by law. Just as the Virgin Mary never sinned by her nature because of the merits of her divine Son, so Rachel will never sin by her nature because God is making of her a new nation just as he did with Abraham. Alan A. Ford suggests as much:

Rachel is the pinnacle of Miller's achievement. She is the promise that God does not quit offering chances to his creation to regain "the preternatural gifts of Eden." Rachel's refusal of the rite of baptism at the hands of Abbot Zerchi signals her awareness that she is innocent of Adam and Eve's original sin, because she is the first member of God's new creation. And she is offered to us in the face of total destruction. She is a reminder that God sees possibilities where we see only obstacles, and holds out hope that, whatever our sins, God will not desert us. (48-49)

Because Rachel is preternaturally innocent by nature, she is capable of becoming not only the new Mary but also the new Eve, the new mother of all the living and the new mother of all the faithful. Her faith is natural by grace and not by law.

Science attempts to obviate our need for God, but Rachel shows us that God not only explains the nature of the universe but is an essential component in the scientific exploration and determination of the laws under which the universe operates. Because many people think that science provides us with answers about the nature of the universe, they think that science also makes God unnecessary. However, to understand the nature of the universe and its operation is not the only reason people believe in God and need God. Rachel is pure and undefiled yet it is for this very reason that she knows by faith how much she needs God. The starship represents hope for humanity while Rachel is God's expression of love for humanity. Perhaps in the person of Rachel God has chosen the time of the true Apocalypse.

Significantly, Siciliano does not seem to know what to do with Rachel:

Has God given up on man forever, switched his interest to this new being? Is this new Eve really immune to Satan's temptation, or is she too doomed to fall? Such questions stem from the basic problem: Rachel operates on a plane we cannot connect to the rest of the novel. One might argue that her function is mainly symbolic; she is a miracle, a symbol of God's ultimate mystery and goodness. (158)

Rachel is just as mysterious as the God who created her, and Miller may not intend for us to understand the novel without understanding her. Yet is it possible to understand who she is and what her function is? Is it possible for sinful beings to understand sinless beings? Perhaps not. Perhaps we are meant only to experience the mystery of Rachel in a similar way to how we experience the mystery of the Cross. A mystery cannot be understood by definition but can only be experienced in a spiritual way. Siciliano regards Rachel, though fascinating, as an ultimately unsatisfactory conclusion to the novel (159). I disagree. I think that Rachel is the culmination of thousands of years of progress, not human progress but God's. Biological evolution tells us how human beings evolved into intelligent creatures from lower forms of life, whereas spiritual evolution tell us how human beings evolved into children of God by the

grace of Jesus Christ. Thus, spiritual evolution, particularly the “evolved” Rachel character, is God’s progress in that she represents and, in fact, is the dawn of a new race of people. God is starting fresh with humanity. Perhaps this time, Miller seems to say, things will be different. And *that* is a very satisfactory conclusion to a novel that appears only on the surface to be extremely pessimistic about the human condition and the consequences of original sin because the pessimistic ending in itself is an effective tool to force readers into action—to do something about the looming threat of the Cold War at the time when Miller wrote the novel.

Miller develops an unusual, provocative, and influential theology to incorporate the lives of mutants in the salvific process. Miller is not clear who wins the debate in his story of ordinary people who are neither included nor excluded from the salvific process because they are feckless sinners, inherently evil, or beautifully innocent. Unlike James Blish's ostensibly preternaturally innocent snakes in his novel, *A Case of Conscience*, the preternaturally innocent Rachel is not a threat to the human race; rather, she is a symbol of what human beings could be if not infected with the dark nature of original sin. Why does Dom Zerchi not baptize Rachel? Because she is innocent or because he believes she is going to die before she can develop her inherent nature of a soul infected with the barest essentials of the disease of original sin? All it takes is a microbe. All it takes is the nucleus of a cell. Before that, she was baptized in preternatural innocence. As Rachel whispers to Joshua in a dream long before this scene, "I am the Immaculate Conception" (257). She is Mary as a child, infused with the grace of Jesus Christ at the instant of her conception, spouting words as if speaking in tongues, sensible only to her yet full of grace. She is Jesus after the Resurrection and before the Second Coming, speaking in the language of the heart. She is Rachel singing rather than weeping for her children, who are no more, yet with the promise of the resurrection. She is the misborn reborn.

Did Rachel have to die the way Blish's snakes had to die? Perhaps. But for different reasons. Rachel needed redemption in the same way that Mary needed redemption. In other words, while Mary was redeemed by the blood of her Son just like everyone else, the primary difference is that she was so redeemed at the instant of her conception. This is not a contradiction because Rachel needs redemption in

the sense that she will be prevented from committing sin by the grace of Jesus Christ just like Mary. Rachel needs redemption because of the way she might develop. On the other hand, Blish's snakes had to be destroyed because of the way they developed. By contrast, Rachel was not a threat to the salvation of human beings the way the snakes were, and, in fact, I think Walter Miller would have regarded the concept (of prelapsarian innocence as a direct threat to salvation) as a doctrine that is in and of itself theologically insane because of his apparent belief that the preternaturally innocent Rachel is the hope of humanity and a prophecy of things to come rather than a symbol of its doubt and demise. Rachel need not be killed by theological necessity. Miller's theological point may be that she is pre-Adamic at the time of her "birth" or awakening. He implies the condition of her soul as a result of her preternatural innocence, and I suspect Miller's intent is that she would see the beatific vision before she moved through the cross. Do people who see the beatific vision before moving through the cross need to be destroyed at all costs because they are a threat to Christian theology? Miller, perhaps without realizing the theological import of his words, seems to answer in the negative.

There is not much in the world that is driven by reality; it is all perception. Or is it? What is real? What is truth? I am reluctant to reiterate the question that Pilate asked Christ. However, Christians seek to know the character of Christ and, hence, the quality of truth. Therefore, "what is truth?" becomes "what is Christ?" Brother Francis, Brother Kornhoer, Benjamin, and Dom Zerchi, all in their own way, tell us who Christ is, and, hence, what truth is. Reality is Christ, for Miller, in the sense of Colossians 2:17: "These are shadows of things to come; the reality belongs to Christ." What in American culture, according to Miller, is driven by Christ? People's perception of Christ is what drives much of American and much of Western culture. The body of Christ is, for the Catholic community which comprises it, the central archetypal figure of living history around which humanity's survival revolves. His subtlety of presentation of the centrality of the body of Christ transcends one's awareness of suffering and death and resurrection. The death and resurrection of Jesus is the center around which the Gospels revolve. Along the same lines, the death of Mrs. Grales and birth of Rachel is the center around which *A Canticle for Leibowitz* revolves. It culminates in the spiritual and physical destruction of Earth coupled with the

spiritual and physical rebirth of humanity in Rachel and the survival of the remnant hurtling towards the stars. Perception is catching up with reality inasmuch as the future of suffering humanity is seen in modern culture to lie in the theological importance of advancement in the various sciences of the human race. God wants human beings, Miller seems to say, to advance scientifically and spiritually to achieve the spiritual discernment requisite to a race beset with scientific advance and cultural misery.

Canticle has elements of comedy and tragedy with an overarching Christian perspective. While many science fiction works depict tragic forces leading to destruction, Miller depicts human beings as not at all innocent in the process. The difference between Miller and other authors, Christian or not, lies in the font from which redemption flows: it is not from science that humanity is redeemed but from God. While the monks shake the dust from their feet as they leave the Earth for the last time, Rachel is a new creature wrought by the evil of science and yet born from above (cf. John 3:3) in a new way strangely unrelated to baptism. Miller does not appear to dismiss science as evil, but he warns readers about humans who misuse science to produce evil results. For Miller's narrator, God via Rachel, or his vision of the supernal creature, snatches victory from the jaws of defeat. The monks in the starship are merely starting over for a humanity that may not have changed. Rachel is a radical change in the nature of humanity. The starship monks represent for Miller good science doing something good for humanity mixed with good theology, whereas Rachel is God making humanity better. In the end, the final monk to enter the starship claps his sandals together in order to shake the dust from his feet (336), an obvious reference to Christ's commandment, so that Miller seems to be saying to the people of the Earth, and not just a town, "The dust of your town that clings to our feet, even that we shake off against you. Yet know this: the kingdom of God is at hand" (Luke 10:11 and cf. Matthew 10:14; Mark 6:11; Luke 9:5; and Acts 13:51). Will the descendants of the starship monks and the descendants of Rachel ever meet? What would be the consequences of such a meeting?

Miller's theology is as orthodox as the theology of C. S. Lewis and just as poignant. For Miller, humanity's fallen nature has evil consequences, and so he seems to believe he must create a different kind of human to rise from the ashes of humanity's own destructive nature. Science does not cause destruction

per se but the misuse of science, that is, science without religious ethics, is doomed to fail, in essence to cause the second fall of man, and the third fall, etc. This may be what Miller means when he writes, “Lucifer has fallen,” indicating the detonation of nuclear warheads. Lyssa Dianne Bossay explores the view that Miller, despite the theology surrounding the extraordinary Rachel character, actually develops a system of beliefs in his future world that is consistent with the orthodoxy of the Catholic Church:

Miller’s view of man’s fallen state and of his need for a grace outside himself is as orthodox as Lewis’. Yet his exploration of certain hypothetical consequences of unredeemed original sin is thoughtful rather than polemical, compassionate rather than contemptuous, and speculative rather than allegorical. It is profoundly religious; it is also real science fiction. Miller and Lewis have in common the grammar of their faith; but in matters concerning the inherent implications of technology itself, Miller’s diction is founded far less than Lewis’ upon principles of exclusivity. His primary motifs offer ample evidence of this in both their vehicles and their topical content.

(113)

Bossay also writes that the figure of the Wandering Jew exemplifies the idea that those who reject the historical offer of redemption are doomed to repeat history, that is, are doomed to experience again and again the apocalyptic cycles of destruction and rebirth (113–14). That said, Miller is no anti-Semite. His depiction of the Wandering Jew in the person of Benjamin/Lazarus is very sympathetic. In “Fiat Lux” Benjamin is looking for the Messiah but has his hopes dashed. Miller seems to suggest that the Messiah will not be found in a scientist who rejects faith but only in someone who embraces faith, someone like Saint Leibowitz himself or Rachel. In this dichotomy, the scientist without faith rains destruction on the Earth and brings pain and illness and suffering, whereas Jesus is a God of healing and brings salubrious good news to the Earth. Once again, Rachel is a preternaturally innocent human being who feels no pain and experiences no suffering despite the destruction of the Earth happening all around her. At the end of the world, she is the beginning of new life.

Section 4: Conclusion

Our earth is degenerate in these latter days. There are signs that the world is speedily coming to an end. Bribery and corruption are common.

-- An Assyrian clay table dated approximately 2800 B.C.

Throughout his novel, Miller stresses connections between the ideological structure of the Church and the structure of ideas and relations between characters in the societies in which they live, breathe, move, and have their being. The most illuminating critical approach to science fiction involves coagulating the ideas and ideals of the characters with the ideas and ideals the societies and social and religious institutions to which the characters either belong to or are estranged from, to which they support and defend or decry and seize by violence either to destroy or to remake in the image of whatever new ideology strikes their fancy. One of the most basic myths of all human cultures is the quest for immortality, and Miller provides us with a glimpse at the Catholic Church's theology of resurrection in the midst of suffering and death. For many people, the end of the world is their greatest fear and their greatest hope. It is possible that Rachel achieves the immortality sought for by so many people before her but only in the midst of cataclysmic death and destruction. This only serves to show that it is God's way to bring forth good out of evil. Nevertheless, for Miller, the apocalyptic cycle is a vicious circle of humanity's own devising and is different from the ultimate apocalypse that will be initiated by God. Again, Rachel is God's response to humanity's apocalypse, for humanity by itself could not produce a person of preternatural innocence.

Mythology wrought by humans yet inspired by God is a middle ground between pure science and pure theology. Science is no better than the scientist who discovers its principles, nor is theology any better than the faithful who practice its precepts. Miller's novel exemplifies this idea in the conflict between science and religion, a conflict that leads to the destruction of both the science and the religion of the people who wrought their own demise. This conflict destroys both the world and its mythologies,

both the mythologies of faith and the mythologies of science, with two rays of hope in Rachel and the people of the starship. Each will develop different new mythologies to make sense of a restructured universe.

For Miller, the Catholic Church forms the bulwark institution which his characters both love and struggle with as well as oppose and try to destroy. As with any good science fiction story, Miller brushes the canvas of his setting with the broad strokes of novelty and strangeness, infusing in readers what critics once fashionably called “the sense of wonder.” The sense of wonder engendered in me as I read this story consists of the fascination with being in a world in which I felt both comfortable and uncomfortable, that is, comfortable in the setting of a Church I know well amidst the backdrop of a future culture alien to my way of life and way of thinking. Science fiction as a literary genre is thus capable of enabling us to escape into a world familiar to our senses but strange and a bit abhorrent to our feelings, engendering within us both feelings of awe and fear at the unknown and unknowable as well as feelings of joy and sadness at the triumphs and failures of characters for whom we develop a sense of familiarity. Because we seek to make sense of the strange in terms of what we know, science fiction is unique as a literature because it can cause readers to develop a new and more perceptive perspective on our own societies and cultures that is not possible in any other medium. Miller has written a timeless story about a possible future wracked with the pain of human folly yet sustained by the hope of the faithful for a better tomorrow in the person of Rachel and the people of the starship.

A science fiction novel containing a mixture of genuine science with genuine theology seems out of place and ludicrous in a secular world. What does science have to do with a monastery full of devout monks dedicated to preserving ancient knowledge? Plenty.

Many readers of science fiction expect religion in novels to be full of stories of bloodthirsty gods demanding sacrifices of maidens by hypocritical, power-hungry priests. It is unusual and refreshing to find stories depicting religious faith seriously with good character development of the faithful and theologians as well as scientists. Miller writes a compelling story about a group of devout monks whose

greatest goal is not merely salvation for human beings but also the resurrection of civilization, particularly technological civilization.

The novel tells the story of the monastery of Leibowitz and its monks over a period of about eighteen hundred years. The monastery lives through barbarism, a technological enlightenment, and finally a modern technological society that ultimately destroys itself yet again. The three periods of time separate the three major sections of the novel entitled, appropriately enough, “Fiat Homo” and “Fiat Lux” and “Fiat Voluntas Tua.”¹ Each of the three sections covers a span of about six hundred years with a wealth of characterizations of theologians and scientists with themes of science and theology. Each section shows suffering humanity trying to rise from the ruins of civilization to create new civilization and hope for tomorrow. People seem to succeed in recreating civilization until the very end when people destroy themselves again in another nuclear holocaust. The dismal ending of the novel has only two glimmers of hope, that of the monastery’s starship heading for the stars and that of Rachel, but it is still a bleak ending with an uncertain future—an ironic tragedy in the sense of flawed characters representing a deeply flawed humanity sowing the seeds of their own destruction as opposed to Rachel, a flawless character representing a sinless humanity yet still with an uncertain future. As science fiction, the novel fulfills the criteria expected of the genre by providing insight into the human condition through the use of the stylistic device of portraying a future world that is strange and yet compelling to modern readers. As good fiction, and science fiction in particular, Miller develops the themes of good versus evil, pride versus humility, civilization versus barbarism, religion versus alienation from God, spiritual innocence versus the false sophistication of the material world, the varying demands of Christ and Caesar, religious ethics versus secular ethics, both the delights and dangers of free will, war and peace, life and death, and, last but not least, the differing views of suffering held by the Church and the secular world.

In many science fiction stories, the protagonist in the story is not so much a character or characters as concepts and ideas and sometimes movements. In Miller’s novel, the idea of civilization

¹ “Fiat Homo” means “Let there be man;” “Fiat Lux” means “Let there be light;” and “Fiat Voluntas Tua” means “Your will be done.”

rising from the ashes of nuclear war is the “hero” of the story with the monks of Leibowitz the characters who fuel the heroic idea by their dedication to the task of preserving the Memorabilia for posterity. In other words, it is the idea-hero of preserving science for posterity by the faith of monks who serve the God of Leibowitz that gives the novel a sense of unity. The monks of each generation fulfill their vows anew by painstakingly copying the Memorabilia for the next generation, and that generation for the next generation, et cetera, for the sake of the civilization of human beings rising again.

Miller’s novel creates the idea-hero par excellence and his amazingly effective use of it is unsurpassed in science fiction literature. This may be part of the reason for its continued success as a novel, constantly reprinted over and over again since its debut in 1960. Indeed, the morality depicted in the novel is kind of a secondary character illustrating the importance of the controlling idea that preserving knowledge for the sake of posterity is an inherently good thing. In the same vein, McNelly points out in “A Canticle for Leibowitz,” as cited in Knapp, the novel “has no central character, ‘no protagonist with whom the reader can continually identify’” (38). Knapp continues:

The reader follows this character or that as each reacts to the central idea; in this first section are Francis, later Dom Paulo and Dom Zerchi; but it is rather the common themes which tie the work together than any one character. The unbroken line of sympathetically presented abbots suggests them as heroes, but McNelly holds that it is the concept represented by the abbots – the preservation of knowledge – which is central. Rather than any character the idea itself is hero.

(38)

As a great American novel, Miller has written a story paralleling in some ways the moral sophistication with religious overtones of other great American storytellers from Nathaniel Hawthorne and Herman Melville to the atheistic but highly moral Mark Twain. In Miller’s novel, evil only appears to triumph because of another nuclear war, but, for Miller, “the Lord provides” by creating Rachel even while humanity tries to save itself via a starship. Thus, for Miller, there is always hope for tomorrow even in the midst of catastrophe.

According to James Morrow, science fiction literature is “well equipped to examine the mysteries raised by religion.” Morrow adds in a letter to Ford: “The great ideas in science, it seems to me, often have vital mythic and religious resonances at their core” (cited in Ford 59). When science is seen as an outgrowth of religion, it becomes more knowable and less mysterious to the uninitiated. Theology is the queen of the sciences. Characters like Thon Taddeo and Doctor Cors tend to think that science develops in a vacuum among intelligent people. Characters like Dom Paulo, the Poet, the Wandering Jew, Brother Francis, Dom Zerchi, and Joshua know better. Asimov suggests that poor science fiction ignores religion entirely (Introduction to Michael Bishop’s *Close Encounters with the Deity*). I suggest that poor science ignores religion as well, just as poor religion ignores science. Any theology of the creation must take into consideration the point of view of science when attempting to understand the nature of the universe. Any scientific understanding of the nature of the beginning of the universe must take into consideration the point of view of theology when attempting to understand the mysteries of the universe. For Miller, apocalyptic cycles are both a religious idea and a scientific problem. Scientists cannot stop apocalyptic cycles without religious ethics, and theologians cannot stop apocalyptic cycles without the help of scientific theories which attempt to make the world a better place for people to live in but which, unfortunately, destroy the place people live in (anti-creation). To avoid the problem of anti-creation, we must understand the theology and science of the creation.

Miller broke new ground in science fiction because, prior to *Canticle*, religion had been portrayed in most stories of the genre with either contempt or ridicule. For the first time, religious characters were portrayed sympathetically and without any attempt at parody while atheists and barbarians were portrayed as foils for the good religious characters. Miller changed the minds of many critics of science fiction who had previously thought that science fiction literature could not realistically depict theological debates and the resolution of ethical dilemmas with appeals to religious authority in a serious and thoughtful way. In the hands of a master storyteller like Miller, science fiction became the playground of theologians and religious characters who take their faith and morals seriously and who are portrayed more sympathetically than atheist scientists and barbarians worshipping barbarian gods. Because of Miller’s groundbreaking

novel, other science fiction storytellers warmed to the themes of religious morality and theistic conceptions of time and space. As a result of his original approach and refreshingly serious religious thought, Miller's novel has become a standard against which other science fiction stories have been and will be judged in future years.

What is the message of the novel, if any? Perhaps the message is the warning itself. The monastery Miller bombed in World War II had withstood centuries of warfare before succumbing to destruction by American bombs, just as Leibowitz Abbey withstood centuries of warfare before succumbing to Lucifer. America has stood for hundreds of years, but it can still succumb to catastrophe. Miller's message may also be that humanity can survive into the future by imagining an apocalypse so horrific that they will want to avoid it at all cost. Miller may want readers to realize that, when scientists and theologians work together to make a better world, humanity can avoid the raging polemics against moral indifference.

While some of his characters possess faith in God, others in humanity, Miller does not lack faith in humanity, even if he portrays its dark side. The faith of his characters in God gives them faith that God created human beings good and that God will make them good again, particularly in the person of Rachel, if not in the people of the starship at the novel's end. Miller seems committed to the notion that a better world with a better humanity can emerge from the ruins of civilization. Nothing else than a supernatural or preternatural being could survive the final conflagration, but that is exactly what Rachel is by the power of the God who created her and all of her brothers and sisters on the starship. It is in the midst of this hope that the novel ends.

A Canticle for Leibowitz is an important novel in that it portrays the dark side of humanity as well as the simple faith of many characters including the preternaturally innocent Rachel who is the center around which the novel revolves. The novel contrasts the scientifically sophisticated atheist with the theologically sophisticated monks of Leibowitz who nevertheless are instrumental in the preservation of scientific knowledge, an irony not to be lost on the reader. The Catholic Church is portrayed largely sympathetically as a bastion of not only scientific knowledge but also as a repository of theological truth.

Because Miller is a scientist himself who struggled with faith all his life, he creates the innocent Rachel as an example of the ultimate union of scientist and theologian who is the precursor of a new and more spiritually powerful humanity. Because for Miller Rachel “knows” what the rest of humanity has forgotten, she is the symbol of dawn, the beginning before the fall. Just as Jesus said “So be perfect, just as your heavenly Father is perfect” (Matthew 5:48), Miller makes this come true in the person of Rachel. Thus, rather than ending on a completely negative note, Miller significantly concludes his novel with a restoration of faith that human beings will ultimately triumph over evil, not by our own efforts, by the efforts and power of God. As a result of this faith, Miller implies that, as a scientist, one should believe that the laws of the universe are knowable, while, as a theologian, one should come to realize that the meaning of the universe is mysterious.

Bibliography

- Aldiss, Brian W., and David Wingrove. *Trillion Year Spree: The History of Science Fiction*. New Yorkshire, UK: House of Stratus, 1986.
- Anderson, Katherine. "Christian Concepts and Doctrine in Selected Works of Science Fiction." Diss. University of Denver, 1981.
- Bossay, Lyssa Dianne. *Religious Themes and Motifs in Science Fiction*. Diss. University of Texas at Austin, 1981. Ann Arbor: University Microfilms International, 1981.
- Carter, Mark Anthony. "The Doomsday Theme in Science Fiction: A Critical Survey of the Literature." M.A. Thesis. University of Windsor, ON, 1981.
- Casey, John J. *An Apostate Instauration: Religion, Moral Vision and Humanism in Modern Science Fiction*. West Yorkshire, UK: The British Library Document Supply Centre, 1989.
- Clute, John, and Peter Nicholls. *The Encyclopedia of Science Fiction*. New York: St. Martin's Griffin, 1993.
- Dewey, Joseph. *In a Dark Time: The Apocalyptic Temper in the American Novel of the Nuclear Age*. West Lafayette: Purdue University Press, 1990.
- Ford, Alan R. "The Use of Religion in Some Recent Science Fiction." M.A. Thesis. North Carolina State University, 1991.
- Frye, Northrop. *Anatomy of Criticism: Four Essays*. Princeton: Princeton University Press, 1957.
- . *The Great Code: The Bible and Literature*. New York: Harcourt Brace Jovanovich, 1982.
- . *Myth and Metaphor: Selected Essays 1974–1988*. Ed. Robert B. Denham. Charlottesville and London: University Press of Virginia, 1990.
- . *Words with Power: Being a Second Study of the Bible and Literature*. New York: Harcourt Brace Jovanovich, 1990.
- Garvey, John. "A Canticle for Leibowitz: A Eulogy for Walt Miller." *Commonweal* 5 Apr. 1996: 7–8.
- Grafflin, Theresa M. "Irony, Humor and Allusion in Walter M. Miller, Jr.'s *A Canticle for Leibowitz*." B.A. Thesis. East Texas State University, 1993.
- Hendrix, Howard V. *The Ecstasy of Catastrophe: A Study of Apocalyptic Narrative from Langland to Milton*. New York: Peter Lang, 1990.
- Herbert, Gary B. "The Hegelian 'Bad Infinite' in Walter M. Miller's *Canticle for Leibowitz*." *Extrapolation*. 31.2 (1990): 160–169.

- Jacobs, DawnEllen. "Enemies of the Rational Soul: Confrontations with the World, the Flesh, and the Devil in Selected Works of Science Fiction, Fantasy, and Literature of the Fantastic." Diss. University of California, 1993.
- Kievitt, Frank David. "Walter M. Miller's *A Canticle for Leibowitz* as a Third Testament." *The Transcendent Adventure*. Ed. Robert Reilly. Westport: Greenwood Press, 1985. Pages 169–175.
- Knapp, Robert Dean. "The Literature of Change: An Approach to the Fourth Gospel through Current Science Fiction." Diss. San Francisco Theological Seminary, 1985.
- Kreuziger, Frederick A. *Apocalypse and Science Fiction: A Dialectic of Religious and Secular Soteriologies*. Chico: Scholars Press, 1982.
- . *The Religion of Science Fiction*. Bowling Green: Bowling Green State University Popular Press, 1986.
- Lacombe, Michael. "The Apocalyptic Elements of Science Fiction." M.A. Thesis. York University, 1977.
- Lamm, Norman. *Faith and Doubt: Studies in Traditional Jewish Thought*. New York: Ktav Publishing House, Inc., 1971.
- Latner, Alexis G. "Revelation in a World of Science: A Comparison of Revelation in Paul Tillich's Systematic Theology and in Science Fiction." M.A. Thesis. Graduate Theological Union, 1985. Berkeley: Graduate Theological Union, 1985.
- McNelly, Willis E. "A Canticle for Leibowitz." *Survey of Science Fiction Literature*. Ed. Frank N. McGill. Vol. I. Englewood Cliffs: Salem Press, 1979.
- Miller, Walter M., Jr. *A Canticle for Leibowitz*. New York: Harper & Row, 1959.
- The New American Bible with Revised New Testament and Revised Psalms: The New Catholic Translation*. Atlanta: Catholic Bible Press, 1987.
- Olsen, Alexandra H. "Re-Vision: A Comparison of *A Canticle for Leibowitz* and the Novellas Originally Published." *Extrapolation* 38.2 (1997): 135–149.
- Percy, Walker. "Rediscovering *A Canticle for Leibowitz*." *Signposts in a Strange Land*. Ed. Patrick Samway. New York: Farrar, Straus and Giroux, 1991.
- Reilly, Robert, ed. *The Transcendent Adventure: Studies of Religion in Science Fiction/Fantasy*. Westport: Greenwood Press, 1985.

- Roberson, William H., and Robert L. Battenfeld. *Walter M. Miller, Jr. A Bio-bibliography*. Westport: Greenwood Press, 1992.
- Seed, David. "Recycling the Texts of the Culture: Walter M. Miller's *A Canticle for Leibowitz*." *Extrapolation*. 37.3 (1996): 257–271.
- Sellman, Jane A. "The Use of Myth in the Fiction of Walter M. Miller." M.A. Thesis. Morgan State University, 1977.
- Senior, W. A. "'From the begetting of monsters': Distortion as Unifier in *A Canticle for Leibowitz*." *Extrapolation*. 34.4 (1993): 329–339.
- Siciliano, Sam Joseph. *The Fictional Universe in Four Science Fiction Novels: Anthony Burgess's A Clockwork Orange, Ursula K. LeGuin's The Word for World is Forest, Walter Miller's A Canticle for Leibowitz, and Roger Zelazny's Creatures of Light and Darkness*. The University of Iowa. Ann Arbor, Michigan: Xerox University Microfilms, 1975.
- Spencer, Susan. "The Post-Apocalyptic Library: Oral and Literate Culture in *Fahrenheit 451* and *A Canticle for Leibowitz*." *Extrapolation*. 32.4 (1991): 331–342.
- Thigpen, Paul. *The Rapture Trap: A Catholic Response to "End Times" Fever*. 2nd ed. rev. West Chester: Ascension Press, 2002.
- Warrick, Patricia, and Martin Harry Greenberg, eds. *The New Awareness: Religion Through Science Fiction*. New York: Delacorte Press, 1975.
- Wilson, Patricia A. "Conflict and Resolution: The Divergent Roles of Catholic Men of Faith in Science Fiction." M.A. Thesis. University of Regina, 1992.